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Overview and Scrutiny Committee Agenda

Monday, 22 January 2018
7.00 pm
Civic Suite
Lewisham Town Hall
London SE6 4RU

For more information contact: Charlotte Dale (Tel: 020 8314 8286)

This meeting is an open meeting and all items on the agenda may be audio recorded and/or filmed.

Part 1

6. INFORMATION REPORT: Stadium Regeneration 235 - 283

7. INFORMATION REPORT: Local Police Station Closures

To Follow

8. Items to be referred to Mayor and Cabinet

Overview and Scrutiny Committee Members

Members of the committee, listed below, are summoned to attend the meeting to be held on Monday, 22 January 2018.

Janet Senior, Acting Chief Executive
Thursday, 11 January 2018

Councillor Alan Hall (Chair)	
Councillor Gareth Siddorn (Vice-Chair)	
Councillor Obajimi Adefiranye	
Councillor Abdeslam Amrani	
Councillor Chris Barnham	
Councillor Paul Bell	
Councillor Peter Bernards	
Councillor Andre Bourne	
Councillor David Britton	
Councillor Bill Brown	
Councillor Suzannah Clarke	
Councillor John Coughlin	
Councillor Liam Curran	
Councillor Brenda Dacres	
Councillor Amanda De Ryk	
Councillor Colin Elliott	
Councillor Carl Handley	
Councillor Maja Hilton	
Councillor Simon Hooks	
Councillor Sue Hordijenko	
Councillor Mark Ingleby	
Councillor Joyce Jacca	

Councillor Stella Jeffrey	
Councillor Liz Johnston-Franklin	
Councillor Roy Kennedy	
Councillor Helen Klier	
Councillor Jim Mallory	
Councillor Sophie McGeevor	
Councillor David Michael	
Councillor Jamie Milne	
Councillor Hilary Moore	
Councillor Pauline Morrison	
Councillor John Muldoon	
Councillor Olurotimi Ogunbadewa	
Councillor Jacq Paschoud	
Councillor John Paschoud	
Councillor Pat Raven	
Councillor Joan Reid	
Councillor Jonathan Slater	
Councillor Luke Sorba	
Councillor Eva Stamirowski	
Councillor Alan Till	
Councillor Paul Upex	
Councillor James-J Walsh	
Councillor Susan Wise	

MINUTES OF THE OVERVIEW AND SCRUTINY COMMITTEE

Tuesday, 31 October 2017 at 7.00 pm

PRESENT: Councillors Alan Hall (Chair), Abdeslam Amrani, Paul Bell, Peter Bernards, John Coughlin, Liam Curran, Colin Elliott, Maja Hilton, Simon Hooks, Sue Hordijenko, Liz Johnston-Franklin, Roy Kennedy, Hilary Moore, Pauline Morrison, John Muldoon, Olurotimi Ogunbadewa, Jacq Paschoud, John Paschoud, Joan Reid, Luke Sorba, Eva Stamirowski and James-J Walsh

APOLOGIES: Councillors Gareth Siddorn, Obajimi Adefiranye, Chris Barnham, Andre Bourne, Bill Brown, Suzannah Clarke, Brenda Dacres, Amanda De Ryk, Carl Handley, Mark Ingleby, Stella Jeffrey, Jim Mallory, David Michael, Jonathan Slater, Alan Till and Susan Wise

ALSO PRESENT: Harriet Brown (Local and Regional Government Liaison Officer) (Thames Water), Sarah Hurcomb (General Manager for South London) (Thames Water), Mark Mathews (Local and Regional Government Liaison Manager) (Thames Water), Tim McMahon (Head of Water Networks) (Thames Water), Aileen Buckton (Executive Director for Community Services) (London Borough of Lewisham), Martin Wilkinson (Chief Officer) (Lewisham Clinical Commissioning Group), Jacky McLeod (Clinical Director and Primary Care Lead) (Lewisham Clinical Commissioning Group), Ashley O'Shaughnessy (Deputy Director of Primary Care) (Lewisham CCG), Ralph Wilkinson (Head of Public Services) and Mole Meade (CWU National Postal Executive Member) (Communication Workers Union)

1. Minutes of the meeting held on 11 July 2017

1.1 **RESOLVED:** That the minutes of the meeting held on 11 July 2017 be agreed as an accurate record.

2. Declarations of Interest

2.1 The following declarations of interest were made:

Councillor Alan Hall – *Member of three Joint Health Overview and Scrutiny Committees (two relating to the South London and Maudsley NHS Foundation Trust and one relating to the Our Healthier South East London Programme) and a Governor of the South London and Maudsley NHS Foundation Trust*
Councillor John Muldoon - *Member of three Joint Health Overview and Scrutiny Committees (two relating to the South London and Maudsley NHS Foundation Trust and one relating to the Our Healthier South East London Programme) and a Governor of the South London and Maudsley NHS Foundation Trust*
Councillor Paul Bell - Elected member of the Kings College Hospital Foundation Trust
Councillor John Paschoud – *Member of the Patient Participation Group at the Jenner GP Practice*

Councillor Peter Bernards – *Director of a company that does business with the South London and Maudsley NHS Foundation Trust*
Councillor Luke Sorba - *Governor of the South London and Maudsley NHS Foundation Trust.*

It was agreed that the agenda order would be varied. Item 5 (Thames Water) would be taken next, followed by Item 4 (post office update) and then Item 3 (local NHS GP Services)

3. NHS Local GP Services

3.1 Martin Wilkinson, Chief Officer; Ashley O'Shaughnessy, Deputy Director of Primary Care; and Dr Jacky McLeod, Clinical Director, Primary Care Lead, (NHS Lewisham Clinical Commissioning Group) introduced the item.

3.2 It was noted that:

- The CCG had been responsible for primary care commissioning from 1 April 2017. Certain core services had to be provided but other 'at scale' services could be locally determined.
- There was a focus on prevention, co-ordinated care plans and an integrated care model.
- To reduce the strain on accident and emergency services at the University Hospital Lewisham, streaming and re-direction was being piloted to deliver rapid clinical assessment and appropriate redirection of patients to urgent care, outpatient care, Neighbourhood Care Networks and GP services in addition to A&E.
- There would be a GP Extended access service in a purpose built site at the hospital from 1 November 2017 offering a service from 8am to 8pm, seven days a week.
- 35 out of the 39 GP practices located in Lewisham offered extended hours.
- Lewisham was the third best borough in London in terms of the number of patients signed up for online services.

3.3 In response to questions from members of the Committee, it was noted that:

- There were 143 full time equivalent GPs in Lewisham (not including locums and retainers) and the borough fared well in terms of list sizes.
- Practice nurse numbers were more of a concern and it was likely that there would be an increase in retirements over the next 3 to 4 years. A targeted international recruitment campaign would be launched.
- The CCG was working with GPs in terms of incentivising GP trainees to stay in the borough and there had been some successes in terms of nursing recently. The CCG had, for example, appointed the first Nurse Consultant in Primary Care in the country alongside three General Practice Nurse Advisors to support with professional development and recruitment.

- GPs were considering whether reception and healthcare assistant staff could take on a broader range of responsibilities.
- The incorporation of public health into the local authority had resulted in a number of positive outcomes including influencing the thinking of a wider range of officers. The provision of the flu jab to all staff (if they wanted it) was one such example.
- The Better Care Fund had brought additional funding into the Council although it had not totally resolved the funding crisis in adult social care. Officers were working on plans to sustain the improvements.
- Free flu jabs would be offered to all residents in care homes and all domiciliary care workers. School pupils in years reception, 1, 2, 3 and 4 were receiving the flu jab and schools were also being encouraged to offer the vaccination to staff.
- High house prices were a factor in the recruitment and retention of A&E, GP and nursing staff.
- Technology was improving primary care with video consultations, online booking of appointments, better transfer of calls via the 111 number etc.

