



# National School Delivery Cost Benchmarking Primary & Secondary Schools

A Local Authority cost benchmarking study undertaken by Hampshire County Council  
in conjunction with East Riding of Yorkshire Council

January 2015

Version 5.0

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1 | Weeke Primary, Hampshire County Council  
 2 | Cayley Primary, London Borough of Tower Hamlets  
 3 | Carr Lodge, Doncaster Metropolitan Borough Council

the sample contains  
**122 projects** from  
 across England

## Study Background

This document publishes the results of a national cost benchmarking exercise undertaken by Hampshire County Council in partnership with East Riding of Yorkshire Council on new build and refurbished primary and secondary school projects.

This study has been undertaken with funding from the Local Government Association (LGA), as part of the National Procurement Strategy (NPS), and has been conducted in conjunction with the following organisations:

- Education Building and Development Officers Group (EBDOG).
- National Association of Construction Frameworks (NACF).

Local Authorities were invited to take part in the study through EBDOG, the NPS, NACF, local frameworks and through participation in previous studies. The project sample used in this report comprises 122 projects from across England, consisting of:

- 61 New build primary school projects.
- 56 Refurbished/partial new build primary school projects.
- 5 New build secondary school projects.

The sample comprises national school projects classified regionally as South East, North East, London, East Midlands, East of England, West Midlands, Yorkshire & Humber, North West and South West.

A common standard of cost analysis has been used to capture cost data, ensuring a high level of consistency across the sample, while including detailed cost and background information on each project – allowing the costs to be fully understood on an individual basis. The data has then been collated at a common price base, in order to compare projects with each other on level terms.

**42 Local Authorities**  
contributed across  
England

## Contributing Authorities

We are grateful to the following Local Authorities who have contributed projects to this study.

Birmingham City Council	London Borough of Tower Hamlets
Bradford Metropolitan District Council	Manchester City Council
Brighton & Hove City Council	Medway Council
Chichester District Council	Northamptonshire County Council
Coventry City Council	Nottingham City Council
Devon County Council	Nottinghamshire County Council
Doncaster Metropolitan Borough Council	Peterborough City Council
East Riding of Yorkshire Council	Portsmouth City Council
Essex County Council	Reading Borough Council
Hampshire County Council	Rotherham Metropolitan Borough Council
Kent County Council	Rutland County Council
Leeds City Council	Royal Borough of Kensington & Chelsea
Leicester City Council	Sheffield City Council
Liverpool City Council	Shropshire Council
London Borough of Croydon	South Gloucestershire Council
London Borough of Haringey	Surrey County Council
London Borough of Hounslow	Trafford Metropolitan Borough Council
London Borough of Islington	Wakefield Metropolitan District Council
London Borough of Newham	West Sussex County Council
London Borough of Redbridge	Wokingham Borough Council
London Borough of Sutton	Worthing Borough Council



Pilgrims Cross, Hampshire County Council

## Definitions of Key Terms

### New Build

A new build project has been taken as any project where 90% or more of the works being undertaken are new build. This includes both new build schools and extensions to existing school buildings.

### Refurbished/Partial New Build

A refurb/partial new build project has been taken as any project which contains significant alterations or partial new build to existing buildings up to 90% of the total build element.

### Spatial Measures

Encompass the most common formats used by clients and industry to benchmark total construction costs, which in the case of schools has been taken as £/m<sup>2</sup> of the Gross Internal Floor Area (GIFA). This is related to throughout and is the total square metreage of accommodation delivered by a project.

### Total Project Cost

Represents the overall project cost at tender stage, inclusive of fees, external works, abnormal costs, including minor building works and fittings and fixtures. It is inclusive of additions for preliminaries, contingency, overheads and profit.

### Nett Cost per m<sup>2</sup>

Represents the tendered cost per m<sup>2</sup> of GIFA, exclusive of fees, abnormal, external works, minor building works and alterations. It is inclusive of additions for preliminaries, contingency, overheads and profit. Fixed fittings and furnishings are included.

### Gross Cost per m<sup>2</sup>

Represents the tendered Total Project Cost per m<sup>2</sup> of GIFA.

### Cost Per Pupil Place

Represents the Total Project Cost, divided by the number of additional pupil places being created by the works in the school. Where this data has not been available for refurbished/partial new build projects, the Total Project Cost has been divided by the total number of pupils in the school.

