The Goodwood Estate:
Estimating Socioeconomic Contribution

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Table of Contents

1. Executive Summary

The Goodwood Estate ('Goodwood') makes an estimated economic contribution of almost £314m annually into its local economy through a direct, indirect and induced mode. An additional £100m is also estimated to be generated locally across all tax categories. These contributions are estimated to increase to £435m and £125m respectively at a national level, reflecting expenditure made in the UK by visitors, exhibitors, suppliers, and others that fulfils a key requirement: this wouldn't have occurred in the absence of Goodwood. Economic impact assessments do not generally quantify a wider contribution: this has been undertaken to provide a comparison to local economic contribution that reflects Goodwood's unique position amongst UK Estate's as an international destination for Hallmark events in particular. *The Festival of Speed, Goodwood Revival, Members Meetings* and the *Qatar Goodwood Horse Racing Festival* draw over 60% of the annual one million visitors to the Estate, with the majority attending from outside of the region including over 100,000 overseas visitors.

This research is the most detailed analysis undertaken of the Goodwood Estate and occurred with unfettered access to information, the management team and staff, the Duke of Richmond, and other key staff. The analysis and research utilised extensive residential stays and day-visits including during Hallmark Events to undertake primary research that was complemented by significant secondary research. This utilised detailed data on all aspects of the Estate's operations including financial information; supplier, contractor, exhibitor and other third-party activities and expenditure; visitor data including preferences, travel modes, costs, and other data. This enabled the modelling and quantification of the impact of Hallmark Events, 14 other facilities, businesses and services on the Estate; sustainability from forestry (through the sequestering of an estimated 165,000 tonnes of CO2), and social 'spillage' through learning from *The Goodwood Education Trust* for students in an era of increased ecological engagement by younger cohorts.

The Duke of Richmond and his management team have grown Goodwood's revenue by 57% from £67m to £105m between 2013-2018 respectively, and positioned the Estate as a 'global brand' and a national attraction. This contrasts the status of the overwhelming majority of English country estates and many other events held in the UK. Goodwood's continued growth is underpinned by the Estate's integrated business model, geographically cohesive operations and social ties that date from the mid 1500's. This supports the continued development of Goodwood and the engendering of higher loyalty amongst many Hallmark Event attendees in particular with a resulting lower price and income elasticity of demand. In addition to UK attendees, Motor and Horse Racing Events draw over 60,000 international visitors to Goodwood who arrive because of these events and generate revenue and expenditure both locally and nationally. The successful development of Goodwood as an international Motor Racing marque, including its strategic location, assisted in attracting Rolls Royce as a key tenant, with the Company locating its global head office and manufacturing facilities on the Estate. Although the contribution the Company makes is not included in this analysis, Rolls Royce increases and further amplifies the economic impact the Estate makes locally and nationally. This research assesses, quantifies and consolidates the complex mosaic of factors that define the Goodwood Estate's local and national socioeconomic contribution.

2. Goodwood Estate and Defining the Host Economy

"We are a collection of small businesses connected through a common location, a passion to deliver excellence, and in the desire to make a contribution to our society, while preserving the Goodwood legacy for future generations."

Duke of Richmond.

The Goodwood Estate is a leading English sporting estate located in the County of West Sussex in the UK and has been the Seat of the Dukes of Richmond for over three centuries. It is an integrated leisure, sport, farming and forestry facility, set in in 12,000 acres, employing over 750 people full-time and a significantly higher number of temporary resources during major events. The Estate includes a Battle of Britain airfield, a racecourse and motor circuit, two golf courses and one of the oldest cricket grounds in the country, one of the largest lowland organic farms in England at 4,000 acres, and the Goodwood House. The Estate also includes a 92-room hotel and other accommodation, a gym and spa facilities, and numerous restaurants and bars. It is bordered by a number of major roads including the A27, which links the nearby towns of Brighton, Chichester, Portsmouth, Southampton, and is the primary east-west road along the south coast. The Estate is also the location for Rolls Royce Motor Cars' Head Office and global manufacturing plant established in 2003, occupying 43 acres of leased land and employing around 2,000 people. The site reflects specific locational requirements by the Company for privacy, security, access to a test track and nearby infrastructure with 90% of Rolls Royce Cars exported.

In 2018, the Estate celebrated the 25th anniversary of its 'car culture' event, *The Festival of Speed* (FOS), that attracts 200,000 UK and international visitors and drivers over four days and is depicted as 'the world's largest automotive garden party.'[1] It is also the largest green-field site-build in the world. Goodwood also hosts the annual *Goodwood Revival,* arguably the most historic motor race meeting in the world, attracting 150,000 international and local visitors over three days, and *Members Meeting,* a further motor racing event. Goodwood also hosts 19 horse racing fixtures including *Glorious Goodwood,* attracting around 225,000 international and local visitors. In addition to these events, Goodwood attracts around 400,000 other visitors annually across its venues, resulting in over one million visitors annually, and combined revenues of around £105M per annum in 2018, up from £67m in 2013. Total attendance includes over 100,000 international visitors who otherwise would not have visited the UK, with 60% of these attending Hallmark Events. These visitors generate an estimated £65m in the UK economy with a further £119m generated downstream using a multiplier of 1.7 for the hospitality sector.[2] The Estate's management continues to develop a sustainability strategy that encompasses one of the largest tree planting schemes in the south of England, with almost 80,000 trees to be planted in 40 hectares of new woodland, adding to the existing 727 hectares of forestry. This research assesses Goodwood's contribution within an approximate 15-mile radius from Goodwood House that incorporates Chichester and the surrounding area, with this increasing marginally in areas due to geographic factors.

[1] https://britishairshows.com/goodwood-festival-of-speed.html
[2] Morrison, A., et al. (2009). Entrepreneurship in the Hospitality, Tourism and Leisure Industries. Routlege.

3. Structure and Direct Elements

Goodwood generates revenue that is utilised to fund the costs of events and day-to-day operations for the Estate including staff, infrastructure, maintenance, central functions and facilities encompassing the Farm, Forestry, and others.

3.1 Revenue Streams

Goodwood generates multiple revenue streams. It is an integrated Estate reflecting cross-supplying between businesses including the sustainable supply of fuel to the Hotel and other facilities from Forestry, and the supply of produce to on-site restaurants from the Farm. The primary revenue sources for the Estate are numerous and encompass:

- Ticket sales for Hallmark Events including FOS, Goodwood Revival, Members Meetings, Horse Racing;
- Sponsorship and Hospitality income;
- Income from track day tickets and packages;
- Vendor income from on-site temporary Event product stalls in particular;
- Catering Income from events in addition to other food and beverage income from restaurants and bars;
- Aviation activities including Flying School, aerodrome and aircraft maintenance;
- Rental income from various tenants, both commercial and residential using land and property across the estate including 100 acres utilised for Rolls Royce's headquarters and manufacturing facility;
- Ticket sales from special events held on the Estate;
- Ticket sales from visitors to Goodwood House;
- Income from Goodwood Hotel including lodging, food and beverage income;
- Accommodation income from businesses operating all-year and during Hallmark Events including temporary camping sites;
- Membership income from the Spa, Gym, two golf courses, GRRC and Racecourse; Special events held at the Estate including corporate functions, wedding receptions, others;
- Memorabilia and other merchandising sales.

Some data obtained during the engagement process are commercially sensitive, with this report providing granularity where possible, but consolidating information for many categories as a result.

The revenue for the Estate in 2018 was £105m. This figure is underpinned by over one million annual visitors, with the Hallmark Events accounting for 60% of this attendance. The remaining 40% of visitors are distributed across Goodwood's other services and functions, with no further distribution of visitor numbers provided due to confidentiality. Major businesses include the 90-room hotel that displays strong occupancy rates with the potential for further utilisation outside of Hallmark Events; the Spa, Gym and Golf, that are operating at levels that are believed by the management team to provide optimal visitor and member enjoyment without compromising the quality of the experience. These are unlikely to increase capacity further in the near-term. Additional revenue areas include the development of the aircraft servicing business and the continued monetisation of Motoring Members through existing and new opportunities including digital. Figure 1 depicts the segmentation of Goodwood's revenue into a number of streams of activities. Rolls-Royce is a contributor to the overall

impact Goodwood makes but this has not been quantified within the scope of this study. The Company makes a significant local contribution through its employment of 2,000 people in its global manufacturing facility and head office on Goodwood, in addition to sourcing some materials locally and leaking other expenditure into both the local and national economy. For the purpose of this analysis, it is excluded but it is recognised that it makes a significant contribution locally and nationally.

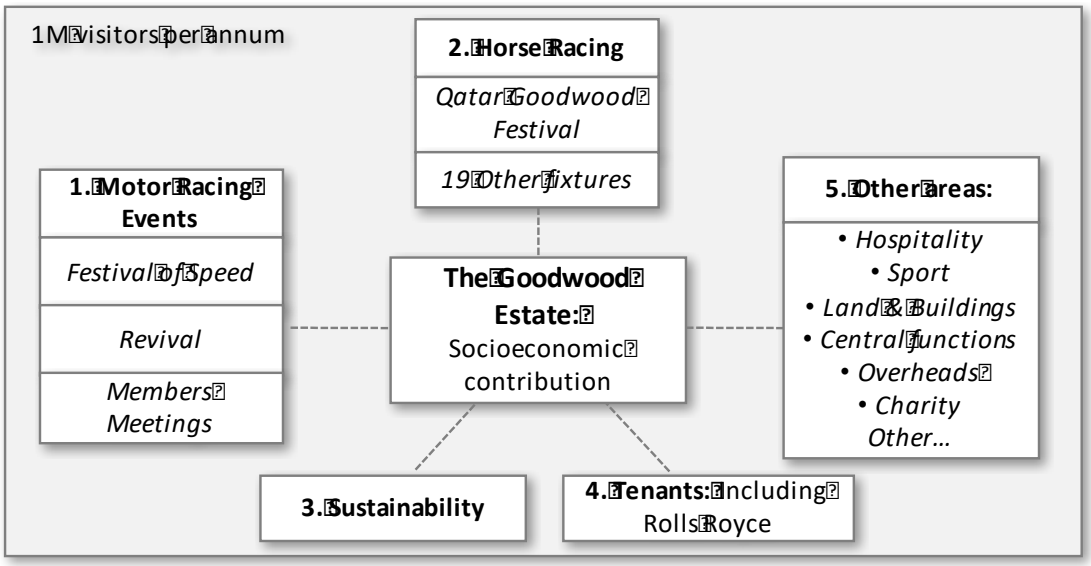


Figure 1: Goodwood's revenue stream by category

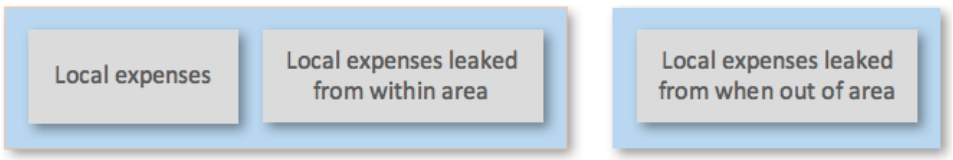
The five areas include: (1) 'Motor Racing Events'; (2) 'Horse Racing Events'; (3) 'Sustainability'; (4) 'Tenants', including Rolls Royce, and; (5) 'Other Areas' that represent the Estate's other facilities in addition to the majority of direct costs and overheads required to deliver day-to-day operations.

3.2 Primary Expense Streams

Goodwood's direct expenditure is distributed between a number of major streams:

- Purchases for Cost of Sales;
- Staff costs with the majority of these paid to in-area employees;
- Infrastructure costs including land, buildings, maintenance of these;
- Travel, accommodation and other overheads;
- Catering costs;
- Third parties including contractors for facilities;
- Taxes and other costs;
- Other categories.

The majority of these costs are incurred and retained locally. A minority are incurred locally but leak out-of the area, or are incurred out-of the area.



These expenses contribute to Goodwood's spillage into its local economy. Leakage is minimised by the Estate through the selection of local suppliers; employees who primarily reside within the immediate area; the cross-supply of businesses on the Estate, and others factors.

3.3 Direct Employment

Challenges exist in forecasting employment wider than Goodwood. Total full-time employees (FTE) number around 750, with an additional 350 staff employed throughout the year to complement permanent staff in areas such as the Hotel, Kennels, special events, functions, Hallmark Events, and other activities (excluding any contractor, vendor or sponsor employees). These FTEs can be segmented by their areas of employment in Table 1.

	2018
Motorsport	186
Sport	203
Entertainment and Hospitality	466
Land and Buildings	85
Central Team	150
Total	1,090

Table 1: FTE employees - 2018

The 1,090 employees comprise the direct labour force employed by Goodwood. The majority of these employees reside within the target local region.

3.4 Revenue and Employment Trend

Goodwood has grown both revenue and staffing over time. Revenue grew by 27% between 2015-2018 from £86m to £105m respectively, and by 57% between 2013-2018 from £67m to £105m. Over this 3-year period alone, this research estimates that growth has added a cumulative Direct and Indirect total contribution of £140m. Over a 7-year period, staffing has tripled, equating to Direct Income tax and NI contributions reaching an annual figure of £25m. With an Office of National Statistics (ONS) multiplier of 2.044 for the closest applicable sector of *Sports Activities and Amusement and Recreation Activities,*[3] the extra 600 FTEs employed in the Estate over this growth period equates to around 1,200 additional jobs being created elsewhere. In addition to these, almost 12,000 people are estimated to work at major Hallmark Events such as FOS, with this both contributing to the considerable room night stays generated in addition to visitor room nights, and the commensurate expenditure injected into the local area by those working on FOS and other major events.

