



ROBERTSON



Fraser of Allander Institute The contribution of Robertson to Scotland's economy August 2021



Table of contents

The Fraser of Allander Institute

123Executive SummaryIntroductionCovid-19 and the
Construction sector141824Economic ModellingMultiplier analysisLocal impact313334Taking
responsibility for
climate changeConclusionsMethodology

36 Appendices

Disclaimer

The analysis in this report has been conducted by the Fraser of Allander Institute (FAI) at the University of Strathclyde. The FAI is a leading academic research centre focused on the Scottish economy.

The report was commissioned in 2021 by Robertson.

The analysis and writing-up of the results was undertaken independently by the FAI. The FAI is committed to informing and encouraging public debate through the provision of the highest quality analytical advice and analysis. We are therefore happy to respond to requests for technical advice and analysis. Any technical errors or omissions are those of the FAI.

Executive Summary

Robertson is one of the largest family-owned construction, infrastructure, development and support services businesses in the UK.

With over fifty years of experience across a diverse group of sectors and projects, Robertson has a significant impact on the Scottish economy.

This report evaluates Robertson's economic contribution to Scotland in terms of the jobs and Gross Value Added (GVA) its activities support.

We find that, once spill over effects are accounted for, Robertson's spending, from 2017/18-2019/2020, is estimated to have supported –

- a total of over £1.8bn in Scottish GVA; and,
- Over 11,200 Full-time Equivalent (FTE) Scottish Jobs on average annually.

Robertson has eight main divisions across Scotland. Of these, investment from the Major Projects division supports the greatest amount of employment and economic activity across the Scottish economy.

This report finds that the collective investment from Robertson's Major Projects, Specialist and Civils divisions, from 2018/19 – 2020/21, is estimated to have supported –

- Almost £400m in Scottish GVA; and,
- Just under 2,500 FTE Scottish jobs on average annually.

But, Robertson's contribution to the Scottish economy extends beyond these traditional economic metrics.

Robertson is committed to supporting the economy's fight against climate change. Additionally, Robertson's focus on local supply chains and investing in Scottish communities provides employment and earnings opportunities in some of the most deprived areas in Scotland, helping Scotland tackle its inequalities grand challenge.

For example, Glasgow and Dundee are the 1st and 4th most deprived¹ local authorities in Scotland according to the Scottish Index of Multiple Deprivation (SIMD 2020).

This report finds that -

- During the period 2018/19-2020/21, Robertson's Scottish divisions spent over a fifth of their expenditure in Glasgow and Dundee City.
- Robertson's Stirling and Dundee offices are located in two of the 20% most deprived areas in Scotland.

This report assesses Robertson's economic contribution alongside its wider impact to highlight this construction firm's role in the Scottish economy.

¹ These two local authorities have the 1st and 4th largest shares of the 15% most deprived areas in Scotland.

Introduction

The construction sector is a significant contributor to the Scottish economy and its adaptability and resilience exhibited throughout the Coronavirus pandemic has highlighted its important role in the Scottish economy.

The construction sector will play a significant role in Scotland's economic recovery from COVID-19 and firms within this sector will all play their part.

Robertson is one of the largest family-owned construction, infrastructure, development and support services businesses in the UK

This construction firm has a strong presence in Scotland, with eight divisions across the country, supporting opportunities in local communities in some of the most deprived areas in Scotland.

This report seeks to highlight Robertson's economic contribution to the Scottish economy, and its wider contribution to local communities.

Robertson provided the Institute with a range of case studies, written by Robertson, which are used throughout the report to complement analysis of Robertson's economic and wider benefits.

This report is outlined as follows -

- Section 1 discusses the construction sector as a whole, reflecting on the impact of COVID-19 on this sector;
- Section 2 includes analysis of Robertson's economic contribution to the Scottish and UK economies, estimated from input-output modelling;
- Section 3 highlights some determinants of Robertson's economic impact to the Scottish economy, reflecting upon the role of supply chains and import intensities in driving economic multiplier effects;
- Section 4 looks at Robertson's local economic impact with analysis of its local supply chain and the economic impact of its eight Scottish divisions and six Scottish head and regional offices;
- Section 5 reflects on Robertson's commitment to helping tackle climate change, making use of case studies provided by Robertson; and,
- Section 6 concludes this report.

1. Covid-19 & the Construction Sector

The construction sector plays an important role in the Scottish economy. It has productivity and wages generally in line with the Scottish average and it supports an above average share of national GVA and employment.

The sector is comprised mostly of SMEs and it offers relatively stable forms of employment compared to other Scottish sectors.

Like many important industries of the economy, the construction sector has been significantly impacted by the Coronavirus pandemic.

During the first national lockdown the sector was one of the hardest hit sectors in the Scottish economy but, since then, it has managed to recover quickly, showing signs of resilience and adaptability.

During the second national lockdown the sector fared better than most of the Scottish economy.

As of March 2021, economic output in the construction sector exceeded pre-pandemic levels.

Scotland's construction sector

The construction sector is the 8th largest sector of the Scottish economy in terms of output. In 2018, it made up around 6% of Scottish GVA and 5% of Scottish employment – See Chart 1.



Chart 1: Share of GVA and employment by sector, Scotland, 2018

On a regional scale, the construction sector is most prominent in North Lanarkshire and South Lanarkshire. On the other hand, Edinburgh and Inverclyde have the lowest share of GVA and employment in the construction sector.





Compared to other sectors of the Scottish economy, construction is somewhere in the middle of the pack in terms of pay. In 2020, the gross hourly wage in the construction sector was £13.33, slightly under the Scottish average of £14.08. See Chart 3.

Additionally, construction is one of the sectors with the lowest shares of part-time employment – See Chart 4.