### Abnormals

These encompass substructure cost above normalised base cost and demolitions. The normalised base cost for substructures used was £120 per m<sup>2</sup> of GIFA. This value has been derived using the worked example for calculating substructure abnormals published by the former Department for Education and Employment (DFEE) within their document entitled "Education Building Projects: Information on Costs and Performance Data". This calculation used within this report recognises the impact of timing (tender factor), location and size of projects.

### Fees

All professional fee costs have been included where provided within the sample data. If fee information was not available a standardised professional fee allowance of 12% has been included on all projects where the unadjusted tendered Contract Sum is £10m or less. A standardised professional fee allowance of 10% has been included on all projects where the unadjusted Contract Sum is in excess of £10m.

### Excluded Cost Elements

Statutory fees, survey costs, loose furniture and equipment, client department costs including programme management, legal and land acquisition costs are excluded from all figures shown herein.

### Location Factor

All costs have been normalised to a common UK average price level using regional location factors published by BCIS to accord with the UK Mean 100.

### Inflation

All costs have been updated to the latest firm Building Cost Information Service (BCIS) ALL-IN Tender Price of Index (TPI) of 1<sup>st</sup> Quarter 2014 of 244.

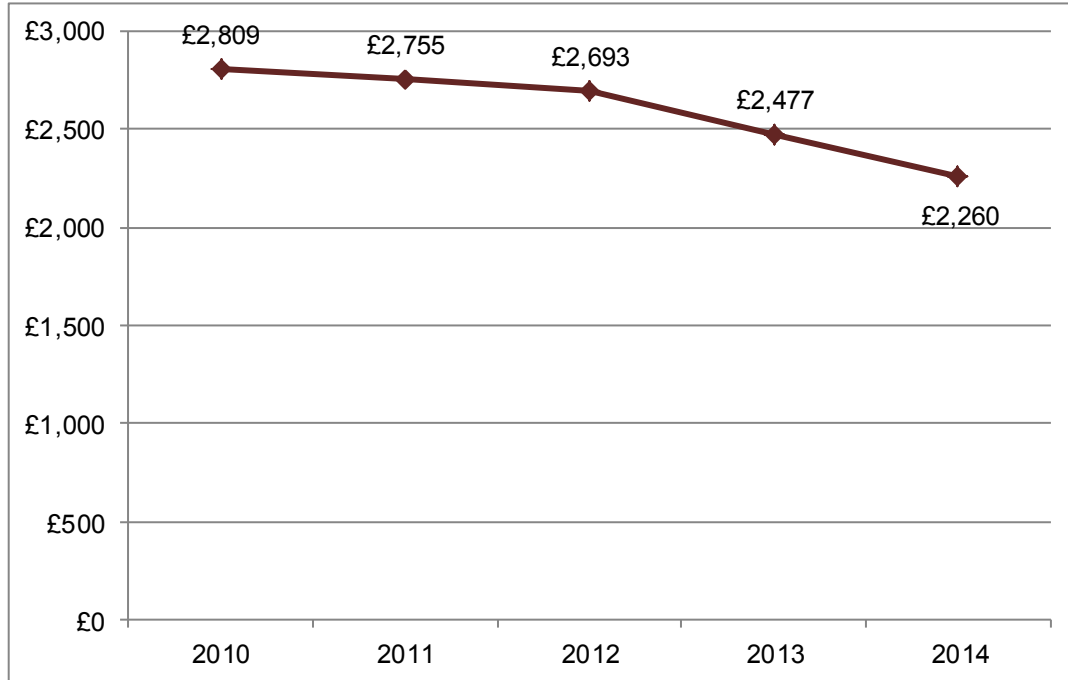
### 20<sup>th</sup> and 80<sup>th</sup> Percentiles

The 20<sup>th</sup> percentile is the value below which 20% of the observations may be found, while the 80<sup>th</sup> percentile is the value below which 80% are found.

**New Build Cost Trajectory**

This study has shown the following observations relating to annual cost projections since 2010. Graph 1 below is based on 61 new build primary projects.