4. Defining 'Contribution'

At the national macroeconomic level, economic activity and contribution is measured in terms of 'output', or gross domestic product (GDP). This reflects the goods and services that are produced in a country and is the sum of personal consumption expenditure plus business investment, and government spending plus exports minus imports.[4] In addition, other measures of economic activity are utilised to highlight the most significant components of national expenditure including employment, salaries and wages and government tax revenues.[5] The notion of *socioeconomic contribution* incorporates a number of these components but also assesses their wider *spill-over* effects. This includes the use of expenditure at the company and personal consumption level. The

[3] https://www.ons.gov.uk/file?uri=%2feconomy%2fnationalaccounts%2fsupplyandusetables%2fdatasets%2fukinputoutputanalyticaltablesdetailed%2f2015detailed/2015detailedioatsbb18.xls

[4] http://www.oecd.org/berlin/44681640.pdf

[5] ONS. (2018). UK national Accounts: The Blue Book. http://www.evaluationsonline.org.uk/evaluations/Documents.do?action=download&id=802

mapping of the expenditure journey commences with the number of individuals being assessed and incrementally incorporates components to define total expenditure. This process underpins economic contribution analysis and focuses expenditure generating activity within the area being assessed.

The approach to defining the socioeconomic contribution that Goodwood makes commences with this analysis and broadly follows the approach utilised by larger, complex investment project analysis: segmenting contribution into *direct, indirect* and *induced contribution,* with the first category defined as 'primary impact' while the latter two are denoted as 'secondary impact':
Direct (primary impact): This captures the expenditure associated with the general running of the Estate including labour, materials, supplies, capital, and other activities. This category also includes a contribution made by the significant sustainability and forestry activities including the largest forest plantation undertaken in the south of England encompassing around 80,000 trees.

Indirect (secondary impact): This category captures the expenditure incurred by the suppliers to Goodwood with activities that would only have occurred to service the Estate. This is a 'second round' impact that includes suppliers purchasing goods, services, supplies, hiring labour to meet obligations for Goodwood. Government indicates that that indirect impacts on GDP are, in nearly all cases, twice as high as direct impacts indicating that these activities are significant due to the links they foster between economic activities and other sectors of the economy, with direct spill-over into other productive sectors.[6]

Induced (secondary impact): This category captures expenditure normally incurred by employees at the household level and reflects the proportion of income that is available for spending. This category has also been utilised to capture expenditure relating to Goodwood that is not adequately captured in other categories but is incurred by some visitors and would not have been incurred without the Estate. This research has estimated this expenditure from a granular 'ground-up' perspective encompassing:

- Cost of travel to visit the Estate segmented by distance band including public and private transport, segmented by mode of transport including fuel and/or tickets;
- Food and beverages bought on route to visit the Estate;
- Tourist spend in the local area including for additional food and beverages, accommodation.

Induced contribution occurs from spending by both direct and indirect employees, but can include wider contribution with government guidance highlighting, *"In-country tourist expenditure will have both direct and indirect impacts as the money follows the tourism supply chain*," with induced contribution from tourism encompassing food and beverages; recreation; clothing, housing, and household goods.[7] This research includes additional spending by individuals commuting to and from Hallmark Events and the Estate, particularly for out-of-region visitors, in addition to expenditure on specific items by these visitors including food, beverages, local fuel, leisure and other spend not captured within Direct expenditure. Congruence exists between this approach for Induced Expenditure and other methodologies: *"It also includes other non-industrial transactions, such as institution savings, payment of social security taxes, and commuting."*[8]

[6] https://assets.publishing.service.gov.uk/media/57a089f2ed915d622c000495/Tourism_Impacts_employment_gender_income_A_Lemma.pdf
[7] Ibid
[8] https://implanhelp.zendesk.com/hc/en-us/articles/115009505707-Understanding-Multipliers

Goodwood's business reflects a considerable facilitation of Indirect and Induced contribution. Its major sporting events are 'Hallmark Events' defined as: "*Tourist events [that] are major fairs, expositions, cultural and sporting events of international status which are held on either a regular or a one-off basis. A primary function of the hallmark event is to provide the host community with an opportunity to secure high prominence in the tourism market place."*[9] FOS, Revival, Members Meetings, Glorious Goodwood can be included within this definition as they arguably; *"continue to be a mainstay of tourism marketing, ensuring the success one of the major reasons for conducting hallmark events - the creation of a sustained and viable tourist industry in the host community."*[10] These events account for approximately 60% of the Estate's annual visitors and almost 70% of the revenue generated that is subsequently utilised in the Estate's expenditure activity chain.

5. Drivers of Contribution: Goodwood 'Stickiness', Impact and International Visitors

Goodwood reflects a number of unique 'characteristics' that contribute to the generation of socioeconomic contribution across a wide array of activities. These result in attributes that differentiate the Estate from many other Hallmark Event hosts including a large degree of fixed infrastructure that supports additional activities year-round and close local-linkages. This business model is not evident in many other event management organisations that are event-specific entities. Goodwood reflects a number of factors that promote localised recurring contributions:

- A high reliance on external suppliers for the design and construction of high-value components such as fixtures for events with a pool of locally sourced labour and resources for many elements;
- Considerable travel and extended accommodation periods occurring for contractor labour that assembles and dis-assemble fixtures and is retained to varying degrees on-site throughout an event. This commences weeks before the start of an event and concludes weeks after the conclusion of an event often encompassing a 4-6 week period;
- The use of skilled and unskilled labour to construct fixtures;
- The construction of temporary facilities for festivals, with motor-racing in particular resulting in significant temporary investment both directly and by secondary (indirect) contractors and third-parties;
- The internationally leading position of Goodwood's Hallmark Events and the Estate's leading position in staging a number of the largest and most well-known 'enthusiast' motor racing events in the world;[11]
- Over one million annual visitors with leakage of expenditure reflecting local, regional, national and international travel to the Estate and to events and local accommodation and leisure spending;
- A 'loyal' base of motor-racing and horse-racing enthusiasts with lower price and income elasticity of demand. This contrasts general tourism that traditionally has a higher price and income elasticity;[12]
- Non-local national and international visitors allocating additional leisure time before and after their event or visit to the Estate to visit the local area and make expenditure on food, beverages, accommodation, other attractions, car rental, transport and other areas of activity.

[9] Hall, C.M. (1989). The definition and analysis of hallmark tourist events. V(19)3; pp:263-268. GeoJournal. https://doi.org/10.1007/BF00454570

[10] Ibid.

[11] Excluding specific racing events such as Formula One and comparable races.

[12] Myer., N and Myer, D. (2015). The role and impact of tourism on local economic development: A comparative study. African Journal for Physical Health Education, Recreation and Dance. V(21): 197; pp:197-201.

These factors can enhance the contribution events make to the local and national economy with analytical approaches assessing the *increase* in contribution through four originating areas:[13]

1. Increasing *the number of visitors* to the attraction and in the region;
2. Increasing *visitor expenditure* in the attraction and in the region;
3. Improving *destination awareness* of the attraction and the region;
4. Increasing *civic pride* with an opportunity to 'showcase this' to visitors.

Goodwood's Hallmark Events result in the annual attendance by over 60,000 international visitors who otherwise would not have travelled to the UK. In addition to a further 40,000 visitors who experience the Estate's other facilities, an estimated £68m is generated nationally and locally reflecting average visitor spending in the Country, and generating a further £119m through a spending multiplier of 1.75 to yield almost £190m in total.[14] Socioeconomic contribution encompasses both quantitative and qualitative elements, with a number of categories utilised to capture these:[15][16]

- *Economic Impact*: Increased expenditure; creation of employment; increase in the standard of living; increase in the labour supply.
- *Physical/Environmental*: Construction of new facilities; preservation of heritage; sustainability.
- *Tourism/Commercial*: Increased awareness of the region as a travel tourism/destination; creation of new accommodation and tourist attractions; increased knowledge on the potential for investment and community activity in the region.
- *Social/Cultural*: Increase in permanent level of local interest and participation in types of activity associated with event.
- *Political/Administrative*: Enhanced international recognition of region and values.

This research utilises 'Economic Impact' and 'Physical/Environmental' to define contribution. The remaining areas are highlighted in a cursory manner encompassing sustainability and education. The geographically integrated nature of the Estate contributes to its commercial and sustainability success, with many key Hallmark Events such as FOS and Revival concentrated in areas of the Estate that have developed to provide required access for participants, attendees, accommodation and car parking, and supplier facilities. This has been identified as a significant factor that has contributes to the generation of economic value and optimised over time, including the location and architecture selected by Rolls-Royce to ensure optimal integration in the grounds of the Estate.

6. Gathering Primary and Secondary Data

6.1 Data Acquisition

This research is a longitudinal study of Goodwood's business spanning a 12-month period from November 2018 to November 2019 and is the most detailed analysis undertaken to date of the Estate's operations. This time period provides an opportunity to assess the full annual calendar of events and the utilisation of the Estate throughout the year. The approach utilised both primary and secondary research activities.

[13] Janezko, B., et al. (2002). Estimating the Economic Impact of Festivals and Events: A Research Guide. CRC Sustainable Tourism. https://sustain.pata.org/wp-content/uploads/2015/02/Mules_EcoImpactsFestivals_v6.pdf
[14] Morrison, A. (2009). Op cit.
[15] Ibid
[16] Hall, C.M. (1992). Op cit.

(a) Primary research: Frequent on site visits and residential stays occurred between November 2018-November 2019 for a duration of 1-2 days with unprecedented access to information and the Estate's Executive Team including the CEO, CFO; the Duke of Richmond; Board Members; Heads of Departments including Marketing, Operations, Facilities, Forestry, the Farm, Motorsport, Events, Leisure Facilities and other areas. In addition, visits and stays occurred during major sporting events to observe, research and sample attendees to obtain further information on purchasing, travel and consumption patterns, and to participate in planning and logistical activities with Goodwood Teams to obtain further insights and data. The core component of this stage included:

- Assessing the P&L and Management Accounts with the CFO and the Management Team: Extensive engagement occurred to obtain the required data for the major expenditure categories;
- Collating previously conducted questionnaire data that had already occurred, captured key expenditure and travel patterns for both visitors and exhibitors, third parties and sponsors encompassing required information including expenditure; accommodation;
- Undertaking additional sample interviews where required to bridge any gaps.

Engagement provided detailed 'ground-up' data across Goodwood's primary operations including costs, with extensive engagement with the CFO and other Finance team members. Data utilised included financial statements (P&L, Balance Sheet, Management Summary). Additional data were sourced from other Department Heads in Marketing, Communications, Facilities Management, Executive functions, Motor and Horse Racing Heads, and others encompassing event cost and logistics; facility and resource utilisation; visitor numbers including segmentation between local and international visitors; vendor costs for both materials and resources utilised to support specific Goodwood activities and other areas. Data were also obtained on Hallmark and other events, and the utilisation of the Estate by both members and non-members throughout the year. The granular development of a ground-up model assessed the end-to-end 'journey' for many items of contribution. The scale of Goodwood's Hallmark Events in particular encompasses a significant cadre of temporary activities that result in contribution being generated. For FOS, these include amongst others:[17]

- 12 miles of track laid for the Event;
- The building of over 200 temporary structures;
- Over 300 Exhibitors establishing sites;
- Using 4,500 bales of hay to define the hill climb and off-road areas and 3,800 bales to line the track;
- Erecting 2000 signs;
- Transporting an additional 1000 benches for Event use.

These activities encompass local, regional and national linkages in some cases and the engagement of a number of participants. The research process utilised primary engagement to assess contribution across these and other activities including where and how the materials were sourced; how they were assembled into the products utilised by Goodwood; the nature of labour utilised (external vs internal; temporary labour) and other attributes that were quantified.

[17] https://www.countrylife.co.uk/luxury/motoring/goodwood-festival-of-speed-in-numbers-73190

Questionnaire-based data from Goodwood attendees was utilised that was generated from previous economic analysis activities, and complemented by data encompassing attendee event and non-event activities held by the Goodwood Marketing, Finance and Facilities functions. Any additional gaps were addressed through ad hoc small-scale sampling during visits. The primary research process also observed local roads, traffic including around Chichester to review the flow of event and non-event traffic and visitor use of local facilities.

(b) Secondary research: Considerable secondary research was undertaken to obtain additional information that supported the analysis. The key data sought encompassed Goodwood attendance, expenditure, travel and accommodation for Hallmark Events. This information was acquired through engagement with the Estate's Marketing and other teams directly and complemented by secondary sources. This included reviewing previous research undertaken by other academic institutions in co-operation with Goodwood that estimated the contribution of the Hallmark FOS Event,[18] with some data utilised from questionnaire based sampling that captured expenditure, travel and accommodation that encompassed national road traffic agency plans for possible future local road changes (A27); local demographic data; national and local tourist numbers and expenditure; public transport costs for rail, bus, taxis for major visitor routes to Goodwood; additional research on Event economic impact; data on consumer purchase patterns; ONS data, and other sources.

Primary and secondary data have been utilised to define key inputs in the estimation of contribution. Due to the considerable and detailed information held by the Goodwood Management Team on visitors by Event or facility utilised, in addition to that held for engagement with contractors and third parties, fewer activities were undertaken to obtain this information during the research.