This suggests that workers in construction may be slightly better positioned to withstand cuts in working hours or job losses in the case of an economic downturn in comparison to sectors with a higher share of part-time workers.

Chart 3: Gross median hourly wage (2020), sectors of the Scottish economy



Chart 4: Share of part-time employment and sector's share of total employment, Scotland, 2018



Source: BRES, FAI Calculations

The business base in the construction sector is made up mainly of SMEs with 1 - 49 employees. SMEs support the largest share of jobs, but large businesses with 50+ employees support most of the turnover generated in the sector. The sector also has a considerable share (39%) of businesses which have no employees - i.e. businesses ran by self-employed individuals.



Chart 5: Structure of the business base in the Scottish construction sector, 2018

The impact of the COVID-19 pandemic on Scotland's construction sector

The construction sector was heavily affected by the first national lockdown last spring, with output falling by more than half. Chart 6.

During the winter lockdown, industries, like Accommodation and Food Services, experienced a similar hit to output as that felt during the first national lockdown.

However, Construction output recovered last summer and was more resilient than the rest of the economy during the second national lockdown in winter.

In March 2021, the Scottish construction industry was 3.7% above pre-pandemic levels; the construction sector is the first sector - of Production, Construction and Services - to return to pre-pandemic levels.

The trends in GDP for the construction sector during the second lockdown have been driven by the higher share of companies trading relative to the rest of the Scottish economy. Around 89% of companies in the construction sector continued to trade during the height of the second lockdown in comparison to only around 83% of companies in the whole economy. See Chart 7.



Chart 7: Estimated share of businesses that are currently trading, Scotland, 15 June 2020 – 2 May 2020



The resilience of the construction sector can be seen when comparing the share of firms which paused trading at the start of each UK lockdown. Almost a third of all construction firms paused trading at the start of the first lockdown, but only 4% and 6% of firms paused trading during the November and January lockdowns.

Chart 8: Firms closing or pausing trading at the start of each lockdown, by industry, UK, First Lockdown - January Lockdown



Lower consumer demand and trading restrictions have resulted in a decrease in turnover for most companies across the country. Over 80% of construction firms saw reduced turnover in June 2020, but only 40% of companies saw a reduction in turnover during the winter lockdown. In April 2021, around a third of companies saw a decrease in turnover compared to normal expectations at that time of the year.

Chart 9: Estimated share of businesses with decreased turnover compared with what is normally expected for this time of year, Scotland, 1 June 2020 – 2 May 2021



Source: Scottish Government, BICS

In Q2 2020, new orders in the Scottish construction industry fell by around £380 million (a 33% decline) year-on-year (y-o-y). The decline in Q1 2021 was slightly higher -37% y-o-y.

Housing and private commercial construction projects typically form the largest share of new orders in the Scottish construction industry. However, the composition of new orders has changed during the first lockdown and the subsequent recovery period.

New orders for housing and private commercial projects fell sharply in Q2 2020. Furthermore, infrastructure spending in Q3 2020 more than doubled y-o-y from \pounds 375 million to \pounds 814 million.

Despite the decline in the overall volume of new orders in Q1 2021, the composition of new orders remained in line with long term trends.



Chart 10: New orders in the construction industry, by main contractors, Scotland, 2019 Q1 – 2021 Q1

Growth in new orders tends to typically be more volatile in Scotland compared to the UK.

Nevertheless, in Q2 2020 new orders in Scotland were less affected by the pandemic than the UK, whereas in Q1 2021 the decline in Scotland was more pronounced.





As a result of reduced capacity and lower demand many firms have placed workers on furlough. In June 2020 almost 60% of employees in the construction sector were on furlough. However, this share fell to less than 10% in subsequent months. Despite a modest increase during the winter lockdown, the share of furloughed employees remained well below that of other Scottish sectors and the levels seen during the first lockdown.

Chart 12: Estimated share of workforce on furlough leave, by industry, Scotland, 1 June 2020 – 2 May 2021



Source: Scottish Government, BICS

During the first lockdown vacancies in the construction sector for both permanent and temporary positions fell to their lowest level on record. On the other hand, during the winter lockdown permanent vacancies declined, but temporary vacancies continued to recover.

In April 2021, there was strong growth in vacancies. Chart 13.

10

0

Jan-07

Oct-07

Jul-08

Apr-09

Oct-10

Jan-10



Apr-18 Jan-19 Oct-19 Jul-20 Apr-21

Source: IHS Markit

Jul-17

Chart 13: Permanent and temporary vacancies index in the construction industry, Scotland, January 2007 -April 2021

Apr-12 Jan-13 Oct-13 Jul-14 Apr-15 Jan-16 Oct-16

Jul-11

By January 2021 employment in the construction industry was back at pre-crisis levels and continued to grow, before declining slightly again between March and April 2021.

Despite a decline in the demand for labour, employment data from HMRC PAYE (available only at UK level) shows that the construction industry has been less affected than the rest of the UK economy in terms of demand for workers.



The impact of COVID-19 and Brexit on trade

The latest Fraser of Allander <u>Economic Commentary</u> highlighted that the pandemic and end of the EU transition period has had a significant impact on UK and Scottish trade.

Trade frictions have impacted Scottish trade slightly more than UK trade overall, and although there has been a swift recovery since the sharp decline in January 2021, a considerable number of Scottish businesses were still incurring extra trade-related costs in May due to frictions with the EU and Northern Ireland.

As discussed later in this report, the construction sector is one of the least import intensive industries in the Scottish economy however, businesses in this sector have seen increased costs due to the end of the transition period with the EU, and it remains to be seen how much recent trade frictions, caused by COVID-19, Brexit, container shortages and the Suez Canal disaster, will translate into higher prices in the future.