**Graph 1 | New Build Gross Costs per m<sup>2</sup>**



Over the last five years, since 2010, average gross new build costs, as defined on page 4, have fallen 19.5% (with a 16% fall over the last 3 years).

This trend provides a five year average gross cost for new build projects of £2,531 per m<sup>2</sup>.

The table below shows the number of projects used for each year banding displayed in Graph 1.

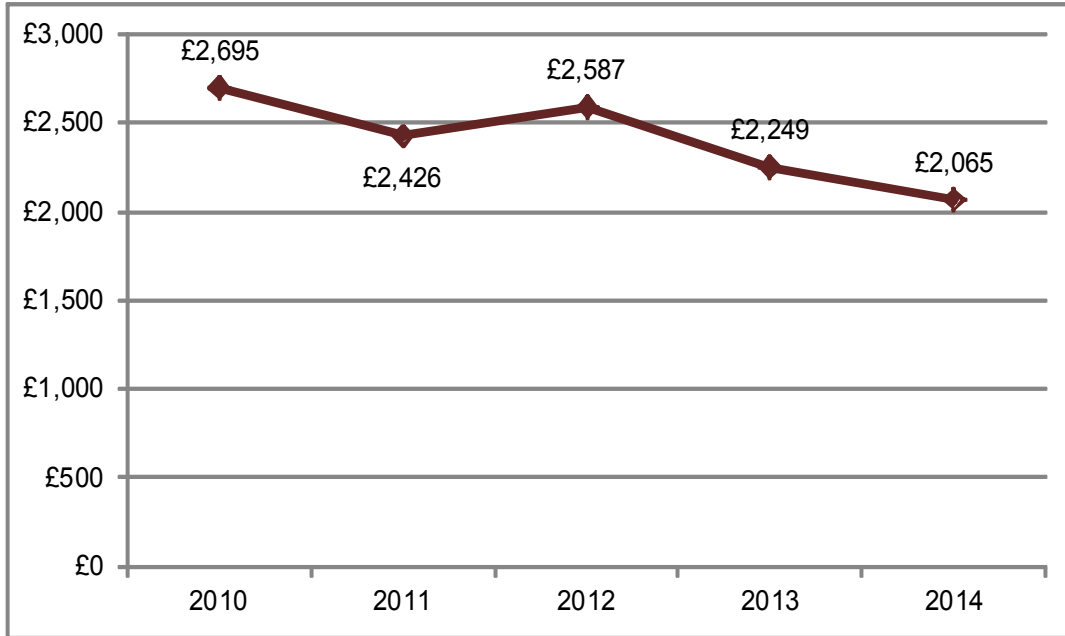
Year Band	Number of Projects
2010	7
2011	6
2012	9
2013	27
2014	12

**16% reduction** in gross costs since 2012 for new build projects

Whole Sample Cost Trajectory

This study has shown the following observations relating to cost projections since 2010. Graph 2 below is based on the whole sample (117 projects including both new build and refurbished/partial new build primary school projects).

Graph 2 | Whole Sample Gross Costs per m<sup>2</sup>



Over the last five years, since 2010, average gross build costs based upon the whole sample, as defined on page 4, have fallen 23.4% (with a 20% fall over the last 3 years).

This trend provides a five year average gross cost across the whole sample of £2,345 per m<sup>2</sup>.

The table below shows the number of projects used for each year banding displayed in Graph 2.

Year Band	Number of Projects
2010	13
2011	8
2012	24
2013	50
2014	22

**20% reduction** in gross costs since 2012 across the whole sample



New Build Cost Benchmarking Summary

This study demonstrates the following findings in relation to new build primary school projects. Definitions of terms can be found on page 4.

Figure 1   New Build Cost Benchmarking							
GIFA (m <sup>2</sup> )	Gross Cost per m <sup>2</sup>		Nett Cost per m <sup>2</sup>		Cost Per Pupil Place		Sample Size
	Average	20th Percentile 80th Percentile	Average	20th Percentile 80th Percentile	Average	20th Percentile 80th Percentile	
0 - 750	£2,962	£2,688 £3,406	£1,785	£1,474 £2,030	£10,077	£6,920 £11,480	8
750 - 1,500	£2,438	£2,147 £2,839	£1,726	£1,488 £1,947	£14,686	£10,105 £18,008	22
1,500 - 2,250	£2,566	£2,070 £3,004	£1,753	£1,556 £1,991	£19,706	£10,893 £22,794	15
2,250 - 3,000	£2,443	£2,043 £2,826	£1,747	£1,597 £1,958	£17,163	£11,923 £21,870	11
3,000 - 3,750	£2,343	£1,809 £2,813	£1,730	£1,458 £2,024	£18,809	£16,298 £22,729	5
<b>Whole New Build Sample</b>	£2,531	£2,073 £2,970	£1,745	£1,549 £1,995	£16,101	£10,156 £20,834	<b>61</b>