6.2 Avoiding Pitfalls

This research addresses a number of potential 'pitfalls' highlighted in the assessment of socioeconomic contribution:

(a) *Incorporating key expenditure*: Traditional event impact studies are generally undertaken at a greater distance than this research, and utilise less detailed expenditure data by event visitors.[19] This can limit the contribution estimated before the use of multipliers is applied to forecast the 'spillover' of expenditure. This research defines relevant expenditure at a granular level across direct, indirect and induced areas that present a reference point without multipliers. The granular and engaged study length serves to map and quantify expenditure that often is approximated by the use of multipliers, utilising the 'Direct Expenditure' category traditionally from which other contribution is calculated utilising multipliers. The ability to identify and quantify expenditure at a granular level with a very high degree of accuracy between Goodwood and suppliers, sponsors and third parties through the use of data from Goodwood's records and management team permitted a reference point without multipliers to be developed before Direct Contribution was utilised to provide a further reference point for comparison, and to define a range. A detailed review of the business-related expenditure

[18] Frost, P., et al (2015). Economic Impact of the Goodwood festival of Speed. University of Brighton. http://eprints.brighton.ac.uk/17645/1/HVRI-FOS%202015-report.pdf

[19] Murphy, P. E., and Carmichael, B. A. (1991). Assessing the Tourism Bene- fits of an Open Access Sports Tournament: The 1989 B.C. Winter Games. Journal of Travel Research. V(29): pp:32-36.

at Goodwood is a key element in defining contribution: *"Exhibitors and vendors may contribute significant expenditures. These groups, especially the former, often do not receive visitor expenditures but spend heavily in the local economy."*

(b) *Adjusting for local visit flow*: Economic impact studies recommend the removal of local visitors to a region's contribution calculations as they are not perceived as making an incremental contribution,[20] although differing views exist on the extent that this should occur.[21] Hallmark Events attract expenditure from other regions, with Goodwood hosting internationally recognised events that draw visitors from within the UK, the EU and overseas. Around 10% of all visitors arrive from either the EU or overseas, while out-of area visitors comprise the majority of remaining attendees. An event can however have a positive tourism impact even in the absence of visitors from outside the region if the resident spectators would have traveled outside the region to attend this or a similar event: the local event prevents a loss of local expenditure with this flow retained locally as a result.[22] This study identifies a proportion of local visitors for each event, facility and attraction, and removes them in the calculation of contribution. This has been estimated through direct engagement with the relevant teams at Goodwood. In some cases, this is a higher figure (e.g. golf participation and gym use) while in others such as Hallmark Events, it is a low figure with few 'deadweight visitors' attending, defined as visitors who would have arrived regardless of an event being staged.[23] Goodwood's Hallmark Events reflect a very high proportion of visitors who attend due to the staging of these events. A degree of subjectivity exists however in the assessment and treatment of this area in the literature: *"Despite the frequency with which such issues arise, the literature does not provide a standardised formal framework with which they may be incorporated into event-related impact analysis."*

(c) *Identify leakages:* Goodwood is an integrated ecosystem that minimises leakage. This includes the utilisation of its own farm to supply produce to its hotel, restaurants and events, complemented by local sourcing where possible, and the use of on-site accommodation and leisure facilities. The requirement for visitors to have expedient access to Goodwood during Hallmark Events also results in a concentration of accommodation in close proximity including a high proportion of small, locally owned and operated accommodation. Research highlights: *"The magnitude of indirect and induced effects depends on the share of capital, land and labour that is locally owned. For instance, small family-owned hotels and restaurants are more likely to buy local intermediate inputs than chain hotels and tourist villages. If factors are locally owned, their remunerations – profits, rent and wages – will stay locally and local community will strongly benefit from them.*" This research makes some adjustment for leakage including scaling some visitor numbers to reduce contribution where leakage could be applicable.

[20] Gasparino, U., et al. (2008). Measuring the Impact of Tourism Upon Urban Economies: A Review of Literature. The Fondazione Eni Enrico Matte. http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm

[21] Ibid.

[22] Tyrrell, Y., and Johnston, R. J., op cit

[23] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/638888/Local_economic_impacts_from_cultural_sector_investments.pdf

An observation in event contribution literature is that if goods are 'manufactured' outside the community, their purchase should be treated as leakage out-of the local economy.[24] Goodwood minimises this for Hallmark Events due to the distinctive nature in which these are staged: key 'goods' utilised by Goodwood include participating cars, horses, drivers, support teams and others taking part in events. The cost for participation is in most cases borne by the attending individuals and teams, minimising expenditure 'leaked' by Goodwood as a result. A number of Goodwood's other businesses and facilities minimise leakage on goods and services 'manufactured' outside of the region including the Aviation Division that has recently invested in aircraft maintenance and servicing facilities and the recruitment of skilled full-time engineers. This will retain additional expenditure within the target area as some aircraft owners who hangar their aircraft at Goodwood, or are located locally, currently fly to other locations for maintenance to be undertaken. In addition, other out-of-region owners could fly to Goodwood for the provision of maintenance services.

7. Methodology

7.1 Approach

The approach utilised by this research follows generally accepted economic analysis practices to define Direct, Indirect and Induced expenditure.[25][26] A number of methodologies utilise the development of complex models such as Input-Output Models to construct tables that match expenditure between selected categories before multipliers are defined and/or utilised from other sources including Government data (e.g. ONS).[27] This process often requires specialised training in the use of these tools and additional software. In other methodologies, relevant expenditure is defined in addition to visitor data and the expenditure between businesses, with multipliers subsequently 'borrowed' from examples including relevant industries, geographies, or events.[28][29] Both of these approaches focus on defining the first primary expenditure ('Direct Expenditure') with multipliers utilising this to define subsequent Indirect and Induced expenditure. This research utilises a hybrid approach encompassing: (1) a longitudinal study that permits the granular detailed analysis and mapping of expenditure by multiple participants at Goodwood encompassing the Estate, visitors, exhibitors, sponsors, contractors, other partners, households, and the detailed mapping of the downstream and upstream activities of these businesses. This process de-constructs Indirect and Induced expenditure in detail than exceeds an approach that utilises Direct Expenditure to estimate these expenditure categories through the use of multipliers, and; (2) the application of multipliers utilising Direct Expenditure (mirroring other approaches) to define Indirect and Induced Expenditure and provide additional reference points for comparison. This research also avoids common pitfalls in the estimation of socioeconomic contribution such as the inclusion of sales.[30]

[24] Crompton. J.L., op cit

[25] Peric, M. (2018). Estimating the Perceived Socio-Economic Impacts of Hosting Large-Scale Sport Tourism Events. Social Sciences. V(7)176; pp1-18. doi:10.3390/socsci7100176

[26] Ahmed, T.S.A. (2017) A triple bottom line analysis of the impacts of the Hail International Rally in Saudi Arabia. Managing Sport and Leisure. V(22); pp:276–309.

[27] Kumara,J., and Hussain, K. (2014). Evaluating tourism's economic effects: Comparison of different approaches. Procedia. Social and Behavioral Sciences. V(144); pp:360-365

[28] Frechtling, D. (1999). Estimating the multiplier effects of tourism expenditures on a local economy through a regional input–output model. Journal of Travel Research. V(37)4; pp:324–332.

[29] Kumara, J., and Hussain, K. (2014). Op cit.

[30] Crompton, J.L. (1995). Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication. V(9)1; pp: 14-35. https://doi.org/10.1123/jsm.9.1.14

The first stage of this research undertook a cross-sectional analysis of Goodwood, *"analysing multiple variables at a given instance, but providing no information with regards to the influence of time on the variables."*[31] This extended over 4 weeks to establish the appropriate assessment variables, data requirements, preliminary cursory indicators, and to scope the study in greater detail. This was followed by a longitudinal study: *"In longitudinal or panel studies, repeated observations of the same constructs over several points in time are considered."*[32] This stage continued for 12-months and yield very detailed ground-up data and information including consumer behaviour and expenditure data for Goodwood and its ecosystem of downstream and upstream suppliers, sponsors and contractors engaged throughout the calendar year to deliver events and other services. This process estimated the direct contribution made by the Estate and the indirect and induced contributions facilitated in addition to tax revenue. Induced spending encompassed additional expenditure from visitors on route, located on the Estate, and when circulating locally in the target region that is not adequately captured elsewhere but would not have occurred otherwise i.e. Goodwood was the sole reason for this expenditure occurring. The following three figures depict the methodology utilised in successively greater detail. Figure 2 provides an overarching view of the approach, followed by Figure 3 that depicts the downstream impact of expenditure. Figure 4 extends this, depicting the model utilised to define relevant costs and expenditure.

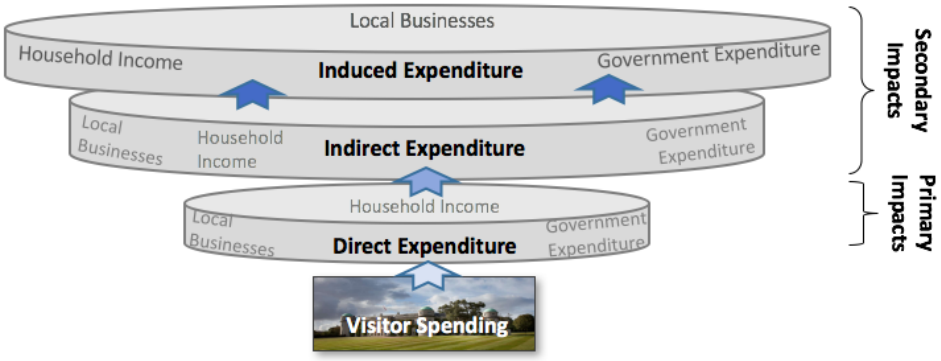


Figure 2: Research approach, expenditure source and type defined

The estimation of Goodwood's economic contribution utilises visitor spending as the initial mode of analysis. Visitor attendance defines the direct expenditure of the Estate (Primary Impact) that spills locally and to other businesses, suppliers, contractors and partners, and creates household income for employee. This also results in government expenditure through taxation incurred or generated in multiple forms (Income Tax, VAT, Business Rates, and others). Figure 3 depicts the Direct, Indirect and Induced Expenditure that follows the capturing of visitor spending at the Estate for events and other facilities.

[31] Caruana, E et al. (2015). Longitudinal studies. Journal of thoracic disease. V(7). E537-540. DOI: 10.3978/j.issn.2072-1439.2015.10.63.

[32] Pielsticker, D., and Hiebl, M. (2019). Survey Response Rates in Family Business Research. European Management Review. 10.1111/emre.12375.

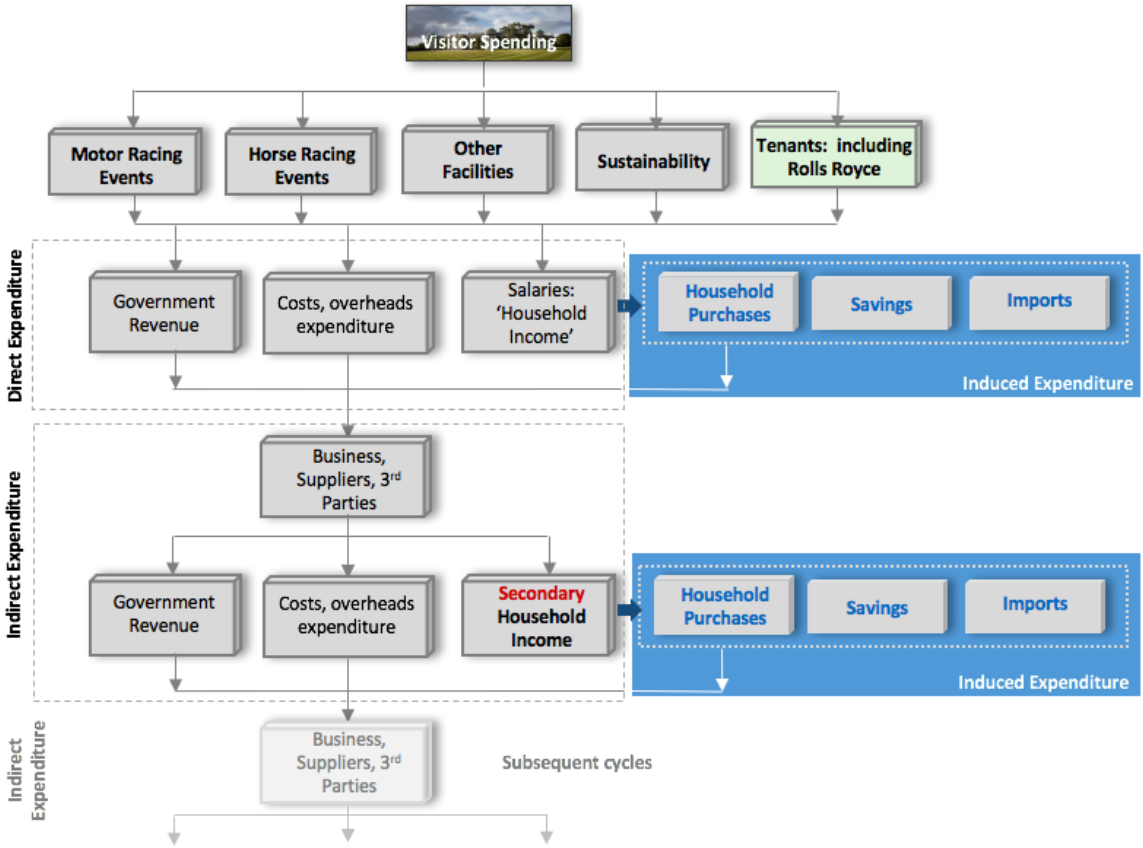


Figure 3: Research methodology defining contribution

Figure 3 reflects how expenditure is channeled into the economy when sales are converted into expenditure including Direct Expenditure when a business such as Goodwood utilises income to pay suppliers, 3rd parties, employees and generate tax contributions in the process; Indirect Expenditure that is incurred when business utilise income that is Direct Expenditure for the generating entity such as Goodwood, and Induced Expenditure that occurs by the spending of household income from employees of these organisations.[33] The use of multipliers can estimate this 'rippling' for expenditure categories beyond Direct Expenditure, or this can be estimated if a significantly granular degree of detail exists and the downstream and upstream business linkages can be mapped and estimated in detail. In the majority of cases this is not possible but this study's unfettered 12-month longitudinal study and access to granular data, information and participants in Goodwood's value chain has permitted major and minor linkages to be mapped and Direct, Indirect and Induced contribution to be estimate. Visitor expenditure is influenced by socio-demographic, economic, psychological variables and destination factors.[34] An analysis of Goodwood's consumer and visitor preferences data, concomitant to the use of limited additional sampling, provided a rich data source encompassing the end-to-end journey for all visitors, sponsors, contractors, vendors and others.

7.2 Expenditure Across All Areas: Direct, Indirect and Induced

The Office of National Statistics (ONS) provides guidance on measuring the direct spending associated with an event. This includes defining the host economy and measuring the spending of three groups:

[33] Preuss, H. (2006). Impact & Evaluation of Major Sporting Events. European Sport Management Quarterly V(6)4; pp:313–16.

