

Scottish Futures Trust Benefit Methodology

Quantitative Benefit Calculation Methodology

1. Introduction

The Scottish Futures Trust (“SFT”) was established in September 2008 with a clear mandate from Scottish Ministers to work to deliver benefits in the delivery and use of infrastructure in Scotland. In its agreement with Scottish Ministers, SFT undertook to initially deliver an annual benefit in the range £100-£150m.

In its formative years, SFT has demonstrated a range of benefits to the Scottish taxpayer through the use of a methodology which showed that, through the investment of time and effort in the creation and development of a number of initiatives such as hub or Tax Incremental Finance (“TIF”), a future flow of potential benefits would be delivered. This methodology considered the cashflows associated with these benefits in the future and discounted them back to the year in which the benefit was being reported (“Reporting Year”). This methodology has been validated by both the London School of Economics (“LSE”) and Grant Thornton LLP (“GT”).

SFT has carefully reviewed its approach to the capture of the benefits that it delivers and has concluded that, as a more mature organisation which is now visibly delivering the savings and efficiencies which the initiatives were set up to achieve, it is now in a position to report its benefits based upon an ‘in-year’ approach rather than a discounted flow of future cashflows mechanism. In addition, the Scottish Government has now confirmed that, rather than a requirement to demonstrate £100-150m of benefit in each operational year, SFT will be challenged to deliver benefits within a range of £500m-£750m over the 5 year period of the 2014-2019 Corporate Plan.

This paper sets out the basis for this updated approach and makes reference to the previous mechanism to demonstrate compatibility between the two approaches.

As part of the 2014/15 Annual Benefits Review, the updated methodology has been validated by both the LSE and GT.

2. Categorisation of Benefits

The updated methodology considers the areas in which SFT operates (“SFT Workstreams”) and calculates all benefits at a SFT Workstream level rather than on an individual granular basis within each SFT Workstream, as was the case under the previous approach. Appendix A shows how the previous benefit categories have been grouped under the SFT Workstreams.

The following table shows how the SFT Workstreams have been further grouped together under the 6 areas of SFT Activity for Benefits Reporting purposes.

SFT Workstream	SFT Activity
hub	SFT BUILD
Lifecycle/FM Basket Saving	SFT BUILD
Schools	SFT BUILD
Legacy – Queensferry Crossing	SFT BUILD
TIF	SFT INVEST
NPD	SFT INVEST
Housing	SFT HOME
Operational PPP	SFT PLACE
Asset Management	SFT PLACE
Low Carbon	SFT GREEN
Waste	SFT GREEN
Digital	SFT CONNECT

3. Updated Calculation Mechanism

The updated calculation mechanism calculates the benefits which have been delivered in each year under consideration (“Relevant Year”) rather than the previous mechanism which considered the discounted cashflow of future potential benefit which could be achieved from SFT’s input.

In order to calculate the in-year benefit for each SFT Workstream two elements of information will be required:

- The **Activity Total (“AT”)** for that benefit area. The underlying basis for this dataset will differ between SFT Workstreams, for example the hub Workstream’s base dataset will be the actual amount of construction on hub projects which has been undertaken in the Relevant Year whilst the Operation PPP Workstream’s dataset will be the total operational savings which have been identified and brought to the attention of the PPP Project owner. Each dataset will be described within the detailed Benefit Proforma (Appendix B); and
- The **Effectiveness Factor (“EF”)** for that benefit area. This single percentage for each SFT Workstream will replace the previous mechanism’s use of confidence factors, sharing factors and benefit recognition profile percentages. Section 4 below considers the EF in greater detail.

Each SFT Workstream will have a Leadership Team (“LT”) member who will be responsible for the collation of the necessary AT input data and for the consideration of the appropriate EF for that benefit in each Reporting Year (“LT Benefit Owner”).

For each SFT Workstream, the benefit for each Relevant Year is calculated as follows:

$$AT \times EF = \text{Relevant Benefit}$$

Note that all reported figures will be in real terms (i.e. excluding inflation) in the Relevant Year in question. This addresses some issues identified within the previous methodology in respect of the comparability of input data.