Conclusion

Whilst the construction sector was brought to a halt in the spring of last year the sector has proven to be resilient. The sector has adapted to social distancing rules and COVID-19 restrictions relatively fast, allowing it to operate during subsequent lockdowns.

The construction sector is now above pre-pandemic levels, the first of any main sector.

Although there remains a great deal of uncertainty in the economy, and there are challenges surrounding the supply and price of imported goods, the construction sector's recovery so far should give some hope for firms within the industry.

As will be shown, investment in this sector can generate significant knock on effects, supporting jobs and economic growth across the whole economy.

Building Scotland's resilience to the Covid pandemic

Built to support Scotland's NHS during the Covid-19 pandemic and achieving operational readiness in only three weeks, the NHS Louisa Jordan field hospital embodies the ultimate team effort. Outstanding collaboration between us, the NHS team, designers, and supply chain saw the 1,000+ bed hospital designed, constructed and delivered to an exceptional healthcare standard and within the unprecedented deadline.

In 2020-2021, the hospital eased the burden on the NHS by:

- delivering 32,000 outpatient and diagnostic appointments;
- training over 6,900 healthcare staff and students;
- vaccinating approximately 175,000 people over a four-month period across Greater Glasgow and Clyde;
- carrying out over 500 blood donations;
- providing nearly 1,000 people from the University of Glasgow with occupational health services.

CASE STUDY

Securing a post Covid recovery through innovative procurement using Clear Futures

Clear Futures is a procurement vehicle for public sector bodies who want to accelerate and unlock projects with the confidence of sustainable outcomes. It is a partnership between Eastbourne and Lewes Councils and strategic delivery partners Robertson and AECOM. As well as achieving sustainable outcomes, it focuses on creating local spend and strengthening social resilience.

In 2019-2021, Clear Futures has:

- secured £7.1m UK Government BEIS funding for public sector decarbonisation projects;
- applied for £4.5m from BEIS that will fully fund decarbonisation projects in Stockport and save 444.31 tonnes of CO2 e annually;
- worked on 40 improvement projects in Bolton with a value of £43m, and delivered 8 projects with a value of £3.7m;
- generated £842,571 of social value;
- provided local employment with 70% of Clear Futures Bolton employees living in the Bolton area.

2. Economic Modelling

Economic impact

From 2017/18 - 2019/20 Robertson spent over £1.8bn in Scotland and almost £400m in England, amounting to a total UK spend of over £2.2bn.

This spend was split across construction investment – or capital expenditure (CAPEX) - and the day-to-day running costs – or operating expenditure (OPEX) - of Robertson.

Around 83% of Robertson's total UK spend during this period was spent within Scotland. Chart 15.

Chart 15: Robertson, Capital and Operating Spend (nominal), Scotland & England, 2017/18 – 2019/2020



The impact and wider spill-over effects of Robertson's spending during 2017/18 - 2019/2020 is estimated through fitting Robertson's capital and operating costs into two detailed models – one of the Scottish economy and the other of the UK economy.

These models estimate the impact that Robertson's activities have on jobs and economic growth in Scotland, both directly and indirectly.

We input Robertson's investment and day-to-day spend over this three-year period into two detailed models of the Scottish and UK economy to evaluate the total economic impact of Robertson's activities to the Scottish and UK economy.

Economic impact assessments examine three types of activity: direct, indirect and induced effects. See Diagram 1.





Scotland

In total, Robertson's spend across 2017/18 - 2019/2020 is estimated to support, once spillover effects are accounted for, over 11,200 FTE jobs annually and have an economic impact of over £1.8bn on Scottish GDP.

Of this total impact, over 90% comes from Robertson's capital expenditure. See Appendices A & B.

2,845

11,235

Table 1: Economic Impact of RG CAPEX & OPEX, Scotland, 2017/18-2019/2020, 2019/20 prices*				
	Output (£m)	Average Annual Employment (FTE)	GVA (£m)	
Direct	1,875	5,555	830	
Indirect	945	2,835	440	

945

3,765

*Totals may not sum	due to	rounding
---------------------	--------	----------

Induced

Total

Source: FAI Calculations

565

1,835



UK

In terms of UK impact, Robertson's spend across 2017/18 - 2019/2020 is estimated to support, once spillover effects are accounted for, just under 19,500 FTE jobs annually and have an economic impact of around £3.4bn on UK GDP.

Of this total impact, over 90% comes from Robertson's capital expenditure. See Appendices C & D.

Additionally, over half of Robertson's impact on the UK economy is driven by spend in Scotland.

	Output (£m)	Average Annual Employment (FTE)	GVA (£m)
Direct	2,260	6,230	925
Indirect	2,270	6,225	1,010
Induced	2,610	7,010	1,460
Total	7,140	19,465	3,395

Table 2: Economic Impact of RG CAPEX & OPEX, UK, 2017/18-2019/2020, 2019/20 prices*

*Totals may not sum due to rounding

Source: FAI Calculations



Chart 17: Economic Impact of RG CAPEX & OPEX,UK, 2017/18-2019/2020, 2019/20 prices

Source: FAI Calculations

3. Multiplier analysis

Economic Activity of all types will generate what is called economic multiplier effects.

Multipliers describe the impact of a $\pm 1m$ increase in final demand for an industry. Final demand can include households, government, gross fixed capital formation, exports and so on. This increase in final demand requires the industry to increase its output to meet it.

The economy-wide effects from the resulting spill-overs of increased economic activity, on output, employment and Gross Value Added (GVA) give us our multipliers. However, the size of these multipliers vary significantly by sector.

This section highlights some key determinants of economic multipliers, demonstrating why Robertson has the economic impacts on GVA and employment that it is estimated to have.