[34] Brida, J.G., et al. (2013). Visitors' expenditure behaviour at cultural events: the case of Christmas markets. Tourism Economics. V(19)5; pp: 1173-1196. doi: 10.5367/te.2013.0237

spectators, sponsors/businesses and third parties, and the event organiser.[35] The host economy has been defined as comprising 15-mile radius originating from Goodwood that incorporates Greater Chichester. The research process nested Goodwood as the 'Contribution Source', that delivers a number of 'Contribution Activities' as depicted in Figure 4. Multiple sub-activities were defined within each of these, grouped into three areas for analysis: (i) *visitor-driven expenditure*, defined by unique visitor numbers; (ii) *non-visitor driven overheads* that comprise expenses required to maintain Goodwood's operations, and; (iii) *tax* generated from income, VAT, Corporate Tax, Business Rates, Air Passenger Duty (on the applicable component of domestic and international travel). During this stage of the research process, considerable on-site attendance and workshops with Goodwood's Management Team and the Finance Department: (a) mapped the flow of activities within the Estate; (b) mapped activities occurring upstream and downstream with suppliers, contractors, sponsors and others; (c) identified key visitor metrics; (d) incorporated considerable data across the activity chain including visitor attendance; expenditure; accommodation costs, occupancy rates, and other factors. These were segmented across the three contribution generators to create three deep silos of activities from which expenditure could subsequently be categorised ('Contribution Type').

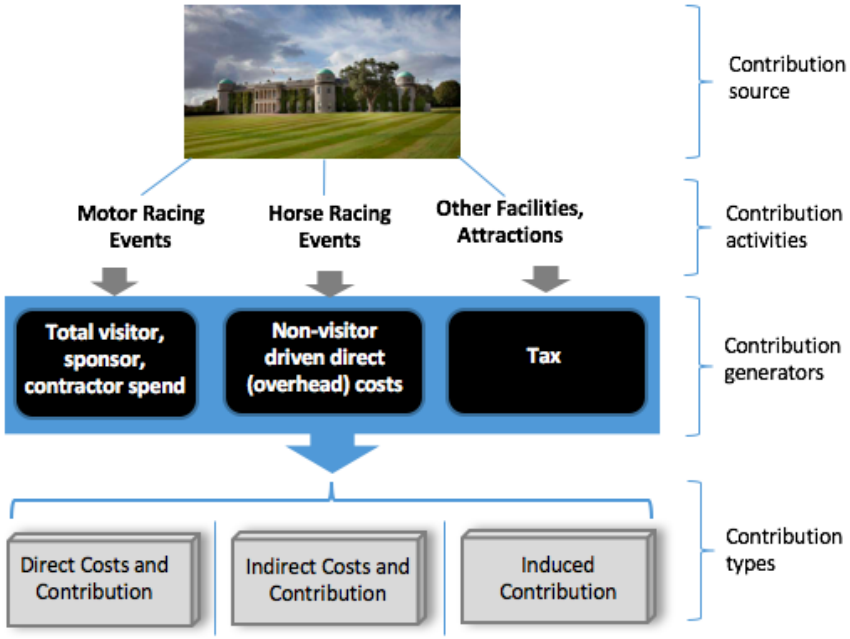


Figure 4: Goodwood's core facilitative role in generating direct, indirect and induced contribution

Analysis to define the sub-activities within each of the three contribution generators comprised the most significant component of this research project.

7.3 Expenditure Capture Approach by Contribution Generator

The three primary contribution generators are divided into:

- Total visitor and contractor spend
- Non-visitor driven overhead costs
- Tax

[35] Office of National Statistics (ONS). (2011). Measuring Tourism Locally. Guidance Note 6: Event Analysis and Evaluation. https://www.ons.gov.uk/file?uri=/economy/nationalaccounts/satelliteaccounts/methodologies/measuringtourismlocally2011/measuringtourism6tcm77248621.pdf

A fourth contribution category has been assessed, but this is not included in the total Direct, Indirect and Induced contributions: CO2 sequestered from Goodwood's Forest through sustainability initiatives. A quantification of Goodwood's environmental contribution through this activity is presented as a stand-alone figure in parallel to the other three contributions that have been mapped in detail to assess the key contributing elements derived from assessing linkages, participants, visitor data and other areas. At the conclusion of this process, the expenditure defined for the considerable sub-activities was grouped into the appropriate categories of *Direct, Indirect* and *Induced Expenditure.* This formed a first reference point for Goodwood's contribution locally and nationally for comparative purpose. A second output was calculated for each of these contribution categories utilising multipliers, following the generally accepted approach for economic contribution analysis. The first multiplier was obtained was a 'Type I' multiplier that is utilised to measure Indirect Contribution. This was sourced from the ONS for the most relevant applicable category of activity. The second multiplier was a Type II multiplier: this is not obtained by published sources but calculated utilising research results. The use of these multipliers and the research results defined a second set of contribution results that provided a comparative approach. The analysis commenced with visitor-driven expenditure.

7.3.1 Visitor-Driven Expenditure

Total visitor, sponsor, contractor spend

This category encompasses the majority of the primary research effort. The results are driven by attendance numbers that are in turn 'funneled' by events and the Estate's facilities and service. Research on the economic analysis of events highlights: *"In addition to individual categories of expenditure, it is good practice to find out how much visitors are planning to spend on their entire trip to the Host Economy."*[36] The longitudinal study undertaken provided the continuity to engage with Goodwood's Management Team and undertake additional primary research.

Unique visitors attendance data

Attendance data for unique visitors were obtain segmented by event-type or facility visited in the first instance. Primary research from previous Goodwood studies provided additional data, further supplemented by ticket sales data and visitor numbers from the Goodwood Marketing and Events Team.

Spend/visitor by travel mode and on-route

Each visitor was categorised into a segment reflecting individuals, couples, large group, private and organised tours and others. These categories were utilised to define travel mode and average vehicle/travel occupants with further analysis defining travel distance and origin including regional, national and international by transport mode utilising questionnaire data obtained to date or information held by the Marketing and Events Teams at Goodwood. Government statistics provided additional data on average UK tourist expenditure. Primary research provided expenditure profiles by each segment of traveler encompassing the cost of the travel mode itself and ancillary spend such as food, beverage, accommodation on-route, segmented by distance. This stage of the analysis provides a travel profile by visitor with commensurate costs. Data also generate value added tax for items purchased on route and accommodation. Research highlights; *"Whilst accommodation is a major item of Visitor Spend, it is not the only one. With a view to promoting a common template for recording and reporting Visitor Spend, six other standard categories of expenditure are proposed: Food and Drink; Entertainment; Local Travel (e.g. Bus, Taxi); Merchandise; Shopping/Souvenirs; Other (e.g. Petrol, Parking)."*

[36] http://www.eventimpacts.com/~/media/event-impacts/downloadable-resources/economic/economictoolkit.pdf?la=en

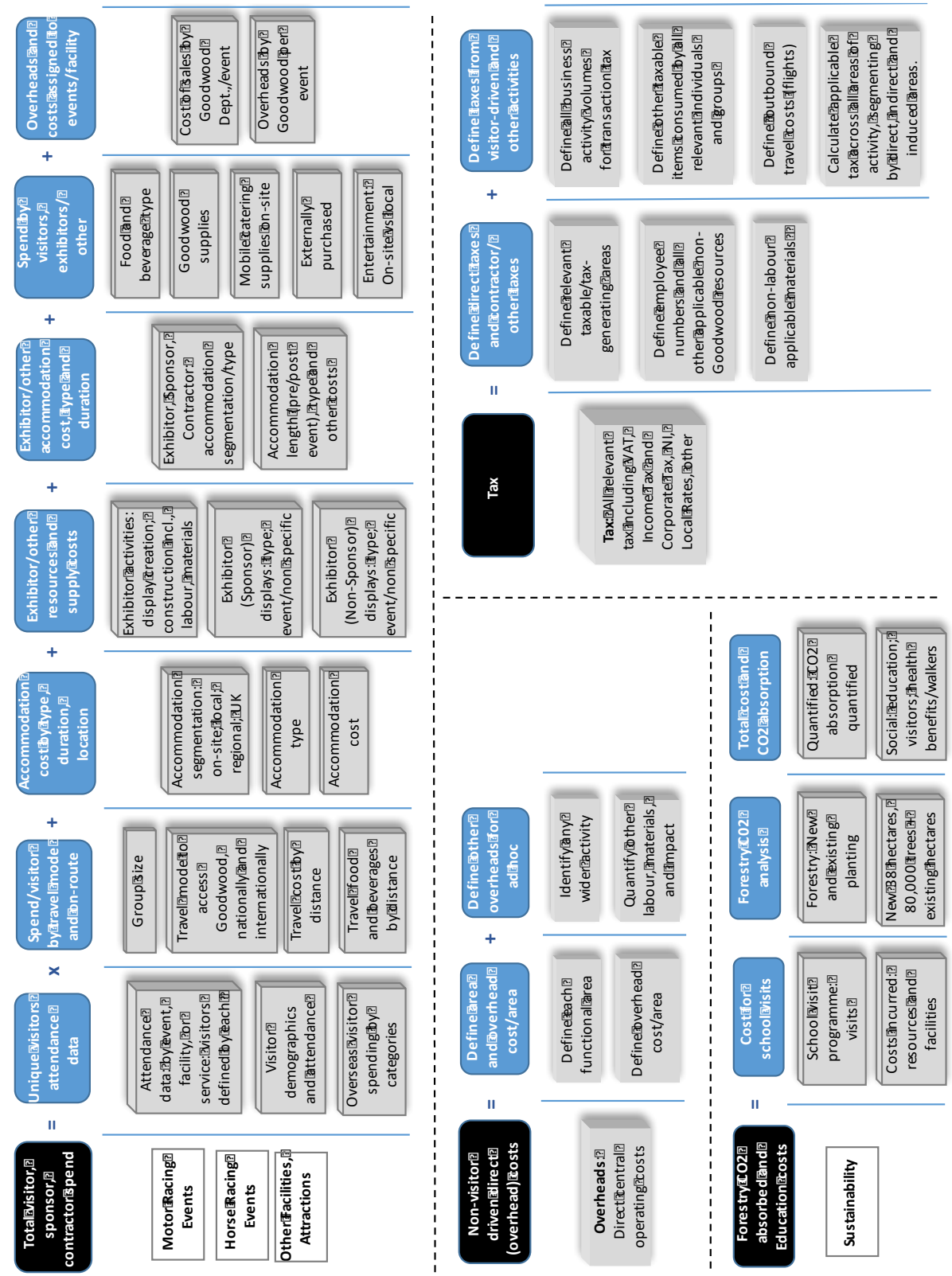


Figure 5: Expenditure model defining contribution

Accommodation cost by type, duration, location

The highest expenditure generated by visitors to Goodwood is on accommodation and food and drinks. These areas were amongst the most detailed elements of analysis in the initial research and included the utilisation of detailed previously administered questionnaires and interviews with visitors for events including FOS. A detailed profile was established of accommodation utilisation, occupancy, duration, and ancillary spend. Accommodation includes both Goodwood on-site facilities across multiple camp sites, the Goodwood Hotel and other lodges, and local camp sites and other lodging types. Detailed accurate data were also obtained on rates for these across the longitudinal study period to reflect a true calendar year of operation with rates fluctuating by seasons and when major events were held at Goodwood or other surrounding locations.

Exhibitor/other resources and supply costs

A further major cost generated by Goodwood is event-driven and incurred by its exhibitors, sponsors and non-sponsors, suppliers and contractors. These businesses construct significant stands and displays that in some cases are specific to Goodwood, or have been constructed for Goodwood and re-utilised since that can cost £3-4m each. In addition, the FOS, Goodwood Revival, Members Meetings all require significant track construction, grandstands, crowd facilities including temporary catering stands, toilets, display areas, that involve both permanent and temporary skilled and unskilled labour, materials and other activities. Glorious Goodwood also requires this engagement but to a lesser degree for some fixtures while others require considerable engagement and activities by other parties. Goodwood Management utilises local suppliers for many activities, retaining expenditure within the target region wherever possible.

Exhibitor/other accommodation cost, type and duration

Exhibitors, suppliers and contractors are also responsible for considerable accommodation and food and beverage expenditure in addition to their primary expenditure preparing Goodwood for events and general use. This additional expenditure reflects the unique nature of Goodwood's Hallmark Events. Motor racing events in particular are also 'showcase opportunities' for motoring brands. The construction of stands and facilities provides the opportunity to generate sales or leads and are an integral component of sponsorship. Larger complicated stands provide 'showroom' space for multiple vehicles in addition to siting and light-catering areas. Analysis assessed the considerable breadth of exhibitor and sponsor costs that include teams attending before major events to construct these and to re-attend to dismantle them after event conclusion. This generates pre and post-event accommodation spanning weeks in many cases and the additional generation of income and taxes for labour. These costs were defined by event, with a low incidence of leakage observed due to the utilisation of local suppliers and resources wherever possible.

Spend by visitors, exhibitors/ other

All non-accommodation costs incurred by visitors to Goodwood were quantified both on-route and while staying at the Estate or in alternative accommodation. This included those visiting the Estate for its attractions in addition to exhibitors, suppliers and contractors. Purchase and consumption patterns were defined utilising detailed data available from Goodwood, sub-contractors, surveys and other sources to define: food and beverage expenditure related to accommodation type including the recipient (e.g. Goodwood catering versus local off-site hotel), and any additional expenditure made locally while visiting Goodwood, wither by a visitor or an exhibitor, supplier or contractor. This includes local tourist

spending and other expenditure that otherwise would not have been made. This is a key test in the inclusion of such expenditure as secondary: Goodwood represents the sole reason that third parties engaged in delivering products and services incurred such expenditure with this counted as secondary with a high degree of applicability.[37]

Overheads and costs assigned to events/facility

The delivery of Goodwood's events and management of its facilities entails the maintenance of both central overheads and others that are dependent on specific events or facilities. This includes activities undertaken by teams to stage an event for example including travel and accommodation, or the purchase of services and materials. These were identified and separated from other overheads that are core and reflected elsewhere in the modelling including central functions that are fixed. Each represents a cost for the Estate with a segmentation between the two. The overheads incurred for specific events or facilities are smaller in total than those incurred in total for a central

7.3.2 Visitor-Driven Expenditure

Non-visitor driven direct (overhead) costs

This category represents a high proportion of the Estate's central running costs that comprise a direct contribution, and includes its employees and functional area costs that are required to manage its services across its facilities.

Define area and overhead cost/area

Each functional area was identified and overheads acquired. This excluded any event-specific overheads already assigned. The major overheads identified comprised a large proportion of the Estate's costs covering cost of sales, marketing, finance, maintenance, and other categories.