3.4 In relation to the proposed closure of the Walk In Centre at New Cross, the Committee heard from Jane Mandlik of the Save Lewisham Hospital Campaign. She felt that the proposals to fill the gap that the closure of the centre would create were insufficient. In the discussion that followed the points below were noted:

- The equalities impact needed to be fully considered. The centre served, amongst others, a large homeless population, people who found it difficult to get appointments with their GP, patients who had not registered with a GP for a variety of reasons, and those with ill children who needed an urgent appointment.
- The CCG was open to the idea of delaying a decision to allow extra time to fully consider the results of the consultation and how any gap in provision caused by the closure might be addressed.

3.5 The Committee agreed to make a referral to the Healthier Communities Select Committee in relation to the proposed closure of the New Cross Walk In Centre. The Committee also agreed that the matter should be referred to Full Council.

3.6 **RESOLVED:** That the Overview and Scrutiny Committee would like to

(A) Make the following comments to the Healthier Communities Select Committee in relation to the proposed closure of the Walk In Centre at New Cross:

1. We have heard a number of concerns about the proposed closure.
2. We appreciate that the NHS Lewisham Clinical Commissioning Group (CCG) is likely to need more time to consider the responses received during the conclusion and we welcome that.
3. We would welcome the final response from the CCG on this matter being provided to all councillors as the walk-in centre is a borough-wide service.

4. We would welcome further details on GP recruitment and nurse retention bearing in mind Lewisham's population increase and Our Healthier South East London (OHSEL) / the Sustainability and Transformation Plan (STP) primary care requirements.
5. Current A&E performance figures for local trusts (Lewisham, King's and Guys and St Thomas') were discussed at our meeting and we question how this proposal will help improve performance.

(B) Refer this issue to Full Council.

4. Post Office Update

4.1 The Chair welcomed Mole Meade, Communication Workers Union (CWU) to the meeting.

4.2 Ralph Wilkinson gave a brief update on the New Cross and Sydenham Crown Post Offices. It was noted that:

- The Mayor had written to Ellie Reeves MP, the Chief Executive of the Post Office and the Government minister responsible for Post Offices, opposing the changes to the Sydenham Post Office. The Post Office Chief Executive had also been asked for further information about their strategy to preserve the full range of Post Office services for Lewisham residents.
- Sydenham - the timetable had been to complete the consultation by 26 May 2017 and to make the changes in August 2017. However, the Post Office have not yet made a decision on the future of the branch. Terms for the temporary lease renewal (pending a decision) had been agreed and solicitors instructed to draw up the new lease.
- New Cross – the timetable was to complete the consultation by 18 October 2017 and implement the changes in February 2018. The Post Office was currently making its decision.

4.3 Mole Meade introduced the CASS Business school report on proposals for a Post Bank. It was felt that the establishment of a Post Bank would enable the Post Office to be sustainable in the long term, by diversifying its portfolio of activities and increasing revenues. A state-owned Post Bank would also provide better access to finance for Small and Medium Enterprises, improved financial inclusion, a rebalancing of the UK economy away from London and other major urban centres and align the Post Office with the successful strategy of other postal operators around the world.

4.4 In response to questions from members of the committee the following points were noted:

- The CWU wanted the Post Bank to be state run, rather than mutually owned.
- Members could help the CWU realise their ambition by applying pressure to ministers.

4.5 **RESOLVED:** That

(A) The Chair would write, on behalf of the Committee, to the Parliamentary Under Secretary of State, Minister for Small Business, Consumers and Corporate Responsibility, Margot James MP, in relation to the future of New Cross and Sydenham Crown Post Offices.

(B) The CASS Business School report *Making the Case for a Post Bank,* (prepared for the Communications Workers Union, September 2017), would be provided to Mayor and Cabinet to inform policy development in this area.

5. Thames Water Strategic Review and response to scrutiny recommendations

5.1 The Chair welcomed Mark Mathews, Local and Regional Government Liaison Manager; Sarah Hurcomb, General Manager for South London; Tim McMahon, Head of Water Networks; and Harriet Brown, Local and Regional Government Liaison Officer (Thames Water) to the meeting.

5.2 Tim McMahon introduced the item and the following was noted:

- A number of capital investments had been made since the two major bursts in Lee High Road and Lee Road at the end of 2016; including £10m of capital investment for Lee High Road to improve the infrastructure.
- 90 metres of pipework on Eltham Road had been replaced with cross connections for strengthening purposes and chambers for monitoring.
- The independent Cuthill report considered why the major bursts across London in 2016 had happened, the impact of the bursts, the response provided and the role of network configuration. As a result, Thames Water had improved its approach to monitoring its trunk mains and by 2025 aimed for 25% of its network to be covered by monitoring. Customer response had also been improved with 24 newly trained customer representatives now responsible for managing cases for customers from the day of the burst to resolution.
- Thames Water's recently published Strategic Review built on the findings of the Cuthill report, and included 15 commitments to improving performance. Key aspects of this were recruiting extra night time resource and improving assurance processes for customers.

5.3 In response to questions from Members of the Committee, it was noted that:

- A new shift pattern had been introduced to improve the response available in the case of an out of hours event, especially between 2am to 8am, and a night time complex manager had been appointed.
- Thames Water was working more closely with Transport for London. This included coordinating work so there would be a single excavation on key roads (e.g. Deptford High Street).
- The recent Rushey Green Road incident would be looked into and a response provided to the councillor who had raised the issue.

- Training for operators of Syrinix monitoring units involved a refresher every quarter and full training once a year to ensure that they were correctly and consistently using and acting upon the resulting monitoring unit data.
- Thames Water reported that the volume of investment in the network was four times higher now than pre-privatisation levels.
- Of the two fines recently imposed on Thames Water, one was self-imposed, a penalty agreed with customers, the other related to an incident five years ago that Thames Water were certain would not be repeated.
- 0.7 to 1km of repairs were being carried out daily to the pipe network.

5.4 The Committee noted that Thames Water's Business Plan (2020 – 2025) would be released for consultation in early 2018 and would include options for a comprehensive long term programme of pipe replacement. The Committee noted that it might ask Thames Water to attend a future meeting, following the publication of this document.

5.5 It was noted that one of the recommendations the Committee had made as a result of its scrutiny into this issue, was that "The Mayor of London, GLA and London boroughs support the campaign of the Fire Brigade Union to become the statutory Emergency Response Service for flooding". The Council's Highways Team would not have any objection to this happening.

5.6 **RESOLVED:** That full Council be asked to endorse the Committee's recommendation that: *"The Mayor of London, GLA and London boroughs support the campaign of the Fire Brigade Union to become the statutory Emergency Response Service for flooding",* and write to the Home Office to voice the borough's support.

6. Items to be referred to Mayor and Cabinet

6.1 **RESOLVED:** That a referral be made to Mayor and Cabinet in relation to item 4 (Post Office Update), referring the CASS Business School report *Making the Case for a Post Bank,* (prepared for the Communications Workers Union, September 2017), to that body.

In addition, it was agreed that a referral be made to the Healthier Communities Select Committee in relation to item 3 (Local NHS GP Services) and the report on the proposed closure of the Walk In Centre referred to full Council; and that a further referral be made to full Council, asking it to endorse one of the Committee's recommendations in relation to item 5 (Thames Water).

The meeting ended at 9.00 pm

Chair:

Date:

Agenda Item 2

Overview and Scrutiny Committee			
Title	Declarations of Interest	**Item No.**	2
Contributor	Chief Executive		
Class	Part 1 (open)	22 January 2018	

Declaration of interests

Members are asked to declare any personal interest they have in any item on the agenda.

1 Personal interests

There are three types of personal interest referred to in the Council's Member Code of Conduct:-

(1) Disclosable pecuniary interests
(2) Other registerable interests
(3) Non-registerable interests

2 Disclosable pecuniary interests are defined by regulation as:-

(a) Employment, trade, profession or vocation of a relevant person* for profit or gain

(b) Sponsorship –payment or provision of any other financial benefit (other than by the Council) within the 12 months prior to giving notice for inclusion in the register in respect of expenses incurred by you in carrying out duties as a member or towards your election expenses (including payment or financial benefit from a Trade Union).