Robertson's economic multiplier

Although Robertson belongs in the construction sector, its spending across Scottish industries is not identical to the construction sector as a whole.

Therefore, whilst there are similarities between the make-up of Robertson's spending profile and that of the construction sector's overall, there are some differences.

This means that Robertson's supply chain differs from the construction sector and therefore, the economic impact of its investment differs to the industry average for the construction sector.

Robertson is a construction firm that spends 87% of its Scottish spend in the Scottish construction sector, which is a lot of for a construction firm. However, Robertson's capital investment, into construction projects, makes up the majority of its spending profile and so this figure is expected.

Overall, differences between Robertson and the sector are not large.

Table 3 compares the economic impact of \pounds_{1m} invested for Robertson, the Scottish construction sector, and Scotland's total industry average.

	Output (£m)	Average Annual Employment (FTE)
Scottish Industry average	1.04	17.47
Construction	0.97	17.93
Robertson*	0.98	17.99

Table 3: Economic impact of £1m invested, Scotland, Scotland's construction sector, and Robertson

*Based on Robertson's spend, and economic impact, in Scotland (2017/18-2019/20)

Source: Scottish Government 2017 Input-Output Tables; FAI calculations

Employment-output multipliers show the number of full-time equivalent (FTE) jobs supported by increased output in this sector. Similarly, GVA-output multipliers show the amount of gross value added supported.

So, if there is investment of $\pm 1m$ into the construction sector then this is estimated to support just under 18 FTE jobs across the Scottish economy.

In terms of GVA, for every £1m spent in construction, an estimated £0.97m in Scottish GVA is supported.

Relative to Scotland as a whole, the construction sector's employment multiplier is greater however, it's GVA-output multiplier is slightly lower.

It is important to note that a large employment-output multiplier and lower GVA-output multiplier, relative to Scotland, is not unusual for a labour-intensive industry like construction. A large GVA-output multiplier could be inferred as being the result of a highly productive, capital-driven industry or firm, which consequently would support less employment than a less productive, more labour-intensive industry or firm.

Therefore, there is a trade-off here between being extremely productive (higher GVA multiplier but lower employment multiplier) and supporting more jobs (lower GVA multiplier but higher employment multiplier).

Based on Robertson's investment and day-to-day running costs from 2017/18-2019/20, for every £1m spent during this period, in Scotland, by Robertson, an estimated £0.98m Scottish GVA and 18 FTE Scottish jobs are supported.

Robertson's UK wide investment, from 2017/18-2019/20, is estimated to support £1.5m and 26 FTE jobs for every £1m spent in the UK.

What drives economic multipliers?

To understand some of the reasoning behind Robertson's economic impact, it is important to understand what drives these multiplier effects.

This subsection will include discussion of some of the key drivers of economic multipliers –

- Supply chain composition; and,
- Import intensity.

Supply chain composition

While analysis of the construction sector's multipliers has been covered, Robertson spends 13% of its total spend in industries outwith the construction sector.

Table 4 shows the total GVA-output and Employment-output multipliers of Robertson's ten largest industry suppliers.

When Robertson purchases from its suppliers, its suppliers need to then to make additional purchases to meet increased demand and this knock-on effect is what drives the indirect effects of multipliers and therefore the total economic multipliers of Robertson.

If Robertson purchases from industries with large economic multipliers then this drives up the indirect effects of Robertson's economic impact.

From Table 4 it is evident that Business support services, Robertson's 5th largest supplier, has the largest economic multipliers – albeit Head office services has a slightly greater GVA-output multiplier – and almost all of Robertson's top five suppliers, which make up 95% of Robertson's total spend, have multipliers greater than the Scottish average.

Analysis of Robertson's supply-chain therefore gives some explanation to its significant economic impact.

Nonetheless, Robertson's spending profile is unlikely to change significantly in coming years and therefore, it has little influence over this determinant of economic impact.

Rank	Industry	GVA-output multiplier	Employment-output multiplier
1	Construction	0.97	17.93
2	Wholesale excl. vehicles	0.94	15.98
3	Head office & consulting services	1.23	20.69
4	Architectural services	1.07	19.74
5	Business support services	1.22	29.65
6	Repair & maintenance	1.05	15.68
7	Electricity	0.70	5.61
8	Insurance & pensions	0.74	7.80
9	Fabricated metal	0.98	16.01
10	Cement, lime & plaster	0.86	18.42
	Scottish Industry Average	1.04	17.47

Table 4: Total GVA-output and Employment-output multipliers of Robertson's main suppliers, and Scottishindustry averages*

*These top ten suppliers are Scottish industries. That is, head office and consulting services is not Robertson's head office but the industry of head offices and the like.

Note: table cells are red if multiplier is below Scottish average and green if multiplier is above Scottish average.

Source: Scottish Government 2017 Input-Output Tables; FAI calculations

Import intensity

One thing Robertson does have realistic influence over is its import intensity.

The input-output tables used to construct economic impact figures are made up from supply and use tables. Supply tables include the supplies of a particular industry in the Scottish economy to all industries in the economy, i.e. the supply of goods and services both domestically and outside of Scotland (exports). Use tables include the inputs from all industries in the Scottish economy to a particularly industry in the economy, i.e. inputs of goods and services both domestically and outside of Scotland (imports).

Imports from the rest of the UK (RUK) or the rest of the World (RoW) are treated as leakages out of the economy. That is, the higher the share of imports into final use of an industry, the greater the amount of leakage out of the Scottish economy and the smaller the economic multiplier for that industry. This is because money spent by Scottish industries on foreign goods and services supports industry output, employment and wages in other countries.

Overall, importing less increases the direct effect of Scottish industry multipliers as more goods are purchased locally and not imported from RUK or RoW.