Define other overheads for ad hoc

A small number of overheads were identified as ad hoc with these comprising the minority of overheads.

7.3.3 Tax Contribution

Tax

A range of tax types and generation modes have been identified and calculated. These have been defined at various stages of the research including revenue identification and expenditure across activities.

Define direct taxes and contractor/ other taxes

All tax types were identified at stages of the research with a segmentation between visitor-driven *transactional* taxes and those generated by Goodwood as an entity and by the activities of its suppliers related to tax on materials purchases, services provided, and in the payment of salaries or contractor invoices.

Define taxes from visitor-driven and other activities

Transactional and visitor-driven taxes are a key component of the tax revenue forecast. Value-added taxes in particular related to purchases made on on-route contribute to Government revenue, encompassing accommodation, ticket sales, material costs, supplies, Air Passenger Duty on UK-applicable portions and other areas.

[37] Brida, J.G., et al., op cit.

7.3.4 Forestry CO2 and Education

Forestry CO2 absorbed and Education costs

Goodwood makes an environmental contribution to its local region and in a wider capacity through its forestry programme. CO2 absorption has been quantified to estimate the CO2 sequestered, and the potential value this has utilising international data on health benefit savings of CO2 removed from the atmosphere.

Cost for school visits

The costs associated with 'Goodwood Education' were defined and captured, that provide educational visits for schools at various age groups. This encompasses staff and facilities provided by Goodwood to provide the service.

Forestry CO2 analysis

Analysis was undertaken on Goodwood's forestry to define the data required to estimate the CO2 that is absorbed as a contribution by both the current Estate's forestry and the new planting scheme for an additional 40,000 trees.

Total cost and CO2 absorption

CO2 absorption was calculated over a long-term horizon accounting for significant time required for new trees to mature and maximise their CO2 absorption, complemented by estimates of existing tree CO2 absorption. This figure reflects a non-monetary contribution defined in conjunction with costs from the education programme.

7.4 Capturing Expenditure 'That Would Not Have Occurred Otherwise'

A key test cited in the assessment of major events for economic contribution is: *"Would event visitors have spent the same quantity of money in a community with or without a given tourist event?"* [38] Goodwood's Hallmark Events and additional facilities are believed to be the catalysts for expenditure by businesses (sponsors, contractors, suppliers), and visitors in the Estate and the local and national region. Four expenditure-related considerations were utilised to assess this contribution: (1) the source of the expenditure; (2) the geographic starting point of the expenditure; (3) the destination or end point of the expenditure, and; (4) the reason for the expenditure.[39] The research indicates that the flow from non- local sources to Goodwood and the surrounding local region occurred due to the events hosted and the presence of the Estate.[40] It is extremely unlikely that the absence of Goodwood's Hallmark Events would have resulted in the same influx of visitors as these are leading international Motor and Horse Racing Events with a differentiated position in the market. If these events were held elsewhere, this will most likely displace existing visitors to another location reflecting the ability of Hallmark Events to draw attendance irrespective of their location.[41] Goodwood's Hallmark Event visitors in particular also display a lower price and income elasticity of demand. These visitors undertake expenditure both on route and when at their destination *because* of the event. When demand is 'stickier', consumers are more likely to follow an event or other attraction and display a propensity to spend a higher amount in order to do so. [42] This phenomenon is observed in the behaviour of fans for many other Hallmark Events such as Formula One Grand Prix Races, World Cup Rugby Finals, and others.[43]

[38] Ibid
[39] Ibid.
[40] Ibid.
[41] Primary research undertaken between 2017-2019.
[42] Tyrrell, T. J., and Johnston, R. J. (2001). A Framework for Assessing Direct Economic Impacts of Tourist Events: Distinguishing Origins, Destinations, and Causes of Expenditures. Journal of Travel Research. V40(1); pp: 94–100. https://doi.org/10.1177/004728750104000112
[43] Henderson, J.C., et al. (2010). Sports events and tourism: the Singapore Formula One Grand Prix. International Journal of Event and Festival Management. V(1)1; pp: 60-73.

The location of an Event's Management is also cited as a further factor affecting contribution: *"the location of expenditures of the event committee or festival management frequently determines the greatest share of destinations."*[44] Goodwood's management team is located within the Estate and utilises owned-facilities to supply products and services to events, the Hotel and other accommodation and catered events. Expenditure further occurs in the local community for locally sourced supplies and resources. Research highlights that event contribution, *"includes [the] total amount of additional expenditure generated within a defined area, as a direct consequence of staging the event. For most events, spending by visitors in the local area (and in particular on accommodation) is the biggest factor in generating economic impact; however, spending by event organisers is another important consideration."*[45]

8. Expenditure Incurred by Contribution Generators

The contribution generator categories defined in Figure 5 encompass a number of activities that individual (visitors) and business attendees display. These have been assessed and quantified utilising both publicly available data; questionnaire-sourced data; forecasting and estimation where data are unavailable; Goodwood data; other primary and secondary sources. Some data are presented in a consolidated manner to mask their commercial sensitivity, with this occurring in particular for individual businesses or facilities within Goodwood, or for some Festival data including commercial revenue from activities that incorporate sponsorship, revenue sharing, active participants, and others. This research removed expenditure estimated to be from out-of-region with this incorporated to define a national contribution as a comparison. It is accepted that this does not constitute a locally-generated estimate but this provides an indication of a wider contribution due to Goodwood hosting a number of unique events that have an international recognition and profile. Estimated contribution encompassed a number of categories in which data were consolidated: unique visitor attendance; visitor segmentation, travel mode and spend (on-route and in-area); accommodation; labour; materials; food, drink and entertainment; overheads; inbound tourists, and charity. Expenditure from these categories has not been segmented into Direct, Indirect and Induced silos in this section. This occurs subsequent to the data summary in this section that followed an initial estimate for each category of expenditure within the three contribution generator headings defined in Figure 5.

8.1.1 Unique Visitor Attendance

Total annual visitor numbers for Goodwood marginally exceed 1 million. The four Hallmark Events of FOS, Goodwood Revival, Member's Meetings and Horse Racing ('Glorious Goodwood'), account for 600,000 visitors, with the remaining 400,000 distributed across 14 other areas that comprise the Estate's facilities and attractions. Visitor numbers are not disclosed publicly by Goodwood for many of these areas, with this report adhering to consolidated figures. Local visitors have been estimated and removed from attendee figures. This aligns with economic contribution theory, reflecting the notion that their expenditure 'does not equate to incremental income' for the target area.[46] The average reduction to overall visitor numbers was around 20% with some areas reduced to a greater degree including Gym/Spa and golf visitors reduced by around 40%, while Hallmark Event local visitor reduction was under 10%. The 'Other Areas' Category encompassed 14 facilities and services with reductions varying between them. Facilities such as Hound Lodge (the premium lodging experience)

[44] Tyrrel, T.J., and Johnston, R.J., op cit.
[45] http://www.eventimpacts.com/~/media/event-impacts/downloadable-resources/economic/economictoolkit.pdf?la=en
[46] Crompton, J.L. op cit

attract almost 100% out-of-area visitors, while other areas such as Golf, Gym and Spa attract a higher proportion of local visitors than Hallmark Events. Around one-third of Horse Racing visitors have been removed reflecting the propensity of local visitors to attend the 19 fixtures on a more casual and repeated basis. A mix of reduction figures occurred for the remaining 14 areas that ranged from a negligible amount for premium accommodation for *Hound Lodge* through to a 40% reduction for golf and gym/spa visits, and a range of reduction figures in between these for other facilities.

A net annual visitor figure estimate of around 840,000 was defined. This is segmented by local visitors (752,600); 9% EU visitors (79,000); 1% visitors from other international locations (8,400).

8.1.2 Visitor Segmentation, Travel Mode and Spend: On-Route and In-Region

Visitor segmentation commenced with the breakdown of Goodwood's visitors into 'Couples', 'Individuals' and 'Groups'. The ratio of visitors between these categories varies by Event, facility and service, including between days for a specific event, e.g. FOS displays a 70% predominance of 'Couples'[47] on some days while for Horse Racing, this reduces, with 'Groups' increasing in prevalence. Visitor distribution is Event and attraction-specific, while in other cases it is dependent on the season or a special occasion booking. The travel mode to Goodwood was subsequently defined as the secondary filter encompassing *Private Transport* that included Modern Car, Historic Car, Motorcycle, Cycle, Walking, while *Public Transport* was also utilised to segment visitors by cost to capture multiple modes including train and bus transport. Following the definition of visitor numbers and travel mode, expenditure by each was defined based on distance in-region and out-of region with additional modes assessed including air transport (outbound components in particular to reflect Air Passenger Duty generated); tube; national rail. For private transport, fuel cost was the primary cost captured while for public transport, this included the cost of travel (ticket expenditure). The key parameters across these categories varied by Event and Facility visited and included the following assumptions, with some elements consolidated due to data sensitivity and confidentiality:

- Average group size for modern car transport was 2.16, while for classic cars this was 1.0;
- For FOS, modern cars transport accounted for around 82% of total journeys, with classic cars accounting for around 5%; public transport accounting for 10% and other modes (motorcycle, cycle, walking) accounting for 3%, with motorcycles accounting for around 60% of this category.
- For other events such as Horse Racing, modern cars accounted for over half of all journeys, with public transport accounting the next largest share and less than 5% accounted for by other modes. Less than 1% of Goodwood's visits are also accounted for by fly-in visits from aircraft and helicopters either through charters at Hallmark Events or from joy-flights, experience days or flight training;
- For other events, modern cars dominated transport at around 87% of all trips, with public transport accounting for 7% and other modes accounting for the remainder of trips;
- The average cost for longer trips by public transport varied by each event and within the 14 Other Category and included £350 longer trips greater than 2 hours that encompassed a mix of trains, bus, taxi for major events: this reflects peak-pricing charged on routes that significantly increased over Hallmark Event period by 200-400% for some sectors, with some

[47] The term denotes a range of attendees where two tickets are purchased together and can denote friends, colleagues, family, or others. This constitutes a broader definition of a 'couple'.

degree of advance-purchase occurring by around 40% of attendees. For medium-length and short trips (out-of region) a cost of £120 and £15 respectively.

- The most expensive transport cost was observed for Hallmark Events or special occasions where a cost of £500-800 per person was incurred for private charter for aircraft or helicopter.
- Multiple-day event attendance was factored with motor events such as FOS reflecting in some cases a marginally lower attendance on the first day (16% of total 4-day attendance) with this increasing and averaging a similar proportion over the remaining days;
- Fuel costs for private vehicles varied from £140 for a longer trip greater than 2 hours, to £20 for a shorter trip. Longer trips often included larger vehicles with multiple occupants and were particularly relevant for Hallmark Events. This also took account of considerably slower progress and higher fuel consumption for sectors of the route including congestion on route and closer in and around A Roads in Chichester irrespective of the origination for the latter.
- Food and beverages consumed on the journey and within the area while travelling were defined and varied with 75%, 50% and 15% of long distance, medium distance and shorter distance trips including purchases. A respective cost of £50, £35 and £20 was captured with the non-local expenditure component removed for the local-expenditure calculation.

The segmentation of data for the outlined categories yielded a total expenditure of:

Travel – Food and Drinks	
Travel – Motor Vehicles – Fuel	
Travel – Motorbike, Cycle, Fly-in's, Others, Fuel	
Travel – International Flights (local purchase component)	
Travel – Public Transport	
Travel – Tourism Tax (Passenger Air Duty Outbound)	
Travel Total	£18,718,975

8.1.3 Accommodation

Accommodation analysis represents one of the most extensive areas of analysis undertaken and utilised extensive primary and secondary research. This encompassed both visitors to events and the considerable number of exhibitors, sponsors and contractors who participate in the pre and post event assembly of temporary facilities including track components, stands, displays, and other structures. This analysis included acquiring data on local and regional costs across accommodation types; analysis of the proportion of bookings made in advance to estimate the seasonal and overall expenditure profile (advance vs later bookings); the proportion of stays within the area, and other factors. This analysis calculated:

Visitor numbers (local vs non-local) and **Exhibitor, Sponsor, Contractor numbers** x
% utilising accommodation (local vs non-local) x
% type of accommodation (*Hotel* (X Star Hotel, B&B, Friends and Family, Self-Catering)) or *Caravan and Camping* (Camping non-electric, Camping electric, Pre-pitched camping, Glamping, Other non-Goodwood camping) x
Number of accommodation days utilised (pre, during, post-Event and for other facilities) x
Cost of each (varying by a seasonal profile)

Goodwood facilitates considerable accommodation across Events and general facilities contributed to in part by its more rural location but close proximity to Chichester and nearby other coastal resorts areas. This contributes to a disproportionately higher demand for accommodation than otherwise might occur resulting in higher occupancy rates for Goodwood's Hotel and full-occupancy during events for other Camping facilities, while local accommodation within the target region absorbs considerable demand during Event periods. In addition, major Events such as FOS, Goodwood Revival and Members Meetings are multi-day events spanning from four to two days and attracting over 360,000 visitors (excluding local visitors) including 37,000 overseas visitors, with an additional 155,000 visitors attending Horse Racing fixtures including 9,000 overseas visitors. Accommodation encompasses room nights stayed during events and in visiting Goodwood, and around 11% extra nights added on average by visitors within the target area when attending a Hallmark Event. During these events, room rates are significantly higher than at many other times of the year, contributing further to a high degree of expenditure for this category. The consolidated costs across the primary categories of on-event, pre event (including post event) and other accommodation incurred as part of cost-of-sales activities totals £63m.

Accommodation – on-event	
Accommodation – pre-event	
Accommodation – from cost of sale	
Accommodation	£62,490,803

8.1.4 Labour

Labour cost is incurred by both Goodwood and its partners in the delivery of Hallmark Events and the running of the Estate's other facilities, services, attractions, and the delivery of core support services to support these. The core categories for labour include: labour expense incurred by exhibitors, sponsors and non-sponsors, stalls in delivering the displays, stands and other temporary structures in the target region; additional labour utilised by Goodwood in the cost of sales to deliver its events and other services and attractions; labour utilised by Goodwood related to capital projects related to the maintenance and investment in the Estate's facilities including replacement items, grounds and other areas; labour cost for Goodwood 1,090 employees. These costs total £66m per annum.