52% of projects in the whole sample for primary schools are new build (61 projects), with a combined capital value of £249 million.

General observations show that the majority of Local Authorities build new schemes which are in the 750 - 1,500m<sup>2</sup> GIFA band, with a significant number also being built in the 1,500 - 2,250m<sup>2</sup> band.

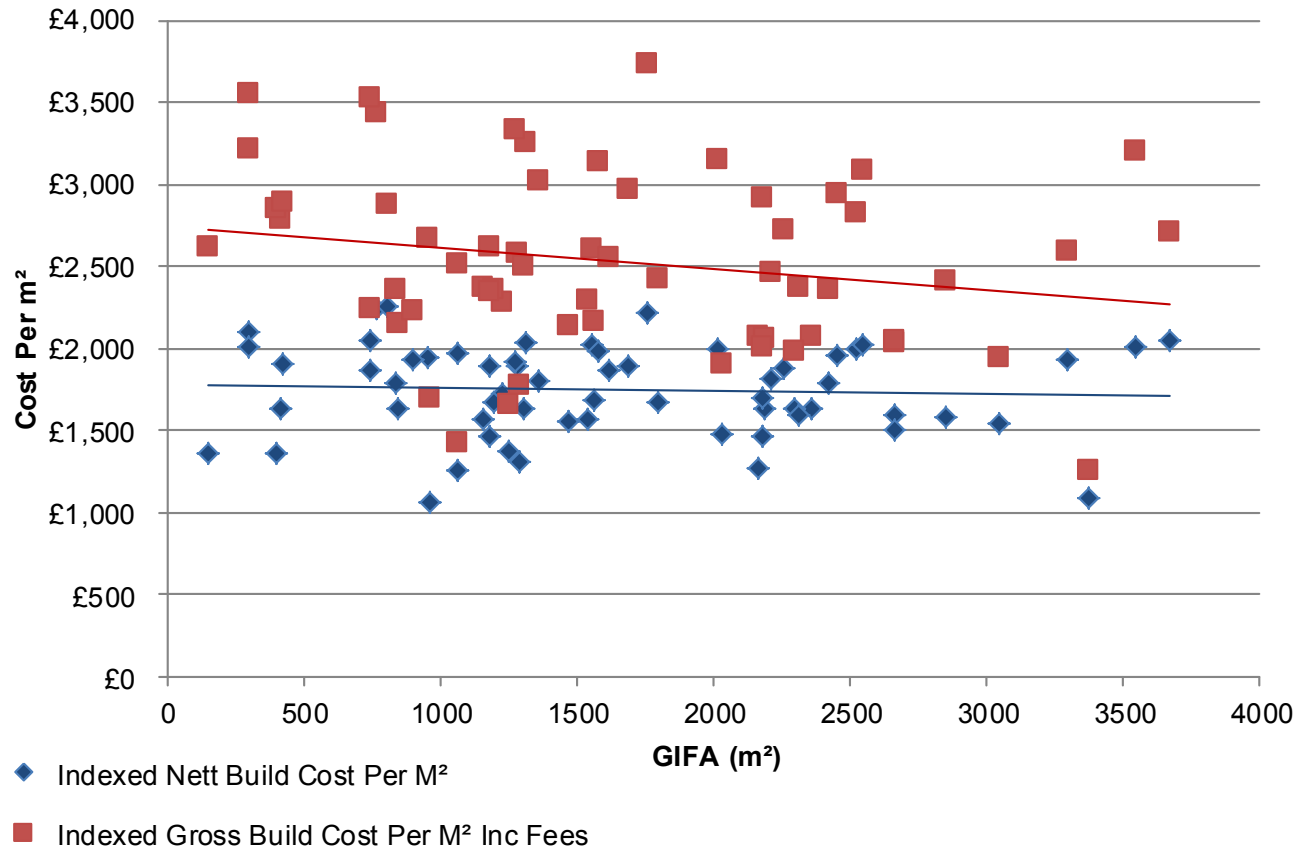
Projects in the 0 - 750m<sup>2</sup> and 750 - 1,500m<sup>2</sup> GIFA bands are mostly extensions to existing schools. This accounts for the lower costs per pupil place figures as these projects have a reduced infrastructure provision.