4. Derivation of the Effectiveness Factor

In order to significantly simplify the benefits calculation methodology, it was considered appropriate to replace a number of data elements with one single universal factor. This is referred to as the Effectiveness Factor (“EF”) for each SFT Workstream benefit.

The EF reflects:

- The benefit which SFT have incrementally added to the SFT Workstream through their involvement in a ‘basket’ of activities. This basket of activities will be described by the LT Benefit Owner in the Benefit Proforma (see Appendix B);
- Any consideration of the sharing of the benefit with other Public Sector bodies; and
- For non-Capital delivery benefits (such as Low Carbon and Waste), a consideration of the likely uptake of SFT’s advice and guidance as to potential savings in that SFT Workstream. For all capital delivery benefits, such as hub or NPD, this element will be 100% as the benefit is based solely on actual construction undertaken during the Relevant Year.

Ceteris Paribus, the EF should remain reasonably constant over time, assuming that the SFT involvement remains consistent. However, should SFT undertake more work within an SFT Workstream, or identify a new area within an SFT Workstream to develop and deliver (or, conversely, contract their involvement in an SFT workstream) the LT Benefit Owner may consider it appropriate to revise the EF.

5. Comparison to Previous Methodology

The following table shows the similarities and key differences between the updated benefits calculation methodology and that previously adopted.

	Previous Methodology	Updated Methodology
1	Identify and describe the interventions that have/will realise a financial benefit	The same approach is followed in the updated methodology
2	Allocate the benefit a unique reference number and benefit owner	Similar approach followed, however all benefits within a specific workstream are grouped together rather than separately identified for calculation purposes
3	Allocate the benefit to one of SFT’s value for money	Under the updated methodology benefits are being reported

Previous Methodology	Updated Methodology
<p>drivers:</p> <ul style="list-style-type: none"> • Delivery; • Aggregation & Collaboration; • Funding and Finance; • Validation; and • Centre of Expertise 	<p>under a different basis of categorisation to link directly to the Corporate Plan.</p>
<p>4 Allocate the benefit to one of six benefit types:</p> <ul style="list-style-type: none"> • Avoided Cost; • Additional Investment; • Efficiency Gain – Funding and Finance; • Efficiency Gain – Centre of Expertise; • Efficiency Gain – Delivery; and • Efficiency Gain – Validation 	<p>Benefits are initially categorised by sector but are to be grouped under three new SFT Activity categories for reporting purposes:</p> <ul style="list-style-type: none"> • Capital Efficiency; • Additionality; and • Operational Efficiency.
<p>5 Set out the actual/forecast annual financial benefit profile</p>	<p>The same approach is followed in the updated methodology</p>
<p>6 Apply a sharing percentage (described below) to take account of partnership working;</p>	<p>The percentage is encapsulated within the overall EF for that SFT Workstream</p>
<p>7 Apply a confidence factor (described below) depending on the stage of development;</p>	<p>The percentage is encapsulated within the overall EF for that SFT Workstream up to the current year.</p>
<p>8 Calculate the present value of the benefit profile multiplied by both the confidence factor and the sharing percentage</p>	<p>There is no longer a requirement to discount a profile of benefit spend as the benefits to be reported in the year related solely to those physically delivered during that period.</p>
<p>9 Allocate a percentage of the factored present value to the years in which SFT will/has undertaken work to realise the value of each benefit</p>	<p>There is no longer a requirement to discount a profile of benefit spend as the benefits to be reported in the year related solely to those physically delivered during that period.</p>

As with the previous methodology, sensitivity analysis (2 upside and 2 downside) is undertaken to the forecast benefit profile to show a range of possible benefit values.

The fundamental difference between the mechanisms for calculation of the final reported benefit amount is set out in the following table.