Labour (Sponsor/Exhibitor stands)	
Labour (related to cost of sale)	
Labour (related to capital projects)	
Labour (related to employees)	
Labour Total	£66,408,206

8.1.5 Materials

Three primary categories comprise Materials: inputs into the construction of stands, facilities and temporary structures by sponsors and contracts. This includes both materials specific for stand construction on a temporary basis in addition to the purchase of other materials required in the construction of new stands. These categories include materials that require replacement and encompass around 90 sponsors engaged in the delivery of branded exhibitor stands. Additional material and supplies are required for grandstands; temporary track development; spectator barriers, crew areas, and others, and materials that encompass cost of sales for the Estate in addition to those

required for capital projects on the Estate that complement labour related to this category. A total of £35.7m expenditure per annum has been estimated for this category.

Materials (Sponsor/Exhibitor stands)	
Materials/Supplies (related to cost of sale)	
Materials/Supplies (related to capital projects)	
Materials Total	£ 32,473,854

Sponsors/Exhibitors Purchase of Materials, Stands, Other Major	£ 5,397,225

A final expenditure category for Exhibitors and Sponsors encompasses additional local expenditure incurred that is not captured within other categories. This includes additional specialist services required to deliver requirements for Goodwood Hallmark Events, and other costs incurred by these providers that are not captured by the above categories. These total £3m per annum.

Other Expenditure Sponsors/Exhibitors	£ 3,150,762

8.1.6 Food, Drink and Entertainment

Expenditure on food and drink represents a recurring cost across Goodwood's restaurants, bars, events, and other areas in addition to being generated from incremental sales that occur in the target area from visitors. Primary research defining the purchase and expenditure pattern of visitors has defined that on average around 30% purchase additional food and drink from venues outside of Goodwood with an average spend of £30 on food and £10 on drinks across venue types (including restaurants, bars, take-away venues, and others). The core categories encompassed in this expenditure include primary expenditure in events on food and drink through Goodwood's catering facilities; the distribution of Goodwood's mobile catering throughout areas of the Estate and for special events; additional food and drink expenditure incurred in Goodwood's other non-Event facilities including the Hotel, restaurants, and bars. The total expenditure for this category totals £54m per annum.

Food & Drink Central (Events)	
Food & Drink Mobile Catering	
Food & Drink Hotels/local area	
Food & Drink from cost of sale	
Food & Beverage Total	£ 54,873,969

Around 10% of visitors to Goodwood are estimated to attend additional activities around the Estate including special event-related entertainment; entertainment that forms part of the Estate's other offerings; entertainment that occurs within the local target areas by visitors go Goodwood including visiting other attractions, attending concerts, other events, and related activities, with an average spend of around £30 by 10% and £10 by 20% of visitors for Hallmark Events. Around 5% of visitors to Goodwood's other facilities spend around £50 on additional Goodwood entertainment with 10% spending around £20 per visit locally in the target area on other entertainment, with a total of £4.4m forecast across all additional entertainment.

Entertainment within Local Area Total	£ 4,082,637

8.1.7 Overheads

A core primary expenditure in event analysis is overhead cost incurred by the Event organiser. Goodwood's core annual overhead cost (excluding salaries) is £18m. This is segmented across many cost categories including Central Overheads functions; Non-Operating Costs; Administration; Property, and others. These are not segmented further due to confidentiality.

Overheads Total	£ 18,598,208

8.1.8 Inbound Tourists: Initial and Additional Spend

An estimated 80,000 EU visitors and 8,400 international visitors attend Goodwood each year with many drawn by the Hallmark Events. These visitors spend an average of £600 during their visit across all expenditure categories with around 30% adding additional holiday time pre or post their visit to Goodwood in the local target area, accounting for an estimated additional £181 per international visitor. Additional expenditure is made elsewhere in the UK economy by these visitors, but this has not been captured for this research. This expenditure category's contribution was estimated to be £24m.

Inbound Tourism - from EU/International Local Spend	
Other Tourism - additional Spend locally (added)	
Inbound Tourism Total	£ 24,657,700

8.1.9 Charity

Goodwood supports a mix of charities. Some are local while others are national. Almost £0.5m per annum is raised for charities. For the purpose of this analysis, charity contributions are treated as local, accepting that a mix of contribution is likely to occur between local and non-local retention.

Charity Donations	£ 492,009

8.1.10 Consolidated Expenditure Contribution

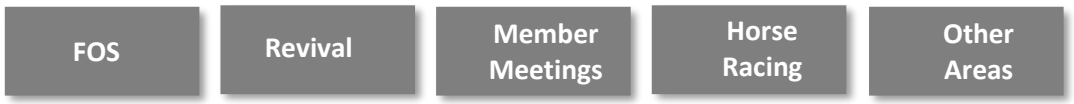
The consolidated granular contributions outlined in each of the defined expenditure categories totals £314m, and is summarised in Table 1. This provides a first reference point that excludes the use of multipliers and is not segmented into the categories of Direct, Indirect and Induced Expenditure. This is defined in the subsequent section that provides the concluding consolidation of contribution.

Labour (Sponsor/Exhibitor stands)	
Labour (related to cost of sale)	
Labour (related to capital projects)	
Labour (related to employees)	
Labour Total	£[illegible]6,408,206
Materials (Sponsor/Exhibitor stands)	
Materials/Supplies (related to cost of sale)	
Materials/Supplies (related to capital projects)	
Materials Total	£[illegible]2,473,854
Accommodation - on-event	
Accommodation - pre-event	
Accommodation - from cost of sale	
Accommodation	£[illegible]2,490,803
Travel - Food and Drinks	
Travel - Motor Vehicles - Fuel	
Travel - Motorbike, Cycle, Fly-in's, Others, Fuel	
Travel - International Flights (local purchase component)	
Travel - Public Transport	
Travel - Tourism Tax (Passenger Air Duty Outbound)	
Travel Total	£[illegible]17,206,268
Tourist Spend within local area	£[illegible]24,195,092
Food & Drink - Central (Events)	
Food & Drink - Mobile Catering	
Food & Drink - Hotels/local area	
Food & Drink - from cost of sale	
Food & Beverage Total	£[illegible]54,873,969
Entertainment within Local Area Total	£[illegible]4,082,637
Inbound Tourism - from EU/International Local Spend	
Other Tourism - additional Spend locally (added)	
Inbound Tourism Total	£[illegible]24,657,700
Sponsors/Exhibitors - Purchase of Materials, Stands, Other Major	£[illegible]5,397,225
Overheads Total	£[illegible]18,598,208
Other Expenditure - Sponsors/Exhibitors	£[illegible]3,150,762
Charity Donations	£[illegible]492,009
TOTAL	**£[illegible]314,026,733**

Table 1: Major expenditure categories and consolidated contribution

9. Goodwood Socioeconomic Contribution

Goodwood's forecast socioeconomic contribution was assessed utilising the methodology defined in Figure 5, with the assessed results depicted in Table 1. These reflect expenditure from the three Hallmark Motor Racing Events and the Hallmark Horse Racing Event (encompassing 19 fixtures), in addition to other areas (encompassing 14 facilities and attractions):



The final process of the research estimated Goodwood's contribution, with a final comparison of the results occurring:

A. *Granular consolidation without multipliers*: The detailed longitudinal engagement defined estimates for expenditure categories that were segmented into Direct, Indirect and Induced contribution to provide a total for contribution, without any multipliers utilised. The extensive assessment of all participants in Goodwood's value chain of activities provides a broad but extensive contribution that included primary activities (Goodwood), secondary activities (other businesses to which Goodwood provides income) and additional induced activities (income re-circulated by employees and others and logistical expenditure incurred by these and visitors). These estimates can be viewed as an initial approximation of contribution with the extended analysis acting as a proxy for the use of multipliers with the process extending the normally utilised higher-level definition of drivers for contribution by the majority of economic contribution analysis. The longitudinal study incorporating extensive engagement with Goodwood's Management Team, extended visits and use of detailed data and previous research on attendee preferences and expenditure, has permitted granular mapping and quantification of upstream and downstream supplier and business links in addition to staff and attendee expenditure. These provide considerable analytical breadth and depth and the visibility of the impact of Goodwood locally and nationally through its 'rippling effect': this is most often approximated through the use of multipliers following the definition of an initial core Direct contribution impact.

B. *Consolidation with multipliers*: In addition to the contribution undertaken in the granular consolidation, this research utilised multipliers to provide an additional reference point that followed a more traditional economic contribution approach. This analysis utilised two components: (i) Direct contribution that occurred at a granular level as utilised in the granular analysis and; (ii) the use of two multipliers: (a) A Type I multiplier sourced from the ONS that encompassed the most applicable category of *Sports Activities and Amusement and Recreation Activities* to define Indirect Contribution, and; (b) the calculation of a Type II multiplier utilising the research data that defines Induced Contribution. The results of this analysis are compared to the granular analysis and provide a second reference point denoting a range for the contribution generated by the Goodwood.

C. *Local versus national contribution*: Goodwood hosts internationally recognised Hallmark Events that attract both overseas and national visitors into the local target area. These visitors incur expenditure throughout their journey to Goodwood and the surrounding local target area that is discounted in the assessment of local contribution. A final comparison occurred following the addition of this data into the analysis to generate an estimate for national contribution accepting that this does not follow a standardised approach as it reflects a contribution outside of the immediate local target area.

9.1 (A) - Granular Contribution Without Multipliers

The expenditure categories defined in previous sections have been segmented into Direct, Indirect and Induced contribution. Chart 1 depicts these categories with a consolidated estimated contribution of £314m per annum for Goodwood into the local economy. This is distributed between a Direct Contribution of £100m, an Indirect Contribution of £92m and an Induced Contribution of £121m. The

nature of Goodwood's attraction draws national and international visitors with analysis undertaken to estimate the wider UK impact of the Hallmark Events in particular. This results in a forecast contribution of £435m annually for the UK in total, with around £121m variation between the contributions. This is accounted for by increases in Direct Expenditure of £16m, Indirect Expenditure increase of £11m and Induced Expenditure of around £94M. These reflect the capturing of wider purchases by visitors before they reach the target region including food and beverages purchased on route; public transport utilised outside of the region; fuel costs expended outside of the region and flight expenditure purchased in the UK outside of the region, or applicable for the UK component but purchased outside of the region. Chart 1 depicts the consolidated contribution for the local region and the UK.

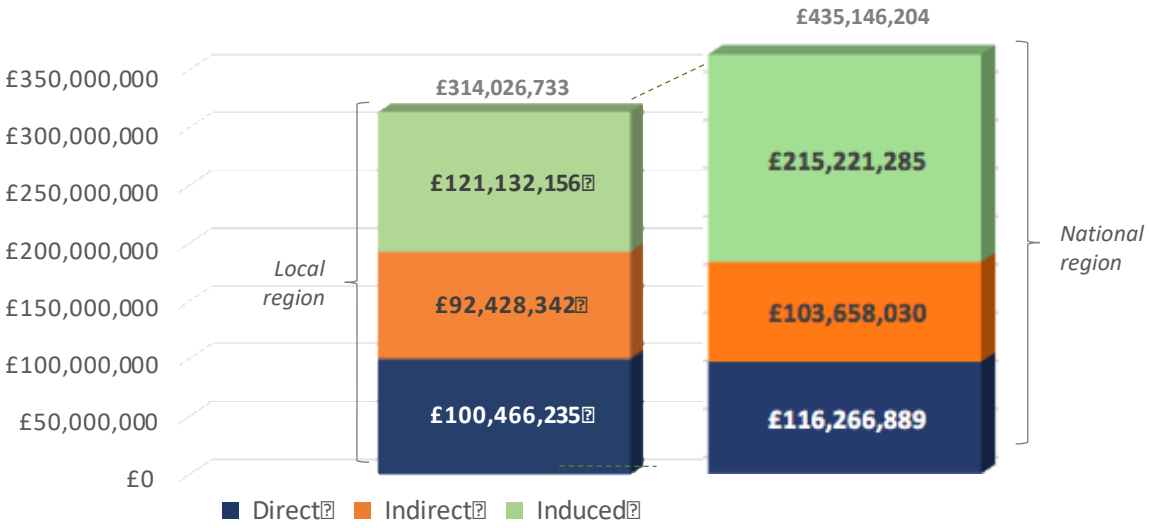


Chart 1: Consolidated annual socioeconomic contribution- local vs national

The local contribution is depicted in Chart 2.

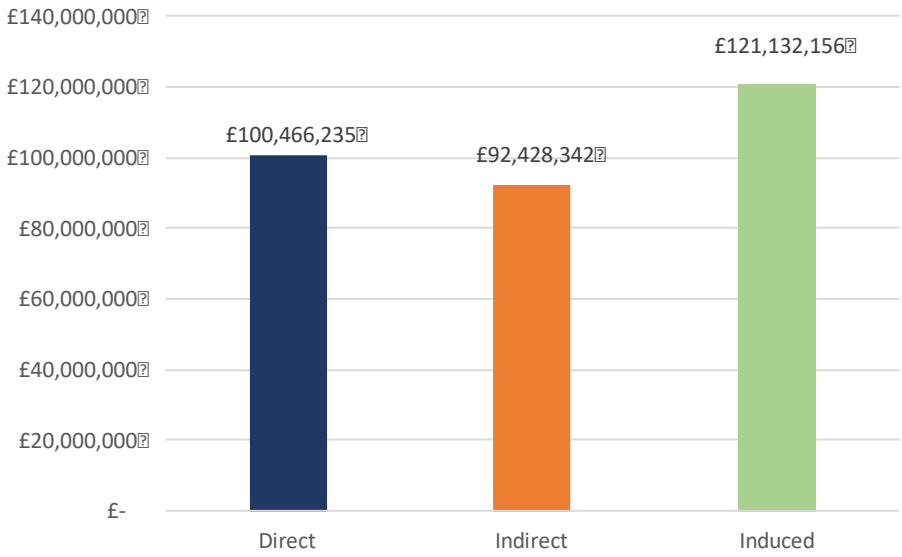


Chart 2: Consolidated annual socioeconomic contribution- local expenditure

9.1.1 Consolidated Expenditure Overview by Category

The primary *direct contribution* category reflects Goodwood's expenditure to manage the Estate and provide key facilities to enable the Events to be staged and for visitors to be supported including cost of sales; central overhead functions; expenditure for salaries, suppliers, vendors, maintenance, and all other functions that comprise the direct costs required to deliver the range of events, facilities, and services that Goodwood provides. These are core delivery elements that comprise *primary expenditure.* This is estimated to be £100m per annum locally with minor leakage occurring due to the highlighted nature in this report of Goodwood's integrated model that utilises own-supplies wherever possible from its farm, forest and other areas, complemented by local suppliers wherever possible. This creates a relatively robust integrated contribution framework that maximises both local expenditure and contribution that is managed by a team working on-site with a further advantage: local knowledge and long tenure. Many individuals in the management team and a considerable number of employees have worked at Goodwood for a considerable time period, with this generating strong local connections and familiarity with suppliers and processes that further contributes to minimising leakages and promoting the local development of the Estate.