Combined project value of  
**£500 million** across  
the whole sample

New Build Cost Benchmarking Summary

The data in Figure 1 (page 7 of this report) is shown graphically below.

Graph 3 | New Build Gross Costs & Nett Costs per m<sup>2</sup>

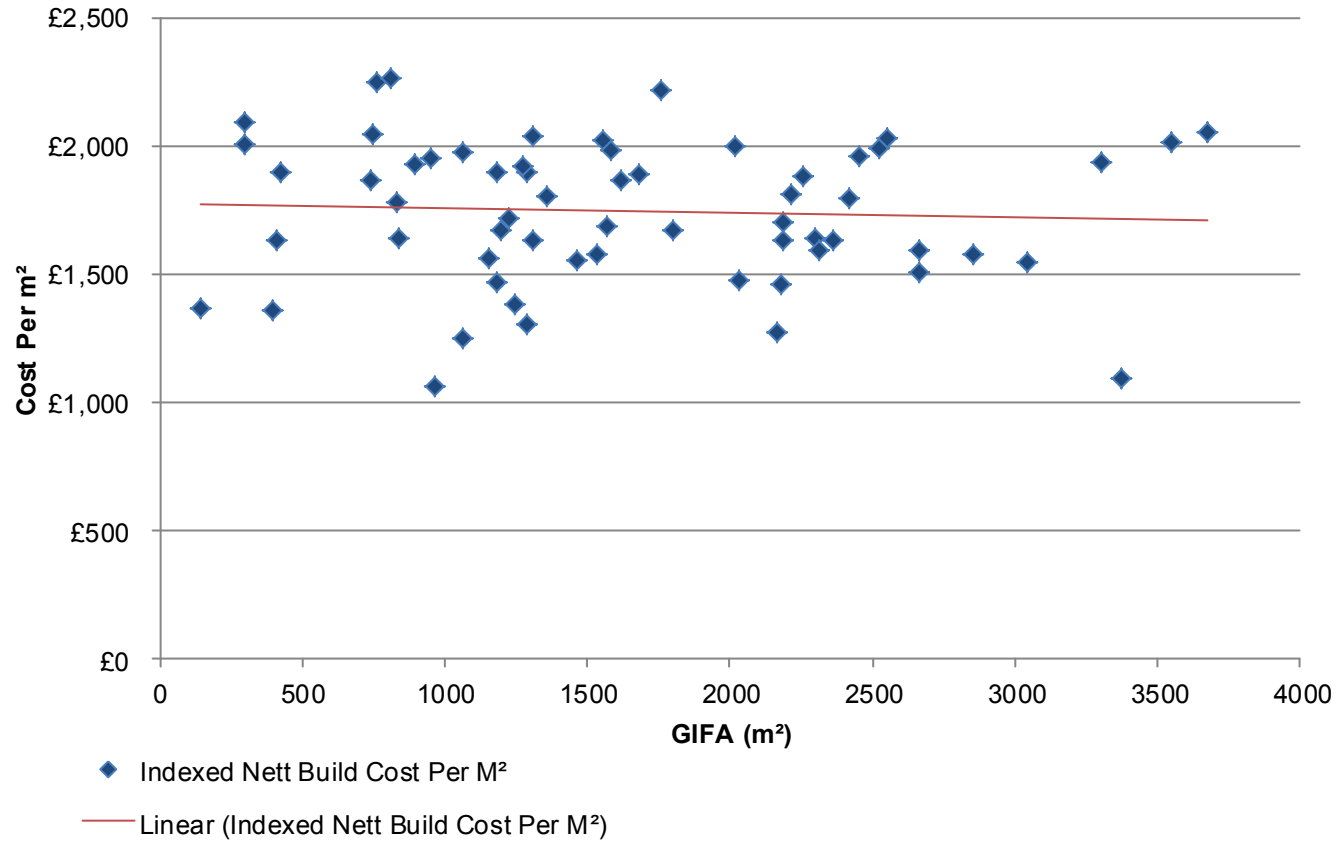




New Build Cost Benchmarking Summary

The data in Figure 1 (page 7 of this report) is shown graphically below.