(c) Undischarged contracts between a relevant person* (or a firm in which they are a partner or a body corporate in which they are a director, or in the securities of which they have a beneficial interest) and the Council for goods, services or works.

(d) Beneficial interests in land in the borough.

(e) Licence to occupy land in the borough for one month or more.

(f) Corporate tenancies – any tenancy, where to the member's knowledge, the Council is landlord and the tenant is a firm in which the relevant person* is a partner, a body corporate in which they are a director, or in the securities of which they have a beneficial interest.

(g) Beneficial interest in securities of a body where:-

(a) that body to the member's knowledge has a place of business or land in the borough; and

(b) either
(i) the total nominal value of the securities exceeds £25,000 or 1/100 of the total issued share capital of that body; or

(ii) if the share capital of that body is of more than one class, the total nominal value of the shares of any one class in which the relevant person* has a beneficial interest exceeds 1/100 of the total issued share capital of that class.

*A relevant person is the member, their spouse or civil partner, or a person with whom they live as spouse or civil partner.

(3) Other registerable interests

The Lewisham Member Code of Conduct requires members also to register the following interests:-

(a) Membership or position of control or management in a body to which you were appointed or nominated by the Council

(b) Any body exercising functions of a public nature or directed to charitable purposes, or whose principal purposes include the influence of public opinion or policy, including any political party

(c) Any person from whom you have received a gift or hospitality with an estimated value of at least £25

(4) Non registerable interests

Occasions may arise when a matter under consideration would or would be likely to affect the wellbeing of a member, their family, friend or close associate more than it would affect the wellbeing of those in the local area generally, but which is not required to be registered in the Register of Members' Interests (for example a matter concerning the closure of a school at which a Member's child attends).

(5) Declaration and impact of interest on members' participation

(a) Where a member has any registerable interest in a matter and they are present at a meeting at which that matter is to be discussed, they must declare the nature of the interest at the earliest opportunity and in any event before the matter is considered. The declaration will be recorded in the minutes of the meeting. If the matter is a disclosable pecuniary interest the member must take not part in consideration of the matter and withdraw from the room before it is considered. They must not seek improperly to influence the decision in any way. **Failure to declare such an interest which has not already been entered in the Register of Members' Interests, or participation where such an interest exists, is liable to prosecution and on conviction carries a fine of up to £5000**

(b) Where a member has a registerable interest which falls short of a disclosable pecuniary interest they must still declare the nature of the interest to the meeting at the earliest opportunity and in any event before the matter is considered, but they may stay in the room, participate in consideration of the matter and vote on it unless paragraph (c) below applies.

(c) Where a member has a registerable interest which falls short of a disclosable pecuniary interest, the member must consider whether a reasonable member of the public in possession of the facts would think that their interest is so significant that it would be likely to impair the member's judgement of the public interest. If so, the member must withdraw and take no part in consideration of the matter nor seek to influence the outcome improperly.

(d) If a non-registerable interest arises which affects the wellbeing of a member, their, family, friend or close associate more than it would affect those in the local area generally, then the provisions relating to the declarations of interest and withdrawal apply as if it were a registerable interest.

(e) Decisions relating to declarations of interests are for the member's personal judgement, though in cases of doubt they may wish to seek the advice of the Monitoring Officer.

(6) Sensitive information

There are special provisions relating to sensitive interests. These are interests the disclosure of which would be likely to expose the member to risk of violence or intimidation where the Monitoring Officer has agreed that such interest need not be registered. Members with such an interest are referred to the Code and advised to seek advice from the Monitoring Officer in advance.

(7) Exempt categories

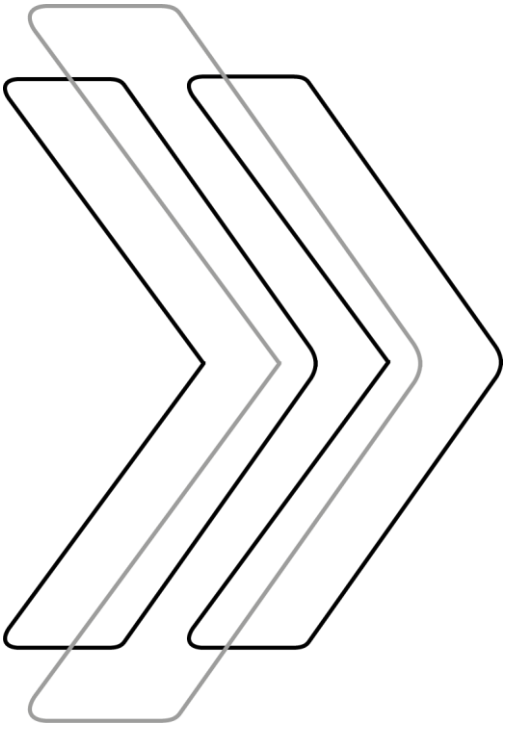
There are exemptions to these provisions allowing members to participate in decisions notwithstanding interests that would otherwise prevent them doing so. These include:-

(a) Housing – holding a tenancy or lease with the Council unless the matter relates to your particular tenancy or lease; (subject to arrears exception)
(b) School meals, school transport and travelling expenses; if you are a parent or guardian of a child in full time education, or a school governor unless the matter relates particularly to the school your child attends or of which you are a governor;
(c) Statutory sick pay; if you are in receipt
(d) Allowances, payment or indemnity for members
(e) Ceremonial honours for members
(f) Setting Council Tax or precept (subject to arrears exception)

The King's Fund nuffield trust

Sustainability and transformation plans in London

An independent analysis of the October 2016 STPs (completed in March 2017)



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September 2017

This independent report was commissioned by the Mayor of London. The views in the report are those of the authors and all conclusions are the authors' own.

The King's Fund is an independent charity working to improve health and care in England. We help to shape policy and practice through research and analysis; develop individuals, teams and organisations; promote understanding of the health and social care system; and bring people together to learn, share knowledge and debate. Our vision is that the best possible care is available to all.

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Contents

Preface

August 2017

The following analysis of London's sustainability and transformation plans (STPs) is based on work completed by The King's Fund and the Nuffield Trust in March 2017. Since then, there have been a number of developments relevant to our analysis. This preface provides an update on the policy context for STPs and any major changes to the five plans in London.

Changes to London's STPs

Our analysis is based on the five London STPs published in October 2016. While the main objectives and proposals in these plans remain the same – with some specific exceptions – these plans have continued to develop throughout 2017. To ensure that we appropriately acknowledged any significant changes in approach, we spoke to the STP leader (or a senior representative) from each of the five STP areas in August 2017. We asked them about changes to their plans for transforming services (for example, if any service changes were no longer going ahead), as well as changes to the assumptions about the expected impact of their plans (for example, on NHS finances). We focused on the content of the plans rather than progress on engagement or implementation. The main changes in each STP area are summarised below.

In South East London, proposals in the STP to centralise elective orthopaedic work (*see* p 24) have changed. NHS trusts will seek to achieve the same objectives for improving services by delivering elective orthopaedic care on three hospital sites overseen by a managed clinical network rather than reducing to two hospital sites.

The financial context for South East London's STP has also changed since the October 2016 plan. South East London is involved in the new capped expenditure process (*see* below), which means that organisations in South East London will have to agree financial plans in order to meet their system control total in 2017/18 (a nationally set financial target for the region).

The same is true in North Central London, where NHS organisations will also be expected to demonstrate how they will achieve their control total in 2017/18. In their October 2016 STP, North Central London stated that it did not believe it was possible to completely close its financial gap by 2020/21 (*see* p 67). There have been no major revisions to the service changes outlined in North Central London's October 2016 STP.