The second contributing category is *indirect contribution.* This is estimated to be £92m per annum and represents a strategically significant area of activity for Goodwood that is less dependent on traveller behaviour and expenditure. As depicted in Figures 2 and 3, Goodwood's direct expenditure is utilised as an input by a number of businesses including vendors and contractors. In addition, sponsors and non-sponsors pay sponsorship fees to Goodwood in addition to incurring considerable expenditure in some cases to erect stands, displays, 'showrooms' for motor vehicles and other items. This occurs on a significant scale, with around 90 major sponsors engaged for Hallmark Events including attendance on-site considerable earlier than an event to construct facilities, utilising local resources on many occasions in addition to core teams, and departing weeks after the conclusion of an event in some cases following the dismantling and packing of stands and displays. These activities generate local expenditure when supplies, accommodation and resources are utilised locally. These indirect activities include accommodation for events that generates over 100,000 utilised nights for FOS and an estimated 225,000 for all Hallmark Events encompassing Goodwood Revival, Members Meetings and the 19 Horse Racing Fixtures, with the majority of these located within the target area. Table 2 depicts an assessment of Goodwood's visitor engagement with vendors. An optimal scenario is depicted when out-of-region visitor spend occurs with local vendors (green). A relatively neutral effect occurs when this expenditure s is recycled within the local economy by local visitors (amber), while a negative effect on local contribution occurs when expenditure 'leaks' with non-local vendors. It is unlikely that any event can completely curtail the utilisation of non-local vendors for some functions.

	General Impact			% observed at Goodwood		
Spend Category	Positive	Neutral	Negative	Positive	Neutral	Negative
Visitor spending with local vendors				70%	10%	20%
Non-local vendors' spend in the host economy				90%	5%	5%
Local residents' spend with local vendors				50%	50%	
Visitor spending with non-local vendors				70%	20%	10%
Spending by local vendors in the host economy				20%	80%	
Vendors' spend with organisers				10%	90%	
Local residents' spend with non-local vendor				60%	10%	30%

Table 2: Strategic analysis on vendor spend[48]

[48] http://www.bha.org.uk/wordpress/wp-content/uploads/2015/09/Economic-contribution-of-the-UK-hospitality-industry.pdf

Analysis on spend by Goodwood visitors with vendors is depicted on the right-hand side. The percentage figures depict the observed distribution of expenditure by each category on the left-hand table with the ensuing impact depicted in the three categories. In general, through the selection of vendors, Goodwood reflects an overall leakage-minimisation strategy.

The final contributing category is *induced contribution*, and is estimated to be around £121m annually. This category encompasses contribution from employee income into the local economy (after accounting for tax, savings, and any leakage into imports). The nature of Goodwood's Hallmark Events draws visitors from across the UK and internationally who generate expenditure across their journey. This is not captured elsewhere with this category including food and beverages purchased when travelling within the target area, fuel, public travel costs, additional tourist spending locally and some other expenditure driven by traveller numbers and travel pattern. This category also includes estimates for both in-region and the UK. It is accepted that the latter does not reflect locally captured impact but this is congruent with the depiction of wider impact as illustrated by the other two preceding expenditure categories.

9.2 (B) - Consolidated Contribution Estimates with Multipliers

Multipliers measure the ratio between the initial impact and the total impact.[49] Government guidance recommends a three-step process in completing event evaluation that is adhered to by this research: (1) Define the host economy; (2) Measure net direct impact incorporating existing data sources and visitor data; (3) Estimate total economic impact using either Input Output (IO) models, CGE models or *existing multipliers.*[50] This research utilises existing multipliers for a portion of the estimate of contribution, reflecting; "*existing multipliers can be used on any scale of event. However, they must be relevant to the host economy."*[51] IO tables or complex GCE models have not been constructed: considerable engagement occurred in this research to define granular flows, impact and 'rippling' that the majority of event research does not provide. The use of multipliers occurred to provide a further reference point utilising more traditional contribution assessment approaches.

9.2.1 Defining Contribution with Multipliers

Advice from the ONS indicates: *"Multipliers usually range between 1.0 and 3.0 and area and by the interaction of industries within the area vary by the amount of economic activity within an area."*[52] The ONS publishes a range of multipliers and ratios from Input-Output Analytical Tables on the UK Economy by sector to assist with the calculation Type I and Type II effects. Only Type I multipliers are provided, and measure the business-to-business effect of estimated contribution.[53] Type II multipliers measure the impact of household spending with these calculated utilising a formula and data from research results.[54] In order to obtain a relevant and available Type I multiplier, the most applicable industry category was obtained from ONS SU114 Industry Tables for Goodwood: *Sports Activities and*

[49] https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/articles/inputoutputanalyticaltables/methodsandapplicationtouknationalaccounts
[50] https://www.visitbritain.org/sites/default/files/vb-corporate/Documents-Library/documents/England-documents/6_analysis_evaluation.pdf
[51] https://www.visitbritain.org/sites/default/files/vb-corporate/Documents-Library/documents/England-documents/6_analysis_evaluation.pdf
[52] https://www.uaex.edu/business-communities/economic-development/FSCED6.pdf
[53] http://srdc.msstate.edu/trainings/presentations_archive/2003/2003_econimpacts_doeksen_inputoutput.ppt
[54] http://srdc.msstate.edu/trainings/presentations_archive/2003/2003_econimpacts_doeksen_inputoutput.ppt

Amusement and Recreation Activities.[55] The relevant tables for this category include Type I multipliers that can be utilised to measure the 'ripple effect' (impact) of the estimated Direct and Indirect contribution into the local economy.[56] ONS data indicate that the applicable Type I output multiplier for this category is 1.638.[57] With accompanying output data for Goodwood's contribution, a Type II multiplier can be estimated:

MULTIPLIERS: Type I and Type II Multipliers

Type I Multiplier:	**1.638**	(source: ONS data)
Type II Multiplier:	**3.126**	source: Calculated below-

$$\text{Type II Multiplier} = \frac{\text{(Direct contribution + Indirect contribution + Induced contribution)}}{\text{Direct contribution}}$$

$$= \frac{£\ 100{,}466{,}235 + £\ 92{,}428{,}342 + £121{,}132{,}156}{£\ 100{,}466{,}235}$$

$$= \frac{£\ 314{,}026{,}733}{£\ 100{,}466{,}235}$$

$$= 3.126$$

Utilising both Type I and Type II multipliers, total local economic contribution can be estimated:

Contribution	**Direct, Indirect and Induced Contribution**			**Incremental**
Direct contribution:	**£ 100,466,235**			**£ 100,466,235**
Indirect contribution (Type I Multiplier):	Direct Contribution x Type I Multiplier			
	£ 100,466,235	x	1.638	
	£ 164,570,753			**£ 64,104,518**
Induced contribution (Type II Multiplier):	Direct Contribution x Type II Multiplier			
(includes Direct, Indirect, Induced)	£ 100,466,235	x	3.126	
	£ 314,026,733			**£ 149,455,979**

A total local contribution of £314m is calculated, with a Direct, Indirect and Induced Contribution of £100m, £64m and £149m respectively. Chart 3 summarises these results.

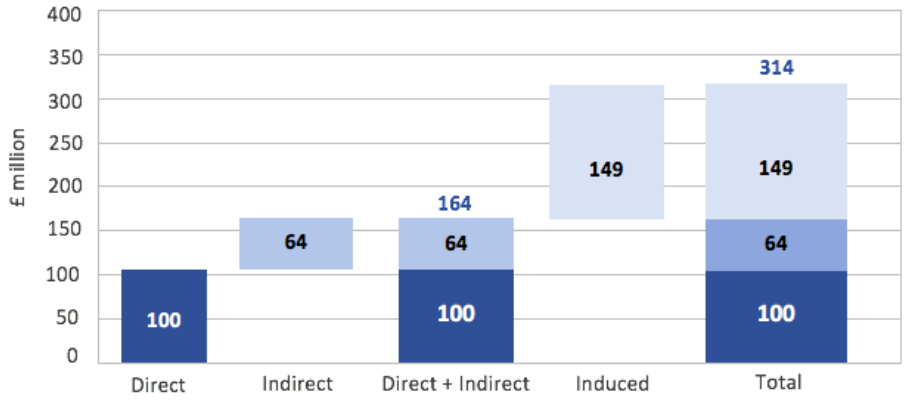


Chart 3: Goodwood's local contribution utilising ONS Type I Multiplier and calculated Type II Multiplier

[55] https://www.ons.gov.uk/file?uri=%2feconomy%2fnationalaccounts%2fsupplyandusetables%2fdatasets%2fukinputoutputanalyticaltablesdetailed%2f2015detailed/2015detailedioatsbb18.xls

[56] https://sustain.pata.org/wp-content/uploads/2015/02/Mules_EcoImpactsFestivals_v6.pdf

[57] https://www.ons.gov.uk/file?uri=%2feconomy%2fnationalaccounts%2fsupplyandusetables%2fdatasets%2fukinputoutputanalyticaltablesdetailed%2f2015detailed/2015detailedioatsbb18.xls

The total national contribution can also be estimated utilising additional data excluded from local contribution, following the same methodology utilised in the calculation without the inclusion of multipliers:

MULTIPLIERS: Type I and Type II Multiplers

Type I Multiplier:	**1.638**	(source: ONS data)
Type II Multiplier:	**3.743**	source: Calculated below-

$$\text{Type II Multiplier} = \frac{\text{(Direct contribution + Indirect contribution + Induced contribution)}}{\text{Direct contribution}}$$

$$= \frac{£\ 116{,}266{,}889 + £\ 103{,}658{,}030 + £215{,}221{,}285}{£\ 116{,}266{,}889}$$

$$= \frac{£\ 435{,}146{,}204}{£\ 116{,}266{,}889}$$

$$= 3.743$$

A marginally larger Type II multiplier is calculated. Utilising both Type I and Type II multipliers, a total national economic contribution can be estimated:

Contribution	**Direct, Indirect and Induced Contribution**			**Incremental**
Direct contribution:	**£ 116,266,889**			**£ 116,266,889**
Indirect contribution (Type I Multiplier):	Direct Contribution x Type I Multiplier			
	£ 116,266,889	x	1.638	
	£ 190,453,335			**£ 74,186,446**
Induced contribution (Type II Multiplier): (includes Direct, Indirect, Induced)	Direct Contribution x Type II Multiplier			
	£ 116,266,889	x	3.743	
	£ 435,146,204			**£ 244,692,868**

A total national contribution of £435m is estimated, with a Direct, Indirect and Induced Contribution of £116m, £190m and £244m respectively. Chart 4 summarising these results.

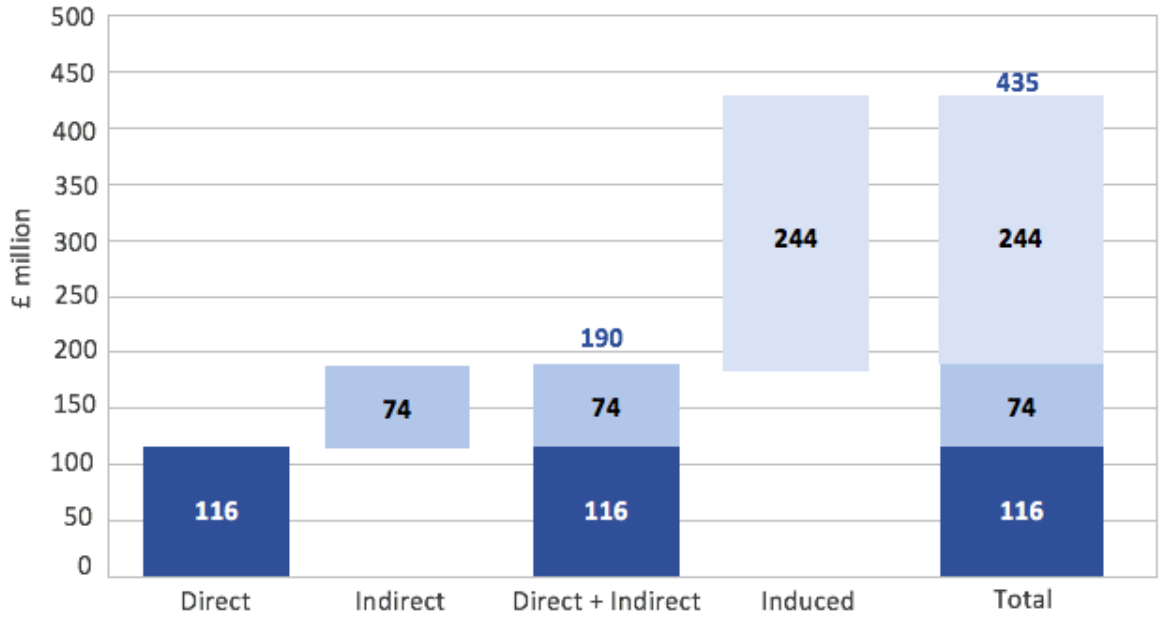


Chart 4: Goodwood's national contribution utilising ONS Type I Multiplier and calculated Type II Multiplier

9.3 Comparing Contribution Results

Goodwood's local annual economic contribution is estimated to be £314m. Both approaches (with and without multipliers) harmonise around this contribution. The national contribution is estimated to be approximately £435m per annum. Variation exists in the Indirect and Induced contribution estimates between the approaches, but it is believed that either estimates provide values that can reflect the contribution within each of these categories. In conjunction, they represent a *contribution range,* that excludes or utilises multipliers. This yields estimates for local contribution without and with the use of multipliers of £92m and £64m respectively for Indirect Contribution, and £121m and £149m respectively without the use and with the use of multipliers for Induced Contribution. For a national contribution, these values are £103m and £74m for Indirect Contribution without or with the use of multipliers respectively and £215m and £244m respectively for Induced Contribution. Direct Contribution remains the same in both scenarios (with and without the use of multipliers) with the primary variation occurring between the categories of Indirect and Induced Contribution. The annual local and national economic contributions are estimated to be £314m and £435m respectively. The very granular nature of this analysis encompassing longitudinal engagement over a year has captured considerable data and modelled its impact that is not present in many economic impact studies where multipliers are utilised to estimate such an impact. This analysis has assessed a degree of downstream impact using granular supplier, contractor, employee and others engaged in Goodwood's activity chain. Additional leakage in subsequent rounds can occur, but it is believed that the significant detail obtained to estimate an initial leakage provides an indication of the Estate's impact.