Previous Methodology	Updated Methodology
For each benefit determine the aggregate benefit value by summing the value for the reporting year and each of the previous years in the current financial model based on steps (1) to (9) above.	For each SFT Workstream, the aggregate benefit value is determined by multiplying the EF by the Activity Total in the Relevant Year.
Determine the Cumulative Net Value position for each benefit by deducting from (a) the aggregate of the value reported for each benefit the previous year's benefit statements increased by 3.5% to bring historical values into the same price base as the current reporting year.	The methodology considers only the benefit delivered in the Reporting Year.
The reported benefit value each year is the summation of the Cumulative Net Value for each individual benefit less SFT's cost of operations for the reporting year	The Relevant Benefit value each year is the summation of the benefits from each SFT Workstream less SFT's cost of operations for the Relevant Year

6. Reporting

Whilst an annual benefit figure will be calculated, the reported figure in each financial year will be based upon the average Relevant Benefits achieved over a 10 year period. SFT's operations began in financial year 2009/10, therefore this represents the starting point for the calculation. For example, the reported benefit in financial year 2015 will be the rolling average of all benefits calculated from 2009-2019. This reflects a data set of 6 years of actual data and 4 years of forecasts.

For the 2015/16 benefit estimate, it is anticipated that the average will still be applied over the 2009-2019 period to reflect 7 years of actual data and 3 years of forecast.

Thereafter a rolling 10 year average will be adopted that reflects 7 years of actual data and 3 years of forecast data.

Appendix A – Reconciliation of Previous to Updated Benefit Categories

SFT Workstream	SFT Activity	Previous Benefit Reference
hub	SFT BUILD	C9, D1, D3, D4, D5, D6, D10, E2
Schools	SFT BUILD	D7, D8, D8a, D9
Lifecycle/FM Basket Saving	SFT BUILD	D2
Legacy - Queensferry Crossing	SFT BUILD	E1
TIF	SFT INVEST	B1a, B1b
NPD	SFT INVEST	C1, C2, C3, C4, C5, C6a, C7, C8, G6
Housing	SFT HOME	B2, B3, B4, B5, B6, B7
Waste	SFT GREEN	A17 (2), G1, G2, G3, G3a
Low Carbon	SFT GREEN	G7, G8a, G8b, G8c
Operational PPP	SFT PLACE	F1 (A), F1 (B)
Asset Management	SFT PLACE	A1, G5 (A), G5 (B)

Previous Category	Description	SFT Workstream	SFT Activity
A1	SFT Consolidated Avoided Cost Benefit	Asset Management	SFT PLACE
A17 (2)	Waste - Avoided Future Contract Variations	Waste	SFT GREEN
B1a	TIF - Development of Model (Glasgow, Falkirk, A&B)	TIF	SFT INVEST
B1b	TIF - Development of Model (Edinburgh, Fife, Ravensraig)	TIF	SFT INVEST
B2	NHT - Development of Model	NHT	SFT HOME
B3	NHT2 - Continued Delivery of the Initiative	NHT	SFT HOME

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Previous Category	Description	SFT Workstream	SFT Activity
B4	NHT Council Variant	NHT	SFT HOME
B5	NHT 2B - Delivering the Benefit	NHT	SFT HOME
B6	NHT Partnership with SG re Institutional Investment	NHT	SFT HOME
B7	NHT with Debt/Equity	NHT	SFT HOME
C1	Western Isles and Orkney Schools Projects - Finance Structure	NPD	SFT INVEST
C2	Borders Rail - Lower Financing Costs (Nil Benefit)	NPD	SFT INVEST
C3	Borders Rail - Competition	NPD	SFT INVEST
C4	Orkney Schools Projects - Business Case Diligence	NPD	SFT INVEST
C5	RHSC/DCN Procurement Strategy and Increased Competition	NPD	SFT INVEST
C6	NPD Contract - Saved Procurement Time	NPD	SFT INVEST
C6a	NPD Contract Saved Procurement Time (Construction Price Inflation)	NPD	SFT INVEST
C7	NPD Contract - Optimal Risk Transfer	NPD	SFT INVEST
C8	NPD Programme - Reduced Cost of Capital	NPD	SFT INVEST
C9	hub - Return on Working capital investment	hub	SFT BUILD
D1	Hub Programme - Reduced Procurement Time	hub	SFT BUILD