There have also been no major changes to the proposals for transforming services outlined in North West London's STP. Some additional service changes are also being considered – for example, networking arrangements for radiology services to reduce duplication and improve access to services. Like in other STP areas in London, the main changes since the October 2016 STP relate to NHS finances. An ongoing major capital bid of just over £500 million to support the changes to acute and community services outlined in the STP has now been approved by NHS England. This capital bid is now awaiting approval by NHS Improvement, and will then be sent for approval by central government. Less positively, the financial challenge in North West London appears to have increased since the October plan. This will require NHS organisations to make greater efficiency savings than originally planned.

South West London's STP proposed reducing the number of hospital sites providing acute care from five to four (*see* p 24). The original plan cited quality and staffing issues in particular as the rationale for reducing the number of sites. NHS leaders in South West London have now stated that all hospitals in the STP areas will continue to be needed in future, but that not all these hospitals will need to provide the same services that they do today. An updated strategy document will be produced by the STP in November 2017. Our analysis also uses figures in South West London's STP estimating that inpatient bed days can be reduced by 44 per cent in 2020/21 (*see* p 20). These estimates were based on a snapshot bed audit carried out in February 2016 with a particular cohort of patients. More detailed work is now being completed at a local level to develop a better understanding of future hospital use and bed numbers in South West London. This includes considering whether some care could be provided in different settings. The new analysis will be included in South West London's STP November update document.

There have been no major changes to North East London's October 2016 STP.

London policy context

The policy context for STPs in London has also continued to evolve. In June 2017, news emerged that three STP areas in London – South East London, North Central London and North West London – had been placed into a new NHS financial planning process, referred to as the 'capped expenditure process', by NHS national bodies (West *et al* 2017). The capped expenditure process is targeted at NHS organisations in 14 parts of the country where existing financial plans exceed available funding, or where financial plans balance on paper but are deemed by national NHS bodies to be unachievable in practice (Anandaciva 2017).

NHS leaders in these areas have been asked to review their current financial plans and 'think the unthinkable' to contain NHS spending, with the aim of creating more affordable financial plans for 2017/18. As we set out in the following analysis, our view is that the financial plans completed as part of London's October 2016 STPs are unlikely to be achievable.

After being announced in the 2017 spring Budget, plans for a deal with central government on the devolution of health and social care services in London have been postponed (Oxford 2017). When our original report was drafted, it was expected that a memorandum of understanding would be signed by the London Councils, the GLA, national NHS bodies, the Department of Health, HM Treasury and the Department for Communities and Local Government, setting out greater powers and flexibilities for health and care services in London. There is currently no agreed date for the deal to be signed.

The structure of NHS commissioning in London has continued to evolve throughout 2017. Formal partnerships, where these did not already exist, are being developed and agreed between clinical commissioning groups (CCGs) in all STP areas in London. In North Central London, for example, a single Accountable Officer has been appointed across the five CCGs. This reflects a trend of growing collaboration between CCGs across the rest of England.

National policy context

There have also been some national policy developments on STPs. In March 2017, NHS England published a document called *Next steps on the NHS five year forward view*, restating NHS England's commitment to STPs as part of its broader aim to 'make the biggest national move to integrated care of any major western country' (NHS England 2017a). STPs were reframed as 'sustainability and transformation partnerships' – not plans. Each partnership was asked to form a board, appoint a leader (where this had not been done), ensure that enough resources and staff are being made available to support the implementation of the plans, and involve local people throughout the process.

The document also announced new 'accountable care systems' (ACSs) – described as 'evolved' versions of STPs that will be given greater support and freedom by national NHS bodies to manage local resources and implement services changes. Eight ACSs have been announced, none of which are in London. However, other areas are also developing plans to develop similar models.

NHS England's *Next steps on the NHS five year forward view* also set out conditions to test proposals for significant bed closures included in STPs. This included the need to show that alternative services will be made available or that

admissions to hospital can be avoided. These tests are important for London's STPs, which – as our report outlines – include plans to reduce hospital use and in some cases the number of acute hospital beds. Our analysis suggests that reductions in hospital use on the scale proposed in London's STPs are not credible. Recent analysis by the Royal College of Emergency Medicine – looking at hospital use right across the UK – also suggests that the NHS is likely to require additional beds this year to achieve safe bed-occupancy levels and hit waiting times targets (Royal College of Emergency Medicine 2017).

In July 2017, NHS England published the first ratings for STP areas (NHS England 2017b). The ratings provide a single summary assessment of 'overall progress' in each STP area (measured against a small selection of indicators chosen by NHS England). Each STP is placed in one of four categories, ranging from 'outstanding' (category 1) to the lowest rating of 'needs most improvement' (category 4). London's STPs ranked in the middle: North East London, North West London and South East London were all ranked as 'advanced' (category 2), while North Central London and South West London were ranked as 'making progress' (as category 3).

Alongside the new ratings NHS England also announced 15 STP areas that would receive a share of the £325 million capital funding promised to the NHS in the spring Budget (Dunhill 2017). This initial investment was given to what NHS England deemed to be the 'strongest' STP areas. A small amount of funding was awarded to support the development of an urgent care centre in North East London.

While there has been significant political change at a national level throughout 2017, the outcome of the general election is unlikely to have a major impact on the NHS, social care and STPs in the short term (Ham 2017). The Conservative party's election manifesto continued to support the ambition of STPs and the broad direction set out in the *NHS five year forward view*. The fragility of a minority government makes any major government intervention on the NHS unlikely. On the flipside, this fragility may lead to greater sensitivity on behalf of the government about any controversial service changes proposed in STPs, particularly those to acute hospitals.

Summary

- Sustainability and transformation plans (STPs) are plans for the future of health and care services in England. Five STPs have been developed in London. We reviewed the content of London's STPs to identify their key themes and analyse the proposals being made.
- STPs are based on the idea that collaboration is needed to improve services and manage resources. This represents a major shift in the approach taken to NHS reform in England, away from the emphasis on competition in the Health and Social Care Act 2012.

What are the key themes in the plans?

- All five STP areas are seeking to give greater priority to prevention and early intervention, while also strengthening and redesigning services delivered in primary care and the community. This includes more closely integrating NHS and social care services.
- Changes to the role of acute hospitals are being proposed, ranging from plans to centralise some acute and specialised services to larger-scale reconfigurations. This includes plans to reduce the number of general and acute hospital beds in absolute or relative terms.
- Each plan focuses on specific services where care needs to be improved – such as mental health and cancer care – and identifies areas where variations in care can be reduced. All STPs set out plans to improve productivity and efficiency of NHS services by 2020/21.
- The plans propose changes to the supporting infrastructure of NHS services – including IT and estates – as well as changes to organisational arrangements and incentives. The plans also describe how the workforce will be supported and developed.

Delivering more co-ordinated care in the community

- Delivering more co-ordinated care in the community is the right thing to do. But STPs must be realistic about what can be achieved within the timescales and resources available. Significant investment is needed to support these care models to develop and it is not clear where this investment will come from.

- The expected impact of new care models on hospital use and costs of care should not be overstated. Services in the community, including social care, are under growing pressure and this will have an impact on the ability of STPs to provide more care outside of hospitals and moderate growing demand for care in hospitals.

Moderating demand for hospital services and cutting beds

- If the current rate of hospital use continues, the impact of demographic changes alone may require the equivalent of 1,600 to 1,700 extra acute hospital beds in London by 2020/21 to meet the population's health needs. This is unlikely to be affordable and there would be difficulties in recruiting the extra staff needed.
- STPs outline plans to reduce hospital use and in some cases to cut the number of beds. Even if additional investment is made in services in the community, reductions in hospital use on the scale proposed are not credible. Heroic efforts will be needed simply to manage rising demand with existing hospital capacity.