As discussed, 87% of Robertson's spend over the analysis period was in the construction sector.

The construction sector (SIC41-43), as a whole, imports around 35% of its inputs. When comparing this sector to the rest of the Scottish economy's 96 industries, the construction sector is the 8th least import intensive industry in the Scottish economy. Chart 18.



Chart 18: Import intensity of Scotland's sectors, 2017

Looking at just Scotland overall and the construction sector –

- Scotland purchases just over half of its goods and services from industries in Scotland, with 44% coming from the rest of the UK (RUK) and the rest of the world (RoW).
- The construction sector uses almost ²/₃ of goods and services from Scotland, importing just 35% from RUK and RoW. Chart 19.

It is important to note here that in the UK model - which estimates the UK-wide impact figures - the only imports are from RoW and the import intensity of Construction - from RoW - is just 3%; 7-percentage points below the Scottish construction sector's RoW import intensity.

Therefore, the UK model typically has larger multiplier effects than the Scottish model as, among other things, there are less leakages out of the economy than in the Scottish model.

As discussed, other than construction, Robertson's Scottish spend is predominantly within architectural services, head office related industries – used for its day-to-day spend – and wholesale trade.

All but head office and consulting services and repair and maintenance² have import intensities below the Scottish average (48%). Chart 20.

² This is repair and installation of machinery and equipment; not to be confused with SIC43 (repair and maintenance related to construction).

Chart 19: Share of total intermediate use by Scotland, RUK and RoW, Construction and Scotland, 2017



Source: Scottish Government Input-output 2017 Tables; FAI calculations

Chart 20: Top ten (after construction) industries of Robertson's spend (with import intensities), Scotland, 2017/18-2019/2020



Source: Robertson; Scottish Government Input-output 2017 Tables; FAI Calculations

Therefore, the majority of Robertson's spend is within industries with import intensities lower than the Scottish average.

Conclusions

As part of a labour-intensive industry, Robertson has both large GVA and employment economic impacts.

This section outlined how Robertson's supply chain - and the import intensities of industries in their chain - is an important driver of its economic impact in Scotland.

This section highlighted the importance of sourcing goods locally to economic impact figures. However, there are wider benefits of engaging in local investment programmes and supporting local businesses and jobs that extend beyond the statistics produced in economic models.

These benefits include things like tackling Scotland's inequality challenge through fairly paid, secure employment opportunities.

The following two sections outline Robertson's local economic impact and the consequent wider impacts that their investment in Scotland has.

4. Local Impact

As part of Robertson's objective to invest in Scotland and source goods locally from Scottish suppliers, the firm has invested in high-detail supply chain data.

This granular dataset of Robertson's Scottish divisions allows for detailed analysis into the geography of Robertson's economic activities. Section 7 (Methodology) outlines more on what this data includes.

This section outlines the geography of Robertson's activities, highlighting the Scottish communities that benefit from Robertson's investment programmes.

The geography of Robertson's activities

Robertson's spend, from 2018/19-2020/21, was within 29 of Scotland's 32 local authorities³.

Within Scotland, Robertson primarily spends within FK and G postcodes. Around 34% of Robertson spend across 2018/19-2020/2021⁴ was within FK postcodes, covering areas in Falkirk and Stirling.

A fifth of Scottish spend was within Glasgow, G, postcodes - Diagram 2.

Diagram 2: Robertson, spend by postcode, Scotland, 2018/19-2020/2021



3 Robertson, during this period, did not spend within the local authorities of: Clackmannanshire, Inverclyde and North Ayrshire.

^{4 2020/21} only covers spend from Apr - Dec 2020.

CASE STUDY

Creating £5.5m social value at Merkinch Primary School and Family Centre

Through local labour and spend, and sector-leading community engagement, the project generated 45% in social value in one of Scotland's most deprived areas. This included 19 apprenticeships; 52 school visits; 31 adult employment opportunities; supporting 27 young people through Scottish Vocational Qualifications.

Scottish Index of Multiple Deprivation

Analysing the Scottish Index Multiple Deprivation (SIMD) allows assessment of how Robertson's expenditure impacts the most deprived areas in Scotland.

The SIMD is an indicator of inequalities across Scotland which measures the deprivation of 6,976 Scottish data zones through various domains which make up the overall SIMD rank.

At the end of January last year, the Scottish Index of Multiple deprivation (SIMD) 2020 was published.

The SIMD rank is a relative measure of deprivation which can be used to compare the proportion of small areas in a council which are deprived.

The SIMD domains include -

- INCOME Including in receipt of benefits, etc.
- HEALTH Hospital stays related to alcohol misuse, mortality ratio, etc.
- ACCESS Time take to GP, schools, post office, etc.
- EMPLOYMENT Employment deprived and certain benefits.
- **EDUCATION** Pupil attendance, working age population without qualification etc.
- CRIME Recorded crimes.
- HOUSING Data on over-crowded households and those without central heating.

Robertson expenditure was around £39.5m in postcode districts containing the top 20 most deprived postcodes in Scotland, or around 5% of their total expenditure, Table 5.

Chart 21 highlights the local share of data zones within each local authority which are considered to be the 15% most deprived in Scotland - the red columns are the ten local authorities that Robertson spent the most in during 2018/19-2020/21.

Glasgow and Dundee city are the 1st and 4th most deprived local authorities in Scotland. That is, these two cities have the 1st and 4th largest shares of 15% most deprived data zones in the country.