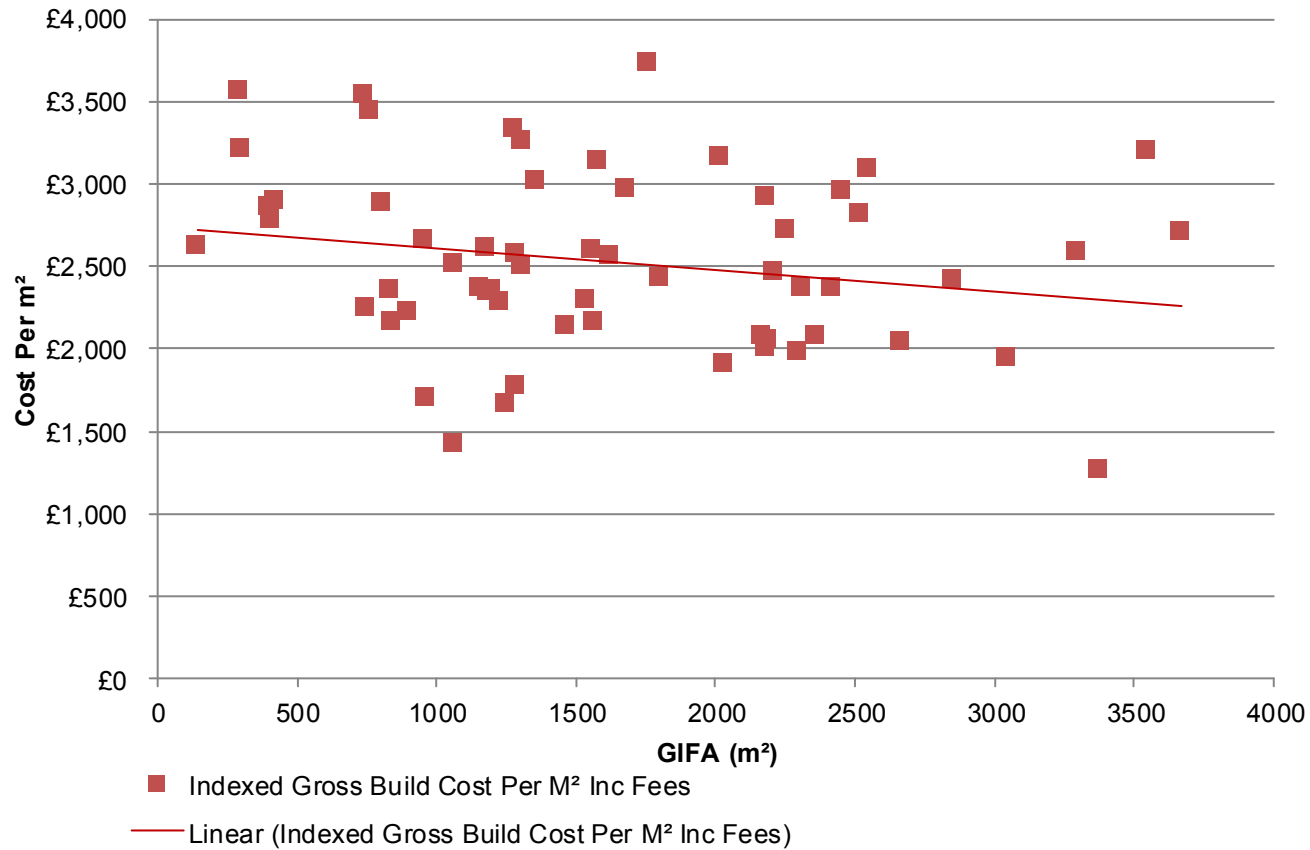
Graph 4 | New Build Nett Costs per m<sup>2</sup>



New Build Cost Benchmarking Summary

The data in Figure 1 (page 7 of this report) is shown graphically below.