Reconfiguring acute and specialised services

- Changes to hospital services are being proposed in the face of quality, workforce and cost pressures. The evidence base for concentrating some services in fewer hospitals to improve outcomes is mixed and each case should be considered on its merits.
- Some reconfigurations may be needed to improve the quality and safety of patient care within current financial and workforce constraints, and these should be supported where the clinical case for change has been made.

Prioritising prevention and early intervention

- Ambitions to prioritise prevention and reduce inequalities need to be backed up by more detailed proposals on how this will be done. The role of the NHS in addressing people's non-medical needs and reducing inequalities should be more clearly defined.
- Recent cuts in funding for public health and other local authority services will make these ambitions harder to achieve. Public health spending by local authorities in London is projected to fall in cash terms over the years to 2020/21, adding to the challenges facing the NHS and local government.

Closing gaps in NHS finances

- London faces a potential gap of £4.1 billion in NHS finances by 2020/21. STPs lack detail on how these gaps will be closed and assume that NHS providers will be able to make greater levels of efficiency savings (averaging approximately 3-4 per cent a year) than they have done in the past. This is unlikely to be achievable.
- There are differences in the way that STPs calculate potential financial savings and in some cases the plans may overstate the savings that might be achieved. The financial assumptions in plans need to be heavily stress-tested.

Securing capital investment

- All STPs require capital investment to be delivered, amounting to £5.7 billion across London by 2020/21. It is unlikely that these resources will be available from national budgets. London's proposed devolution deal may offer alternative ways of finding resources by realising value from underused and unused NHS land and buildings.

Implementing the plans

- Health and social care professionals, patients and the public, local government and other partners must be meaningfully involved in developing the content of the plans and their implementation.
- More attention must be given to the practical skills and resources needed to support staff to make improvements in care. STP leaders and their teams have an important role in co-ordinating service changes and creating an environment for learning and improvement.

The role of the Mayor

- STPs have the potential to improve health and care in London through collaboration between NHS organisations, local authorities and other stakeholders. Realising this potential will require co-ordinated action at different levels: in neighbourhoods, boroughs, the areas covered by STPs, and across London as a whole.
- The main ways in which the Mayor can contribute to improving health and care are as follows.
    - *Providing leadership on the prevention of ill health and on tackling health inequalities*, building on the work of the London Health Commission and working through the London Health Board, with Public Health England and local authorities. Priorities include giving every

child the best start in life, tackling obesity, improving air quality, and addressing the social determinants of health.

- *Supporting changes in the delivery of NHS services* to improve the use of resources and deliver better outcomes for Londoners, including supporting changes to the role of hospitals where the clinical case for change has been made.
- *Making better use of the NHS estate* by working with the London Estates Board and using the flexibilities in the proposed London devolution deal. Priorities include realising value from underused and unused NHS land and buildings to fund new investments and to help meet London's severe housing need – including for NHS staff and other key workers.
- *Working with the NHS to tackle workforce shortages and concerns about the impact of Brexit* on EU staff working in the NHS. Priorities include working with the London Workforce Board to co-ordinate action being taken by the NHS and other employers, making use of the apprenticeship levy, and increasing the supply of affordable housing for key workers.
- *Developing London as a global leader in life sciences* by building on the recommendations of the London Health Commission. Priorities include working with universities, local authorities and the NHS, including the three academic health sciences centres, to realise the economic benefits of research and innovation for the capital.
- *Providing system leadership and oversight of the work being done by STPs* to improve health and care by working with partners in the NHS and local government. Priorities include ensuring that London has its fair share of the NHS budget in relation to the needs and growth of the population.

1 Introduction

The Mayor of London commissioned The King's Fund and the Nuffield Trust to analyse the content of London's STPs. We carried out the analysis in February and March 2017.

We were asked to:

- review the plans to identify common themes and key differences between them
- offer our assessment of the main issues and risks in the content of the plans, focusing on the most important issues across the five STPs
- make practical suggestions for how the plans can be taken forward across London.

This work builds on our previous research and analysis on STPs in England. We carried out research into the STP planning process in four STP areas throughout 2016 (Alderwick *et al* 2016a). We tracked the early content of the plans and identified some initial trends and issues to be resolved (Edwards 2016). And, once the final drafts were published in October, we analysed the content of all 44 STPs in England (Alderwick and Ham 2017; Ham *et al* 2017). This work identified a range of challenges experienced in the process of developing STPs and issues with some of the proposals made in the plans. Despite this, we have argued that STPs offer the best hope for NHS organisations and local government to work together to improve local services.

This report summarises the findings of our analysis of the content of London's STPs. It comprises four parts. The first part (pp 12–15) describes the background on STPs and the context for their development in London. The second (pp 16–35) provides a descriptive overview of London's STPs, focusing on the main themes in the plans and the service changes proposed. The third (pp 36–77) provides our assessment of the main issues and risks to be addressed across the five plans. The final part of the report (pp 78-82) makes a small number of recommendations for the future of the STP process in London, focusing specifically on the role of London-wide action in taking forward the plans.

Methods and approach

We used a range of data sources and methods in our analysis. We used the publicly available versions of the STPs submitted to NHS England in October 2016 to analyse the key themes in the plans. We reviewed each plan individually and then compared the proposals to identify similarities and differences between the plans. We were also given access to some background documents setting out more detailed financial and activity assumptions underpinning the London STPs (as of October 2016).

After carrying out this initial review, we drew on relevant evidence, experience and routinely available data to assess the key issues and risks in the five plans. We carried out more detailed quantitative analysis to assess proposals about hospital activity and demand. We carried out a small number (n=12) of semi-structured interviews to help provide background and context for our work. We also held a roundtable with a small number of NHS and local government leaders to test the early findings of our work.

2 STPs in England and London

Background

STPs were announced in NHS planning guidance published in December 2015 (NHS England *et al* 2015). NHS organisations were asked to work together with local authorities and other partners to develop plans for improving health and care services in their area. Forty-four areas of England were identified as the geographical 'footprints' on which the plans would be based, each covering an average population of 1.2 million people (ranging from 300,000 to 2.8 million people). Put simply, STPs are intended to be local plans for delivering the *NHS five year forward view* (Forward View) – the national strategy, published by NHS England and other national bodies in 2014, setting out a vision of how NHS services need to change to meet the needs of the population (NHS England *et al* 2014).

Draft STPs were submitted to NHS England in October 2016. The plans cover a wide range of issues – from prevention and primary care through to specialised services in hospitals. They also focus on how NHS services could be more closely integrated with adult social care and other services in the community. The plans outline priorities for improvement in three broad areas: improving quality of services and developing new models of care; improving health and wellbeing for the local population; and improving the efficiency of services. Local leaders were also asked to show how their plans would deliver financial balance in their area. STPs are intended to be long-term plans, covering the period from 2015/16 to 2020/21.

STPs bring together all NHS organisations in each area with local authorities and other partners, with an expectation that they will collaborate in developing their plans. A named individual has been identified to lead the development of each STP. Most of these leaders come from clinical commissioning groups (CCGs) and NHS trusts or foundation trusts, but a small number come from local government. The timetable for developing STPs was tight in relation to their scope and ambition. This meant that there was limited opportunity in most areas to engage stakeholders meaningfully in developing the plans (Alderwick *et al* 2016a).

The emphasis on collaboration that lies behind STPs marks an important shift from the belief that competition should be used to improve health and care services (Alderwick and Ham 2016). It mirrors the focus in the Forward View on the need to develop new care models centred on the integration of services. STPs have faced the challenge of fostering collaboration and integration in a system, based on the Health and Social Care Act 2012, that was not designed with this purpose in mind.

NHS England and NHS Improvement have made it clear that STPs will play an increasingly important part in NHS planning in the future. The two-year contracts agreed between commissioners and providers at the end of 2016 were expected to reflect the priorities identified in STPs (NHS England and NHS Improvement 2016). NHS England published a document in March 2017 called *Next steps on the NHS five year forward view* (NHS England 2017a) setting out how STPs will evolve, including by identifying a small number of areas with strong plans and partnerships that will be supported to make faster progress and evolve into 'accountable care systems'.