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Previous Category	Description	SFT Workstream	SFT Activity
D2	Hub Programme - Capital Costs Continuous Improvement	Lifecycle/FM Basket Saving	SFT BUILD
D3	Hub Programme - Bid Costs Savings	hub	SFT BUILD
D4	Hub Programme - Public Sector Investment Returns	hub	SFT BUILD
D5	Hub Programme - Reduced Rates of Return	hub	SFT BUILD
D6	Hub Programme - Dialogue Stage Public Sector Savings	hub	SFT BUILD
D7	Schools Programme - Pilot Project Savings	Schools	SFT BUILD
D8	Schools Programme - Needs Identification	Schools	SFT BUILD
D8a	Schools Programme - Needs Identification - Further Savings Secondary Schools	Schools	SFT BUILD
D9	Schools Programme - Continuous Improvement Savings	Schools	SFT BUILD
D10	Hub Programme – Affordability Cap Savings in NHS	hub	SFT BUILD
E1	Validation - Non-Standard Civils Projects (FRC)	Legacy - Queensferry Crossing	SFT BUILD
E2	Validation - Standard Accommodation Projects	hub	SFT BUILD
E3	Validation - CMAL	No longer required	N/a
E4	Validation - Non-Standard Civils Projects (Borders Railway)	No longer required	N/a
F1 (A)	Operational Projects Support - General	Operational PPP	SFT PLACE

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Previous Category	Description	SFT Workstream	SFT Activity
F1 (B)	Operational Project Support - Targeted Interventions	Operational PPP	SFT PLACE
G1	Waste - Procurement Timetable Benefits - Avoided Disposal Costs - Projects other than Clyde Valley	Waste	SFT GREEN
G2	Waste - Service Cost Benefits (Reduced Gate Fees) - Projects other than Clyde Valley	Waste	SFT GREEN
G3&G3a	Waste - Reduced Gate Fees - Clyde Valley	Waste	SFT GREEN
G4	Budget Recast - Initial Benefit Identification	No longer required	N/a
G5 (A)	Asset Management - Local Estate	Asset Management	SFT PLACE
G5 (B)	Asset Management - General Estate	Asset Management	SFT PLACE
G6	NPD Programme - Needs not Wants - Scrutiny & Challenge	NPD	SFT INVEST
G7	Energy Efficient Streetlighting Model for Local Authorities	Low Carbon	SFT GREEN
G8a	NDEE - NHS	Low Carbon	SFT GREEN
G8b	NDEE - SG (ex NHS)	Low Carbon	SFT GREEN
G8c	NDEE - Local Authorities	Low Carbon	SFT GREEN

Appendix B – Benefit Proforma

SFT Activity	SFT BUILD/SFT INVEST/SFT HOME/SFT PLACE/SFT GREEN/SFT CONNECT
SFT Workstream	hub/NPD/Schools/Queensferry Crossing/TIF/NHT/Lifecycle & FM Efficiency/Low Carbon/Operational PPP/Asset Management/Waste/Digital
LT Benefit Owner	Peter Reekie/Christa Reekie/Viv Cockburn/Colin Proctor/Tony Rose
Activity Total Source Information	<p>Description of:</p> <ul style="list-style-type: none"> • where the input data comes from; • how the data was prepared; • how has its accuracy been validated; and • why it is considered to be the best form of data for the purposes of Benefits calculation.
Effectiveness Factor	[xxx]%
Basis for Effectiveness Factor	<p>Detailed description of:</p> <ul style="list-style-type: none"> • the basket of activities which is undertaken under this SFT Workstream; • any comparator metrics which can be used as a basis for generation of the EF; • any sharing element which has been taken into account in the calculation of the EF; and • any confidence element which has been taken into account in the calculation of the EF.
Movements in EF	In the event that the LT Benefit Owner is proposing that the EF for an SFT Workstream is to change from that used in a previous year a full explanation for the rationale for this should be provided here.