Graph 5 | New Build Gross Costs per m<sup>2</sup>



Refurbished/Partial New Build Cost Benchmarking Summary

This study demonstrates the following findings in relation to refurbished/partial new build primary school projects. Definitions of terms can be found on page 4.

Figure 2   Refurb/Partial New Build Cost Benchmarking					
GIFA (m <sup>2</sup> )	Gross Cost per m <sup>2</sup>		Cost Per Pupil Place		Sample Size
	Average	20th Percentile 80th Percentile	Average	20th Percentile 80th Percentile	
0 - 750	£2,414	£1,755 £3,007	£14,117	£7,652 £19,856	38
750 - 1,500	£1,805	£1,118 £1,965	£12,789	£11,785 £15,117	7
1,500 - 2,250	£1,471	£953 £1,985	£12,836	£10,227 £15,415	4
2,250 - 3,000	£1,301	£1,019 £1,524	£15,116	£6,528 £21,685	4
3,000 - 3,750	£1,465	£1,314 £1,610	£16,201	£9,719 £21,626	3
<b>Whole Refurb Sample</b>	£2,140	£1,437 £2,834	£14,042	£7,622 £19,105	<b>56</b>

48% of projects in the whole sample for primary schools are refurbished/partial new build (56 projects), with a combined capital value of £175 million.

General observations show that the majority of refurbishment/partial new build projects are in the 0 - 750m<sup>2</sup> GIFA band.

The 2,250 - 3,000m<sup>2</sup> and 3,000 - 3,750m<sup>2</sup> GIFA bands include schemes which feature a greater proportion of new build elements. This accounts for the higher costs per pupil place figures as these projects have a higher average cost for infrastructure provision.

**48%** of projects are refurbished/partial new build schemes

**Future Reports & Secondary Schools**

We have obtained a small data set for Secondary Schools which has been summarised below for information. The costs have been brought in line with this publication as outlined on page 4. The sample contains 5 schemes ranging from 2,500 - 12,000m<sup>2</sup>, the table below displays the average costs.

Figure 3   New Build Cost Benchmarking							
	Gross Total Project Cost per m <sup>2</sup>		Net Total Project Cost per m <sup>2</sup>		Cost Per Pupil Place		Sample
	Average	20th Percentile	Average	20th Percentile	Average	20th Percentile	
		80th Percentile		80th Percentile		80th Percentile	
<b>Whole Sample</b>	£2,430	£1,646	£1,601	£1,306	£14,127	£10,897	<b>5</b>
		£2,711		£1,855		£16,997	

Given the size and range of the sample it is not possible to draw any firm conclusions from this data set. We welcome Secondary School submissions for future publications from Local Authorities to enable further analysis to be conducted.

We also hold limited data on the following types of project and welcome any further submissions to allow analysis to be carried out for these categories:

- Special Educational Need schools.
- Free schools.
- Academies.
- Social Housing.

**Future Reports**

This and future reports, build a credible case to inform both the market and Central Government. The report is a valuable tool for us all to understand the real cost of building new school places across the country. We are keen to receive projects for our next publication, and welcome project submissions from any Local Authority.

Participating Authorities will be listed in the published report, however any data supplied will be treated as commercially confidential and will not be shared with third parties without the submitting Authority providing written approval.

All submissions must use our standard form of cost analysis and these should be forwarded to Mike Raven at East Riding of Yorkshire Council, who is collating the projects for the next publication.

For further information and to participate, please contact Mike using the details found at the end of this report.

The table below displays a summary of previous publications, which can be obtained by contacting Matt Robertson using the details found at the end of this report.

Report	Sample Size	Sample Type
<b>Apr 2013*</b>	45	Primary & Secondary
<b>Nov 2013</b>	39	Primary
<b>Jun 2014</b>	70	Primary
<b>Jan 2015</b>	122	Primary & Secondary
<b>TBC 2015*</b>	-	-

\* Report not currently available.

Publication Contacts

For further information relating to this study or for details regarding future publications and how to participate please contact the individuals below.

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- 1 | Tweseldown Primary, Hampshire County Council
- 2 | Cayley Primary, London Borough of Tower Hamlets
- 3 | Woolmore Primary, London Borough of Tower Hamlets