If this is to happen, STPs will need to strengthen their leadership and governance and bolster their staffing arrangements to be able to translate the ambitious proposals set out in the drafts submitted in October 2016 into credible plans (Ham *et al* 2017). They will also have to work hard to involve a range of stakeholders – including health and care professionals, the public and local politicians – in the plans, and consult on any proposals for major service changes. In doing this, STP leaders will need to address concerns in some quarters that STPs are focused on cutting services to meet financial pressures rather than improving care.

STP footprints

There are five STPs in London: North Central London, North East London, North West London, South East London and South West London. These are based on areas that have been used for NHS planning purposes in the past. Each STP in London covers an average population of 1.7 million people – ranging from 1.4 million (in North Central London) to 2 million (in North West London) (NHS England 2016b).

Each STP footprint covers multiple clinical commissioning groups (CCGs), local authorities, and health and care providers – from large acute hospitals to individual general practices. The smallest STP footprint in London covers five CCG areas and the largest covers eight CCG areas. All five named STP leaders in London are from NHS organisations. Work on STPs in London is overseen by the London-based teams from NHS England and NHS Improvement, working in collaboration with other national NHS bodies.

Context

Previous reports by The King's Fund have described the history of hospital and health services planning in London extending back to the late 19th century (Appleby *et al* 2011). The Healthcare for London programme, led by Lord Darzi at the request of the then London strategic health authority (SHA), began in 2007 and developed a comprehensive set of proposals for improving health and care services, following extensive engagement. The programme led to a number of changes in health service delivery, most notably improvements in stroke care across the capital (Morris *et al* 2014; Hunter *et al* 2013).

Following the election of the coalition government in 2010, the new Health Secretary, Andrew Lansley, asked the SHA to call a halt to Healthcare for London. His rationale was that service changes should be led locally by clinicians with full public engagement rather than by the SHA in a top-down planning process. The abolition of the SHA in 2013, following the Health and Social Care Act 2012, left a gap in the ability of the NHS across London as a whole to plan how services should be delivered in future (Ham *et al* 2013). It also led to the departure of some of London's most experienced NHS leaders.

This gap has been filled, in part, by the work of NHS England (London) and by London-wide forums such as the London Clinical Senate and strategic clinical networks. The work of these bodies has been supplemented in some parts of London by CCGs coming together to build on the work of their predecessor primary care trusts (PCTs) and the legacy of Healthcare for London. Notable examples of organisations working together on joint plans are Shaping a Healthier Future in North West London, and Our Healthier South East London, a five-year commissioning strategy developed by CCGs.

STPs build on this pre-existing work and require NHS organisations in all parts of London to plan together for the future. These organisations must also work with local government and others in their local communities. As in the rest of England, the challenge is how to do so in the context of organisational arrangements that are both complex and fragmented and in the absence of a designated system leader (Ham and Alderwick 2015). A further challenge arises from the immediate and growing financial and operational pressures facing NHS organisations, and how to address these pressures while also collaborating with others in developing plans for the future.

The complexity of existing organisational arrangements in London derives not only from the number of NHS commissioners and providers but also from the contribution of other public service agencies. These include academic health science centres and networks, Public Health England (London), London local education and training boards, the London Clinical Commissioning Council, and

commissioning support units (CSUs). The organisation of the NHS in London is also changing as a result of mergers between NHS trusts, the establishment of a hospital group model in north-central London, joint working between CCGs, and the pooling of budgets and staff between CCGs and local authorities in some areas.

Alongside the NHS, local authorities and the Mayor of London both have a leadership role for public health in London. The report of the London Health Commission, chaired by Lord Darzi and commissioned by the then Mayor in 2013, is a tangible example of this (London Health Commission 2014). The London Health Board brings together key stakeholders – including leaders of local authorities, representatives from the NHS and Public Health England, and leaders from the London Clinical Commissioning Council – on public health and other issues to provide oversight of developments in the capital, under the leadership of the Mayor.

In navigating this organisational complexity, STPs can only function by securing agreement between the many NHS organisations involved in commissioning and providing care each area – each of which has its own established duties and responsibilities set out in law – as well as by working with their partners in local government. Local government has altogether separate accountability arrangements to the NHS, including through the democratic accountability of elected councillors. STPs themselves have no legal status. They are a conscious 'workaround' by national NHS leaders to avoid a potentially distracting and destabilising reorganisation of the structure of the NHS. Our analysis of progress on STPs across England has drawn attention to the costs and complexity of this workaround, and has suggested that the current legal framework may need to be reviewed to align the organisation of the NHS and social care with the direction set by the Forward View (Ham *et al* 2017).

3 What are the main themes in London's STPs?

We analysed the five London STPs to identify their key themes and the service changes proposed in each area. We used the publicly available versions of plans submitted to NHS England in October 2016. This part of the report describes the main themes identified across the five plans, uses examples of service changes being proposed under each theme, and sets out some of the differences and commonalities between the plans.

We have focused primarily on what STPs mean for how health and care services in London will change if the plans are implemented. The following themes emerged from our review:

- prioritising prevention and early intervention
- strengthening and redesigning primary care and community services
- improving care in priority service areas, such as mental health and cancer
- reconfiguring acute and specialised services
- reducing unwarranted variations in care
- improving productivity and efficiency
- supporting and developing the health and care workforce
- developing the supporting infrastructure
- changes to incentives and organisational arrangements.

This section of the report is intended to be a summary of the key themes rather than a complete list of initiatives in each area of London. We consider each theme in turn. It is also worth recognising that the five plans may have changed or developed since they were submitted to NHS England in October. That said, our understanding is that the broad themes and key service changes proposed remain unchanged.

London's STPs respond to a unique set of population health challenges (London Health Commission 2014). London is a global city where the population is growing rapidly and is younger when compared to the rest of the country. London's population is highly diverse and mobile. This has a direct impact on

how people in London use health services – for example, GPs experience a relatively high turnover of patients compared to the rest of the country. There are significant and persistent inequalities in health outcomes in London, both within and between London's boroughs. While London does better on some health outcomes than other parts of the country, its population fares worse on others, such as rates of childhood obesity and life expectancy for people with severe and enduring mental illness.

Prioritising prevention and early intervention

All STPs in London emphasise the importance of prevention and early intervention to keep people healthy and support them to manage their own health. The plans describe the scale of the health challenges facing their local populations, including:

- significant inequalities in health outcomes (for example, there is a 16-year gap in life expectancy between the least and most deprived men living in one borough in north-west London)

- large numbers of people living in poverty (for example, 26 per cent of children in south-east London live in poverty)

- high levels of childhood obesity and other issues facing children and young people (for example, north-east London has higher rates of obesity among children starting primary school than other parts of the country)

- widespread unhealthy behaviours within the population (for example, around half of the population in north-west London are physically inactive)

- challenges in providing care for people with long-term conditions, including mental health issues and their relationship with physical health (for example, 75 per cent of people aged over 55 in south-east London have at least one long-term condition).

The STPs propose a number of common approaches to address these challenges. The plans set out proposals to encourage healthy behaviours within the population, including through smoking cessation services, exercise interventions, and alcohol screening, liaison and outreach. Targeted prevention programmes are proposed for people with long-term conditions, including better identification and early intervention for common conditions like diabetes. Earlier access to mental health services is also identified as a priority.

The plans describe how people will be supported to manage their own health and wellbeing, including through better information and advice, and structured

support and education for people with long-term conditions. Some plans focus specifically on improving the health and wellbeing of children and young people – for example, by working with schools to encourage exercise, and by improving early access to mental health support in a range of care settings. In North Central London, there is an ambition to work with schools to support the adoption of the 'walk a daily mile' initiative and other lifestyle interventions.