Postcode	SIMD Rank*	Total Spend
PA15	1, 9, 19	£636,600
G31	2	£3,011,200
ML5	3	£6,843,100
PA3	4	£143,250
FK10	6	£2,501,970
KY8	7	£2,091,450
IV ₃	8	£3,040,020
DD4	10	£12,508,820
EH6	11	£2,164,250
G22	12,14	£41,920
KA8	13,20	£364,350
G20	14	£131,860
G45	15	£4,997,590
G21	18	£931,622

Table 5: Robertson Spend by SIMD Ranked Postcodes, 2018/19-2020/21

*A rank of 1 here means that the postcode district contains the most deprived datazone in Scotland. Rank two means that the postcode district contains the second most deprived datazone in Scotland, and so on.

Source: SIMD 2020; Robertson; FAI Calculations



Chart 21: Local Authority share of 15% most deprived data zones, Scotland, 2020

Source: SIMD2020

CASE STUDY

Providing employment opportunities through our Young People Strategy

Our Young People Strategy ensures that we are effective in providing opportunities through industry leading recruitment and development. Since establishing it in 2014, we have set up five strategic partnerships with Scottish high schools, won two Developing the Young Workforce awards, and achieved the Investors in Young People Gold award. In May 2021, we have:

- 7% of workforce aged 16-24 (212 people);
- 12.5% of workforce aged 16-28 (372 people);
- 50% of our young people attend our 2021 Catalysts development conference;
- 21 people in graduate roles;
- 28 apprentices;
- 42 trainees.

Glasgow and Dundee City

Glasgow contains over 27% of Scotland's 15% most deprived datazones and 38% of datazones in Glasgow City are within the 15% most deprived. Dundee contains over 5% of Scotland's most deprived datazones and around 28% of its datazones are considered to be among the 15% most deprived areas in Scotland.

During the period 2018/19-2020/21, Robertson spent over a fifth of its Scottish expenditure in Glasgow and Dundee City.

Diagrams 3 and 4 highlight Robertson's spend, during this period, in the two cities - these maps show the spend in each postcode district with the SIMD rankings of local areas highlighted also.

The two SIMD domains that are likely most impacted by spillover effects of investment in local areas are: income, and employment.

Glasgow and Dundee rank as the 2nd and 3rd most deprived local authorities in terms of the employment domain, and as the 2nd and 4th most deprived local authorities in terms of the income domain.

Robertson's local investment programmes help tackle inequalities in Scotland's most deprived local authorities through providing positive employment and income spillover effects across nearby communities.

Diagram 3: Robertson, spend in Glasgow City, by postcode district and SIMD datazones, 2018/19-2020/2021



*A deprivation decile rank of 1 means that the datazone is considered to be within the top 10% most deprived Scottish areas. Source: Robertson; SIMD2020; FAI calculations

Diagram 4: Robertson, spend in Dundee City, by postcode district and SIMD datazones, 2018/19-2020/2021



*A deprivation decile rank of 1 means that the datazone is considered to be within the top 10% most deprived Scottish areas. Source: Robertson; SIMD 2020; FAI calculations

Robertson's local impact: divisions, head and regional offices

Modelling the economic impact of Robertson's divisions

Robertson's activities across its Scottish divisions clearly support local communities but, their activities across these divisions also have positive spill over effects across the Scottish economy.

To model the economic impact of Robertson's activities across its divisions, the same model and methodology applied to Robertson's Scottish and UK impact figures can be applied.

Robertson has the following divisions in Scotland -

- Central belt⁵;
- Civils;
- Eastern;
- Major Projects;
- Northern;
- Specialist; and,
- Tayside.

Table 6 outlines the economic impact of the expenditure of each of these divisions of Robertson⁶.

Investment and expenditure from the Major Projects division supports the greatest amount of employment and economic activity across Scotland, supporting on average 2,400 FTE jobs annually and just under £400m in Scottish GVA once knock on effects are accounted for. The central belt division's impact across the whole Scottish economy amounts to around £180m in GVA, supporting an average annual FTE employment of just over 1,100 FTE Scottish jobs.

Average Annual Employment (FTE)	GVA (£m)
2,495	400
1,110	180
625	100
465	75
250	40
	Average Annual Employment (FTE) 2,495 1,110 625 465 250

Table 6: Economic Impact of RG Division CAPEX & OPEX, Scotland, 2018/19 – 2020/21, 2019/20 prices*

Head office and regional office analysis

Robertson primarily conducts its investment through its 6 Scottish head and regional offices, which are located in Glasgow, Edinburgh, Aberdeen, Stirling, Dundee and Elgin - Robertson's Stirling and Dundee offices are located in two of the 20% most deprived areas in Scotland.

The infographic below provides an assessment of Robertson's local impact within a 40-mile radius of each of their Scottish offices, highlighting the spill over effects of having head and regional offices in Scottish communities.

⁵ Central belt includes Robertson's Central East and West Divisions, and legacy work from the previous 'Central' division.

⁶ Major Projects, Civils and Specialist division have been aggregated as data collection for the Civils and Specialist divisions was only started fairly recently and so Robertson only has 9 months of data - out of 33 months - for these divisions.

Assessing the local impact of Robertson's offices

Expenditure by Robertson divisions, within a 40 mile radius of Robertson's head and regional offices, 2018/19 - 2020/21.

Northern

- The Northern Office is home to Construction and Timber Engineering and is the smallest office in terms of nearby expenditure.
- The majority of nearby expenditure is in civil engineering trades, £11.2m.





Eastern

- The highest nearby expenditure in the Eastern Office comes from the Civil Engineering division.
- This office is located in the AB postcode which accounts for around 8% of total expenditure across Scotland.

Stirling

- The Stirling Office is home to the Major Projects and Civils division and has the largest nearby expenditure of all 6 offices.
- Nearly 60% of expenditure near this office is for Major Projects.
- The nearby expenditure of this office accounts for the largest share of Major Project expenditure (13%) overall.