9.4 Tax Contribution

A final area of estimated contribution in the research was the tax contribution made by Goodwood. The Estate incurs Corporate Tax, Income Tax and NI for employees, VAT, Local Business Taxes and Rates and facilitates the generation of tax by its upstream and downstream sponsors, partners and contractors through the leakage of income to these groups. The activity chain of visitors to Goodwood also generates taxes including VAT in particular on items consumed; fuel tax; Air Passenger Duty for contributions made at a wider National level, and others. The total estimated taxes generated through direct, indirect and induced contribution annually by Goodwood locally is £100m. This is segmented by VAT (£73m), Income Tax and NI (£23m) and other taxes (£3.2m). Considerable analysis has occurred to map consumer journeys and segment in and out-of area tax. Chart 5 depicts the total estimated annual tax contribution that Goodwood facilitates and makes directly at a local level.

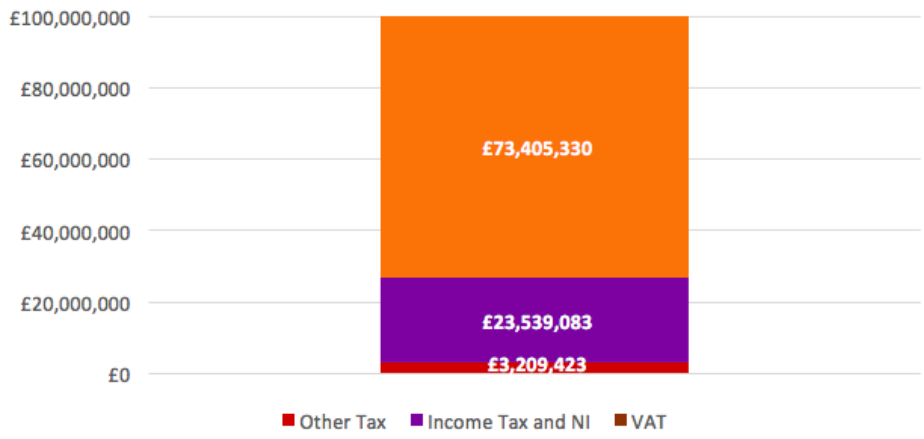


Chart 5: Total local tax contribution from Direct, Indirect and Induced expenditure

Chart 6 segments this to depict each tax type individually.

Chart 6: Total local tax contribution from Direct, Indirect and Induced expenditure by each type

The segmentation of tax contribution by each of these areas is depicted in Table 3.

TAX BY CATEGORY		
Direct	£	51,369,439
Indirect	£	27,717,038
Induced	£	21,067,359
Total	£	100,153,836
By Event/Sub-Category		
Direct		
FOS	£	5,487,404
REV	£	3,885,163
HORSE RACING	£	3,088,020
MEET	£	1,061,484
OTHER	£	37,847,368
TOTAL	£	51,369,439
Indirect		
FOS	£	13,516,704
REV	£	5,834,293
HORSE RACING	£	2,847,987
MEET	£	761,650
OTHER	£	4,756,405
TOTAL	£	27,717,038
Induced		
FOS	£	6,966,269
REV	£	4,409,887
HORSE RACING	£	2,519,657
MEET	£	914,721
OTHER	£	6,256,825
TOTAL	£	21,067,359

Table 3: Total local tax contribution by category and event or area of activity

If national contribution is assessed, Goodwood facilitates a marginally higher tax figure of £125m with a greater inclusion of VAT and other taxes for on-route food, beverages, public transport tickets, car parking and other items, in addition to a greater capture of some airport and ticket taxes and spillovers for an outbound component that accrues to the UK Government. This is depicted in Chart 7.

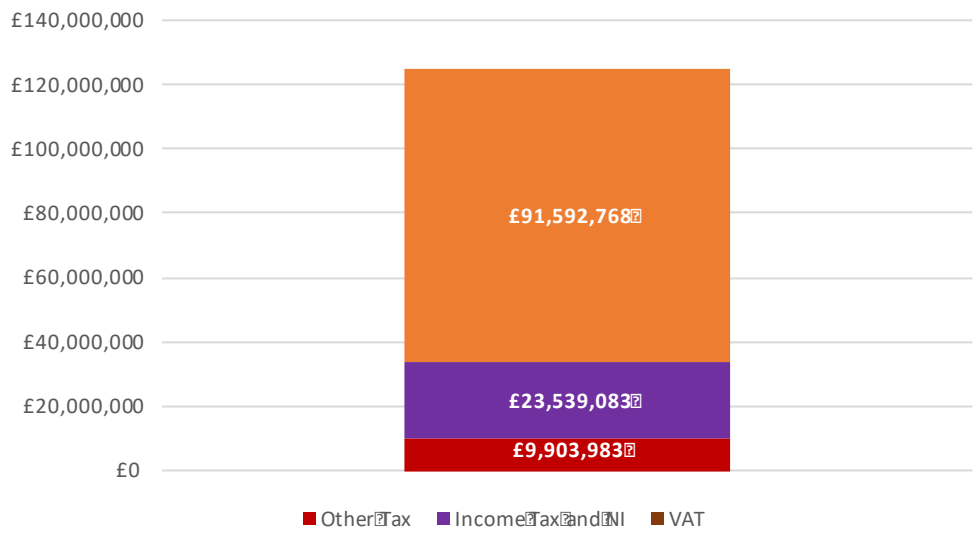


Chart 7: Total national tax contribution from Direct, Indirect and Induced expenditure

The segmentation of tax contribution by each of these areas is depicted in Table 4.

TAX BY CATEGORY		
Direct	£	54,375,926
Indirect	£	29,962,975
Induced	£	40,696,932
Total	£	125,035,833
By Event/Sub-Category		
Direct		
FOS	£	6,025,775
REV	£	4,423,534
HORSE RACING	£	4,171,610
MEET	£	1,168,316
OTHER	£	38,586,691
TOTAL	£	54,375,926
Indirect		
FOS	£	14,976,831
REV	£	6,620,103
HORSE RACING	£	2,847,987
MEET	£	761,650
OTHER	£	4,756,405
TOTAL	£	29,962,975
Induced		
FOS	£	10,795,922
REV	£	7,173,123
HORSE RACING	£	4,605,480
MEET	£	1,658,923
OTHER	£	16,463,484
TOTAL	£	40,696,932

Table 4: Total national tax contribution by category and event or area of activity

9.5 Forestry and Education: Contributing to Sustainability

In 2018, Goodwood Estate developed a sustainability strategy that aligned activities with long term economic development and social progress while safeguarding the environmental foundations of the Estate. The strategy defined a 100-year plan that encompassed both medium and long-term objectives for:

- Carbon
- Water

- Resources and Waste
- Sustainable business
- Social value
- Natural capital

The Estate's strategy is to make an environmental, social and economic contribution through a year-on-year reduction in own carbon emissions in addition to carbon sequestration across the Estate. The sequestration of carbon is defined as the process of transferring CO2 into the soil as organic carbon that would have otherwise been released into the atmosphere.[58] Carbon sequestration in forest soils is considered to be an important factor in the mitigation of carbon dioxide from the atmosphere while also improving the forest health and land productivity.[59] To achieve the Estate's sustainability strategy, including carbon reduction, Goodwood's Forestry Team is planting one of the largest forestry schemes in the South of England. This encompasses almost 40,000 trees in 40 hectares of new woodland that adds to the Estate's existing 727 hectares of forestry. The contribution of CO2 absorption has been estimated, modelling CO2 sequestered above and below the ground tree biomass over the 100-year cycle utilised by the Forestry Management Team that encompasses the journey from seedling to mature trees. This contribution does not form part of a 'traditional' estimate of economic contribution, but this study seeks to identify *wider* contribution that is not necessarily readily monetised but which makes a significant social and environmental contribution. Goodwood's forestry includes a range of softwood trees encompassing western red cedar and Douglas-Fir with the top of the fir trees are used for wood chippings to fuel the biomass boiler, which powers Goodwood's 10-bedroom sporting lodge, Hound Lodge, and Goodwood's member clubhouse, The Kennels. The benefit of using wood product is commonly termed 'material substitution'.[60] In addition to the softwood trees, traditional English trees continue to be planted including oak, sweet chestnut, hawthorn, hazel, beech and field maple across the 12,000 acre estate to provide a protective canopy for wildlife. Many variables affect the amount of CO2 that is sequestered including the tree type, age, density of planting, the type of soil, the litter of deadwood, and other factors.[61]

Studies indicate that the use of wood and wood-based products are associated with lower fossil and process-based emissions when compared to non-wood products.[62] The material substitution of forest products to provide power for Goodwood's accommodation and clubhouses results in lower demand from the commercial grid, with the potential to contribute to lower greenhouse gasses by using wood in place of other more energy-expensive fossil fuel intensive materials. A lower national CO2 emissions target requires contribution from multiple sources. In addition, the growth of Goodwood's forestry assets can contribute to the reduction of greenhouse gases through the removal of CO2. Studies indicate that in most UK forest soils, the soil carbon store considerably exceeds the amount stored in the biomass, with a multiple of 5.5 observed in some UK forests. The health benefits of CO2 mitigation have been estimated to be US$100 (GBP£78) per tonne of CO2 in high-income countries.[63]The annually sequestered CO2 by the Goodwood Estate is estimated to be 165,000 tonnes, accounting for the combination of new growth and replacement areas, with the Estate's carbon 'cost' reducing to

[58] Chinade, A.A., et al. (2015). A Review of Carbon Sequestration in Malaysian Forest Soils: Opportunities and Barriers. International Journal of Soil Science. V(10)1; pp: 17-27.

[59] Ibid.

[60] Cardinelli, C., et al. (2018). Substitution effects of wood-based products in climate change mitigation. From Science to Policy. V(7); pp:2-28. https://www.researchgate.net/publication/329268078_Substitution_effects_of_wood-based_products_in_climate_change_mitigation

[61] http://www.confor.org.uk/media/247010/eskdalemuir-carbon-full-report-june-2018.pdf

[62] Cradinelli C., et al, op cit.

[63] http://www.lse.ac.uk/GranthamInstitute/publication/multiple-benefits-from-climate-change-mitigation-assessing-the-evidence/

zero by 2029 from 10,000 tonnes per annum in 2019. This equates to an annual health benefit value of £12m, and a total cumulative health benefit saving of £123m by 2029 reflecting 1.5m tonnes of sequestered CO2. Over the 100-year plan, the Estate is estimated to sequester 16.5m tonnes of CO2 reflecting a total health benefit saving of £1.2bn. The Estate makes a further sustainability social contribution through its 'School Education' programme that incurs a cost already captured in the calculated direct contribution of the Estate. This requires dedicated resources and the participation of other areas in the Estate to host school visits from both within and out-of the local area, including to the Farm, the House, and other areas. Although this can't be readily quantified, a wider social benefit is generated through the education provided on sustainability, responsible farming and local history.

10. Summary

This research reflects a multi-layered review of the Goodwood Estate's operations to estimate local and national economic contribution. This occurred through primary research over a 12 month-period that assessed the Estate, comprising a longitudinal study with unrestricted on-site access to individuals and information, complemented by additional off-site secondary research and analysis. The process utilised economic contribution analysis methodology including the use of local visitor numbers to define activities and expenditure and the use of detailed supplier and contractor information to assess additional expenditure. The longitudinal study permitted the acquisition of very granular data over repeated visits that distinguishes this study from many economic impact assessments: data and information were utilised to map the activity chain of the Estate followed by the quantification and modelling of upstream and downstream activities and employee household expenditure. This estimated both a local and national economic contribution. The latter was undertaken to estimate the contribution that Hallmark Events in particular have in the UK, with these attracting a significant international base of visitors who otherwise would not have visited the Country. Additional expenditure from these visitors subsequently 'leaks' around Goodwood and elsewhere in the UK from those who travel wider.

The 'stickiness' of Hallmark events reflects the successful development and positioning of Goodwood as an internationally recognised marque that differentiates the Estate with the overwhelming majority of other English country estates. These events draw visitors who otherwise would not have travelled to the UK, or those travelling from within the Country, and are complemented by Goodwood's other facilities that operate year-round in parallel with environmental, sustainability and forestry programmes. Concomitant to, or as a result of this, contribution is created through an integrated geographic and economic ecosystem of assets, partners, employees, facilities and resource that generate value that is likely to be greater than 'the sum of its parts' and the revenue that has been growing year-on-year. Hallmark Events such as FOS are 'the face of Goodwood', and transform the Estate into the largest greenfield site-build in the world, accommodating 200,000 visitors, 11,000 staff, and hundreds of partner organisations. In combination with other events, assets and facilities, Goodwood generates a significant local and national contribution that extends beyond the staging of a number of festivals or horse racing fixtures: The Estate has developed into an integrated ecosystem with deep local linkages and historical roots that date back to the mid-1550's. This creates value that is likely to exceed the amount that can be quantified.