The plans also focus on addressing wider social, economic and environmental determinants of health within the population. Social prescribing models – where people are connected with non-medical services in their communities, such as housing support or gym classes – are being proposed in all STP areas, building on work already under way in different parts of London. Programmes are also being proposed to provide targeted employment and housing support for people living with mental health problems and learning disabilities. In North East London, for example, 'wellbeing hubs' will co-locate health and employment services. Partnerships between the NHS and London Fire Brigade are also explored in the STPs to test whether health-related advice could be delivered alongside fire safety information.

Some of these approaches can be delivered by organisations and teams within the NHS. Many others rely on partnerships with local government, wider public services, the voluntary sector and local communities. The level of detail about how these approaches will be funded and delivered varies between the plans – as well as between the initiatives in individual plans.

Some of the plans include specific, measurable goals for particular initiatives. North East London, for example, aims to reduce the number of people smoking by 5 per cent by 2021. North Central London aims to reduce the gap in life expectancy between adults with severe and enduring mental illness and the rest of the population by 5 per cent. In other cases, the intended impact on people's health is far less specific.

Some plans also include detail on the expected financial impact of their prevention programmes. In North West London, for example, supporting people to lead healthy lifestyles is expected to deliver a gross saving of £9 million by 2020/21 for a £3.5 million investment. Reducing social isolation and improving people's mental wellbeing is expected to deliver a gross saving of £6.6 million for a £500,000 investment.

Strengthening and redesigning primary care and community services

All five London STPs set out plans to redesign how primary care and community services are delivered. The aim is to deliver more proactive care in the

community and people's homes, co-ordinate services around people's health and social needs, and reduce reliance on acute hospital services. This will be achieved by developing more integrated ways of working within the NHS and between the NHS and social care, while strengthening care and support available outside hospitals. There is a high degree of commonality between the proposed ways of doing this. Common ambitions include:

- GPs working together at scale in networks and groups of practices
- strengthening and supporting GP services (for example, by improving access to GP appointments and online services)
- creating multidisciplinary teams to co-ordinate and manage care in the community. This typically involves bringing together staff from primary, community, mental health and social care services, and sometimes staff currently based in hospitals. These teams will be 'wrapped round' or 'aligned with' groups of GP practices
- introducing new roles (such as care co-ordinators and physician associates) and new ways of working (such as supported early discharge from hospital) to co-ordinate services and allow more care to be delivered in the community
- working more closely between the NHS and the voluntary and community sector (for example, through social prescribing programmes)
- using risk-stratification and population segmentation to identify the population groups (such as frail older people) that would most benefit from co-ordinated services and proactive care, and designing targeted models of support
- improving access to specialist support in primary care (for example, through delivering consultant-led assessments and clinics in the community)
- improving intermediate care and rapid response services to improve transfers of care and provide alternatives to hospital
- strengthening the focus on prevention and early intervention in primary and community care (including by connecting patients with non-medical services and community support)
- developing new incentives and organisational models to support these new ways of working (such as 'accountable care partnerships', *see* pp 23 and 34).

The plans describe how these new ways of working will be based around geographically defined populations (often referred to as 'localities'). In South East London, 'local care networks' covering populations of between 50,000 and 100,000 people will be developed. In South West London, 'locality teams' will be established to provide care for populations of 'at least 50,000' people. In North

Central London, 'closer to home integrated networks' will cover populations of 50,000 people. And in North East London, localities and networks covering populations of 50,000 people 'will be the centre of integrated working'.

There are some differences, however, in the approaches proposed in each area. In North West London, for example, there is a stronger focus on population segmentation to define how care will be delivered in the community. The plan defines distinct but overlapping approaches to delivering primary care for 'mostly healthy people' and 'people with long-term conditions'. A specific model of care is being developed for older people (over the age of 65), which will be supported by new approaches to commissioning and contracting.

These plans draw on approaches already in place. In South West London, for example, the aim is to spread the work of the Sutton Care Home Vanguard, which aims to improve the quality of services provided to residents in care homes and co-ordination of services with other parts of the health and care system. In North East London, the intention is to 'scale up' existing social prescribing initiatives developed in Tower Hamlets.

In all STP areas, it is expected these new models of community care will help moderate demand for acute hospital services. In South West London, for example, a 44 per cent reduction in inpatient bed days is expected as a result of new models of community care (compared to a 'do-nothing' baseline of expected bed days by 2020/21).

The assumptions made in the plans about reducing hospital capacity are not always clear. In at least three parts of the London – North West London, North Central London and South West London – the expectation is that acute hospital capacity can be reduced in absolute terms as a result of the combination of changes proposed in their plans. In all areas, the ambition is also to avoid building additional hospital capacity otherwise expected to be needed as a result of increasing demand for care and demographic changes.

The plans also assume that new models of community care will save money (compared to a 'do-nothing' counterfactual of NHS spending by 2020/21). Estimated savings vary between the plans. North Central London's plan, for example, estimates that 'care closer to home' will deliver savings of £114 million by 2020/21 for an investment of £64 million. These estimates come with some caveats. In North Central London, for instance, the plan acknowledges that 'realising such savings can be difficult in practice and are contingent upon removing or re-purposing capacity within acute hospitals'. We examine these assumptions on p 18.

The plans have implications for estates and IT. The plans call for capital investment to improve primary care facilities and develop new hubs for integrated community teams. Investment is also needed in IT services to support the delivery of new care models. In North Central London, for example, £111 million additional capital investment is required to support their 'care closer to home networks' and primary care facilities. In South East London, £99 million of capital investment is needed for primary care estates transformation, £23 million is needed for primary care IT transformation, and a further £62 million is needed for investment in 'community-based care'. The capital assumptions included in the plans are set on in Table 21 on p 75.

Improving care in specific service areas, such as mental health and cancer

The plans describe ambitions to improve care in a variety of service areas, based on local priorities and national requirements and reviews. Every plan, for example, includes proposals to address challenges in urgent and emergency care services. Getting back on track with access to A&E services and ambulance waits was one of NHS England's 'must dos' included in original planning guidance for STP leaders. The nine national 'must dos' are set out in the box below. The level of focus on these and other priorities differs between the five London plans.

National 'must dos' for STPs in 2016/17 to 2020/21 planning guidance

1. Use the STP to define the most critical milestones for local progress towards achieving the ambitions of the Forward View.
2. Return the NHS to financial balance.
3. Address the sustainability and quality of general practice.
4. Get back on track with access standards for A&E and ambulance waits, including by implementing the urgent and emergency care review and other related pilots.
5. Improve referral-to-treatment times for non-emergency care.
6. Improve cancer care, including by delivering waiting times standards and improving one-year survival rates.
7. Achieve two new mental health care access standards (for the Improved Access to Psychological Therapies (IAPT) programme and for people experiencing a first episode of psychosis) and meet dementia diagnosis rates of at least two-thirds the estimated number of people with dementia.
8. Transform care for people with learning disabilities, including by delivering national policy reviews and increasing community-based support.
9. Make improvements to care quality, particularly for organisations in special measures.

Improving mental health services and their integration with other services is one example of a priority area in all London STPs. North Central London, for example, describes how a 'stepped' model of care – ranging from community-based support to specialised services – will be delivered for people with mental health needs. Initiatives are outlined for the whole population, including increasing access to primary care mental health services and integrating mental health support within their 'care closer to home integrated networks'. Services will also be developed for targeted population groups. A female psychiatric intensive care unit will be developed to ensure local provision of inpatient services for women. A range of improvements will be made to mental health services for children and young people. Connections will also be made with other community support and wider public services.

Improving cancer care is another priority area. In South East London, for example, a range of approaches is outlined to improve the quality and consistency of cancer services. GPs, nurses and allied health professionals will receive training in detecting cancer early and providing support for people in the

community after cancer treatment. All patients undergoing cancer diagnosis and treatment will receive a 'holistic' assessment of their needs, be given a care plan, and have access to clinical nurse specialists or other advice and support. A pilot programme will be run at Guy's Hospital to test new approaches to diagnosing patients with non-specific symptoms. And a single phone line – linked to an electronic prescribing system – will be established for acute oncology services to triage patients, share relevant information and ensure consistency between different sites. The three trusts that provide cancer services are establishing 'an accountable cancer network' in an attempt to provide more co-ordinated services across south London.