Tayside

- The Tayside Office is home to the Construction and Specialists divisions; the latter being responsible for work with external partners to deliver unique projects.
- Specialist expenditure accounts for around 5% of total expenditure,
- The Tayside office has the third highest nearby expenditure of all offices.

Central West

- The Central West Office is home to Construction and the Urban Union Programme; a programme designed to deliver large scale regeneration of housing in Scotland.
- Mechanical trades was the most common nearby expenditure, 38%; followed by internal contractors, 29%.



Central East

- The Central East office cumulatively makes up the largest share of expenditure across the central division of Robertson with the Central West Office.
- Around £95 million has been invested in areas surrounding the Central East Office since 2018.

5. Taking responsibility for Climate Change

Robertson is committed to taking responsibility for climate change.

This section includes some case studies, provided by Robertson, which highlight the action that Robertson is taking, and is committed to take in the coming years, to help tackle the climate change challenge that Scotland and the rest of the World are facing.

CASE STUDY

Taking responsibility for climate change

We are a carbon neutral (or net zero) verified business, having declared a climate and biodiversity emergency, made a significant reduction in emissions intensity since baselining in 2015. We have since offset our emissions through tree planting with local schools and Certified Emission Reductions (CERs) from UN Clean Development Mechanism projects.

- 2018-2019: we are verified carbon neutral, one of the first in our sector.
- Our carbon intensity has reduced by 40.9% from 2014-2015 to 2019-2020.
- 11,024 tonnes of carbon was offset in 2019-2020.
- 2021: we are recognised by UN Climate Neutral Now for our emissions measurement, reduction, and offsetting.

CASE STUDY

SEPA Sustainable Growth Agreement

Helping the supply chain improve sustainability in partnership with SEPA.

In 2021, we signed a Sustainable Growth Agreement with SEPA, the first such agreement signed with a tier 1 contractor like Robertson. This long-term partnership will significantly improve the environmental and sustainability performance of our supply chain through a programme of analysis, engagement, training and monitoring over an initial three-year period.

This partnership will mean that:

- Our supply chain understand and are supported to exceed their environmental compliance obligations on construction sites;
- water, energy and materials are managed efficiently;
- carbon emissions are reduced;
- people and nature benefit from a high-quality environment.

CASE STUDY

Committing to long term social and environmental sustainability with our 2030 Strategy

We have significant experience and a robust, structured and collaborative approach to delivering sustainable, low carbon projects. We are driven by our Responsible Business 2030 strategy, which is aligned to the UN Sustainable Development Goals we can impact locally.

Key metrics:

- Our People: enhance the lives of 10,000 people, by creating work placements and job opportunities, and by supporting apprenticeships, upskilling and new qualifications.
- Our Partners: create £1 billion of social value, by enhancing lives and spending locally in the areas where our projects are and with social enterprises, microbusinesses and SMEs.
- Our Planet: become climate positive, generating zero emissions from our sites, offices and commercial fleet, and delivering a biodiversity net gain on our projects without any increase in offsetting.

CASE STUDY

Involving Scottish schools in COP 26 through our Climate Change Champions initiative

In May 2021 we launched the Robertson Climate Change Champions for school children aged 8 to 11 years in Scotland and England. The initiate aims to educate and involve children in the climate debate. The initiative has main features.

• A 10-question survey to be completed in class groups or by individual pupils, prompting them to give their thoughts on the environmental challenges and opportunities ahead. Feedback will be included in a report for delegates attending the United Nations' COP 26 in Glasgow in November.

• Three interactive learning sessions developed by Robertson with films and materials covering climate change, the built environment and sustainable communities. All resources are free and the programme supports the Curriculum of Excellence (Scotland) and Key Stage 2 Statutory Programmes of Study (England).

Our target is to have 500 schools signed up to become Robertson Climate Change Champions by August 2021 and take the conversation even further.

6. Conclusions

Robertson is a significant player in the construction industry and is an important contributor to the Scottish economy as a whole.

This report estimates that, once spill over effects are accounted for, Robertson's spending, from 2017/18-2019/2020, within Scotland supports –

- Over £1.8bn in Scottish GVA; and,
- Over 11,200 Full-time Equivalent (FTE) Scottish Jobs on average annually.

That is, for every £1m spent in Scotland by Robertson, during this period, an estimated £0.98m Scottish GVA and 18 FTE Scottish jobs are supported.

Additionally, we find that, collectively, Robertson's Major Projects, Civils and Specialist divisions generate the largest economic impacts across the Scottish economy among its eight divisions.

But, Robertson's contribution to the Scottish economy extends beyond traditional economic measures.

This report finds that Robertson places a strong emphasis on supporting local Scottish communities.

Investment and activities at Robertson's Scottish divisions help support job and earning opportunities in some of the most deprived areas of the country.

This report finds that -

- During the period 2018/19-2020/21, Robertson's Scottish divisions spent over a fifth of their expenditure in Glasgow and Dundee City - two of the most deprived local authorities in Scotland.
- Robertson's Stirling and Dundee offices are located in two of the 20% most deprived areas in Scotland.
- Robertson's Stirling office has the largest nearby expenditure of all Scottish offices, highlighting the importance of having offices within Scottish communities.

In addition to helping Scotland tackle its inequalities challenge, Robertson is taking responsibility for climate change and has made a number of commitments that should support the fight against the climate crisis.

Overall, the construction sector is already operating at above pre-pandemic levels and will continue to be significant to Scotland's economic recovery from COVID-19.

Robertson will play an important role in both supporting growth in the construction sector and providing opportunities for local communities in Scotland.

7. Methodology

Economic Modelling

This report looks at the economic impacts of the activities of Robertson on Gross Domestic Product (GDP) and employment in Scotland.

GDP is the value of all final goods and services produced within the economy in a given period of time.

Employment here refers to FTE jobs. One FTE job is equivalent to one person working full-time for one year or, two people working half the hours of a full-time worker for one year, and so on.

Expenditure provided by Robertson accounted for VAT and was limited to spending in Scotland and England.

Spending, excluding labour costs, was mapped to Standard Industrial Classifications (SIC) codes and transformed into real terms using the ONS' GDP Deflator.

Expenditure was then modelled using the Scottish Government's (2017) input-output tables for the Scottish model and the ONS' (2016) input-output tables for the UK model.

Data modelled for Robertson impact analysis

This report includes economic impact analysis of Robertson's expenditure in the UK, Scotland and across its eight Scottish divisions.

The Scottish and UK models estimated Robertson's economic impact using expenditure data for 2017/18-2019/20. The local impact models estimated Robertson's economic impact using expenditure data for 2018/19-2020/21 (April 2020 - December 2020)

For each of these impact assessments, different datasets were used.

The local impact data is not as complete as the country-level expenditure data however, Robertson are rolling-out detailed supply chain analysis across the group, with other business data collection to follow after this report - data which will hopefully be available for future reports.

For Robertson's economic impact in Scotland, the Scottish expenditure of the following Statutory Companies of Robertson were modelled -

- Robertson Construction Group LTD
- Robertson Residential Group LTD
- Robertson Group Co. (Scotland)
- Robertson Residential Managed Properties LTD
- Urban Union
- Robertson Regeneration LTD
- Robertson Property LTD
- Robertson Capital Projects LTD
- Robertson Strategic Asset Management LTD
- Robertson Facilities Management LTD
- Robertson Timber Engineering LTD

For Robertson's economic impact in the UK, the Scottish spend outlined on the previous page, and English expenditure of the following Statutory Companies of Robertson were modelled -

- Robertson Construction Group LTD
- Robertson Residential Group LTD
- Robertson Facilities Management LTD
- Robertson Capital Projects LTD
- Robertson Strategic Asset Management LTD

For Robertson's local economic impact in Scotland, the Scottish expenditure of the following Robertson divisions were modelled -

- Central belt¹;
- Civils;
- Eastern;
- Major Projects;
- Northern;
- Specialist; and,
- Tayside.

Economic Multipliers

The Scottish input-output model captures the flow of economic activity across Scotland only whereas the UK model captures the flow of activity across the whole of the UK. Hence, we model Scottish spend in the Scottish IO model and Scottish and English spend in the UK IO model.

As the Scottish and UK IO models are derived from two different sets of national accounts the economic multipliers of each industry can differ. Therefore, results from each of these models can also differ. That is, if you positively shocked the Scottish and UK IO models' construction industry by £100m, the total economic impact of this shock in the Scottish model would differ from the total economic impact in the UK model.

One driver of this differential impact, as discussed in the Multiplier Section of this report, is import intensity. The Scottish model counts imports as imports from RUK and RoW whereas the UK model counts imports as just imports from RoW. Therefore, industry import intensities - and leakages out of the economy - are typically smaller in the UK model than the Scottish model.

It is important to note that the economic impacts of £1m invested discussed throughout this report are based on expenditure data provided by Robertson and the relevant IO models. These figures do not account for factors such as the import intensity of Robertson or the compensation of their employees and so the 'multiplier effects' discussed differ to the industry multipliers in their derivation. Comparisons are made for illustrative purposes and to highlight the drivers of Robertson's economic impact.

¹ Central belt includes Robertson's Central East and Central West Divisions, and legacy work from the previously named 'Central' division.

8. Appendices

Appendix 1

Table 7: Economic Impact of Robertson's CAPEX, Scotland, 2017/18-2019/2020, 2019/20 prices*

	Output (£m)	Average Annual Employment (FTE)	GVA (£m)
Direct	1,755	5,100	760
Indirect	915	2,720	425
Induced	870	2,625	520
Total	3,540	10,445	1,700

*Totals may not sum due to rounding

Source: FAI Calculations

Appendix 2

Table 8: Economic Impact of Robertson's OPEX, Scotland, 2017/18-2019/2020, 2019/20 prices*

	Output (£m)	Average Annual Employment (FTE)	GVA (£m)
Direct	120	450	70
Indirect	30	115	15
Induced	75	225	45
Total	225	790	135

*Totals may not sum due to rounding

Source: FAI Calculations

Appendix 3

Table 9: Economic Impact of Robertson's CAPEX, UK, 2017/18-2019/2020, 2019/20 prices*

	Output (£m)	Average Annual Employment (FTE)	GVA (£m)
Direct	2,125	5,580	845
Indirect	2,190	5,960	975
Induced	2,430	6,525	1,360
Total	6,745	18,065	3,175

*Totals may not sum due to rounding

Source: FAI Calculations

Appendix 4

	Output (£m)	Average Annual Employment (FTE)	GVA (£m)
Direct	135	645	80
Indirect	75	265	40
Induced	180	485	100
Total	390	1,395	220

Table 10: Economic Impact of Robertson's OPEX, UK, 2017/18-2019/2020, 2019/20 prices*

*Totals may not sum due to rounding

Source: FAI Calculations

Fraser of Allander Institute

Fraser of Allander Institute University of Strathclyde 199 Cathedral Street

Glasgow G4 0QU Scotland, UK

Telephone: 0141 548 3958 Email: fraser@strath.ac.uk Website: <u>fraserofallander.org</u> Follow us on Twitter via <u>@Strath_FAI</u> Follow us on LinkedIn: <u>FAI LinkedIn</u>

the place of useful learning www.strath.ac.uk University of Strathclyde Glasgow

The University of Strathclyde is a charitable body, registered in Scotland, with registration number SC015263