Other priority service areas described in the plans include:

- orthopaedics and other outpatient services (for example, plans to improve orthopaedic services in North Central London and South East London, and plans to redesign outpatient services across a range of specialities in South West London)
- maternity services (for example, all STPs commit to implementing the *Better births* maternity review (National Maternity Review 2016); South West London's plan focuses particularly on personalisation and choice in maternity services)
- paediatrics (for example, plans to improve the quality and safety of paediatric care in North West London)
- children and young people (for example, plans in North East London to develop structured care plans for children and families, introduce personal health budgets, and use care co-ordinators to arrange and navigate services)
- care for older people (for example, plans in North West London to develop 'accountable care partnerships' to manage health and social care services for older people)
- end-of-life care (for example, plans in South West London to improve end-of-life care through better identification of needs, improved information sharing and implementing new care models).

Social care services

All STPs acknowledge the significant pressures facing social care and other local authority services in their areas. The closer integration of NHS and social care services is described as a core part of new models of primary and community care (*see* p 36). This includes involving social care staff in multidisciplinary teams; closer co-ordination between NHS and social care providers and commissioners; and new service models to tackle delayed transfers of care and

deliver more support in the community and people's homes. But specific proposals to address the growing pressures in adult social care services are typically lacking, instead the focus is primarily on the interface of social care and NHS services.

This gap is recognised in the plans themselves. In North Central London, the STP states that more work is needed to create a practical plan for addressing provider failure in social care. In South West London, the STP states that more work is needed to understand the impact of cuts to social care and local authority budgets on the ambitions in the STP. The plan goes on to say that 'the local authority financial gap and likely reductions in services it implies is recognised as potentially having a significant impact on the ability of south-west London health services to deliver the proposed changes to services and address its own financial gap'. In North West London, the plan commits to carrying out a 'comprehensive market analysis' of care for older people and create a 'market development strategy'.

Reconfiguring acute and specialised services

Every STP in London includes proposals to reconfigure acute or specialised services. These proposals vary significantly in scope, ranging from ambitions to review opportunities to consolidate some specialised services to major plans to reconfigure acute hospital services.

South East London's original plan includes proposals to:

- consolidate orthopaedic services by developing two elective orthopaedic centres, which will 'bring together routine and complex care onto single sites'. The centres will work as part of a networked model with other hospitals and community support.

South West London's original plan includes proposals to:

- reduce the number of acute hospital sites from five to four. The main drivers cited for the reconfiguration are quality and staffing issues. NHS leaders considered the potential benefits of a three or four site model against a range of clinical and non-clinical criteria. The proposed solution in the plan was to move to four sites.

  Since the October 2016 version of the STP was published, NHS leaders have now stated that all hospitals in South West London will continue to be needed in the future, but that not all these hospitals will need to provide the same services that they do today. An updated strategy document will be produced by the South West London STP in November 2017.

North East London's plan includes proposals to:

- remain committed to the previously agreed downgrade of King George Hospital's A&E. This is dependent on a range of improvements in different parts of the system
- review whether some specialised services should be reconfigured to address quality issues, including:
    - specialist cardiac care
    - specialist renal care
    - cancer care
    - specialist paediatric care
    - neuro-rehabilitation services.

North West London's plan includes proposals to:

- reduce the number of major hospital sites from nine to five (after consultation in 2012). 'The major hospitals will be networked with a specialist hospital, an elective centre and two local hospitals.'
- reconfigure paediatric services by introducing paediatric assessment units in four of the five paediatric units and closing the paediatric unit at Ealing Hospital. Existing staff will be allocated to the remaining units and additional paediatric nurses will be recruited. These changes took place in June 2016 and further improvements are being considered.

North Central London's plan includes proposals to:

- consolidate a range of specialised and acute services. The services potentially 'in scope' for consolidation over the STP period are:
    - emergency surgery (out of hours)
    - maternity services
    - elective orthopaedics
    - mental health crisis care and place of safety
    - mental health acute inpatient services
    - histopathology

- general dermatology services.

Quality issues and workforce constraints are commonly cited as drivers for hospital reconfiguration. In South West London, for example, the STP states that it will struggle to deliver high-quality acute hospital services as a result of staff shortages in some clinical areas. The financial sustainability of services is also identified as a factor for acute reconfigurations. The proposals for these changes are rarely new, building on previous reviews of acute and specialised services in London (such as the Shaping a Healthier Future programme in North West London, which led to a major consultation on proposed changes in 2012).

Some local authorities in London have expressed concerns about these proposals for acute hospital reconfiguration. In North West London, for example, the plan states 'Ealing and Hammersmith and Fulham Councils do not support the STP due to proposals to reconfigure acute services in the two respective boroughs.' The councils are still working with NHS organisations on other aspects of the STP, including prevention and care for older people.

These plans have implications for the size of acute hospitals in London. All five of the London STPs aim to reduce the number of patients in hospital beds either in absolute terms – against the number today – or in relative terms – if activity continued to increase at the current rate of around 3 per cent a year. In two of the STPs, explicit statements are made about this: North East London's STP says its plans will mitigate the need to build one entire extra hospital by 2020/21; while North West London's plan says its scheme to shift care into the community will eliminate the need to create 865 new beds over a similar timescale. We assess the proposals in STPs to reduce hospital activity and bed use in more detail on p 43.

In some cases, the STPs set out the capital requirements related to their reconfiguration plans. In South East London, for example, the proposals to consolidate elective orthopaedic services will require an estimated £12 million capital investment. Other plans are less specific on the capital investment needed. In South West London, for example, no capital requirements were included in the plan for the acute hospital changes proposed. Overall capital requirements for the South West London STP are currently under review. The capital assumptions included in each plan are set on in Table 21 on p 75.

Other changes to specialised services

Improving the commissioning and delivery of specialised services is an important theme in all five London STPs. This includes London-wide priority areas for improvement, such as child and adolescent mental health services (CAMHS), as well as specific priorities within or between STP areas. Proposals to improve

specialised services are more extensive in South East London and South West London's STPs than in North Central London, North East London and North West London.

South East London and South West London articulate the same case for change in specialised services, including:

- growing demand and rising costs
- fragmented services and patients not always being treated in the right place
- inefficiencies and duplication
- variations in quality and failure to meet standards.

In response to these issues, both STPs identify opportunities to:

- align services across south London and reduce overlap and duplication
- improve care by redesigning service pathways (including paediatrics, cardiovascular, specialist cancer, renal, neuro-rehabilitation, HIV, adult mental health, CAMHS and Transforming Care Partnerships)
- improve the value that the NHS gets from high-cost drugs and devices
- improve the value that the NHS gets from specialised services more broadly, including by reducing variations in care and tackling 'non-compliant' services.

A review of specialised services in south London is being carried out with NHS England's London regional team. The London STPs intend to work together to plan specialised services where appropriate through a newly established London specialised commissioning board.

Across all STPs in London, significant financial savings are required in specialised commissioning to bridge the counterfactual 'do-nothing' financial gap in NHS budgets by 2020/21. The plans often include little detail on how this will be delivered. In North West London, for example, it is assumed that a gap of £189 million in the specialised commissioning budget will be closed by 2020/21 – but the plan states that a 'solution' for closing the gap has not yet been identified by NHS England's specialised commissioning team.

Reducing unwarranted variations in care

The plans focus on improving the quality and efficiency of services by reducing unwarranted variations in care. Data on variations in processes, quality and cost of NHS care has been used to identify priority areas for action in each STP area. In North West London, for example, diabetes, atrial fibrillation and hypertension

services have been identified as STP-wide priorities for reducing unwarranted variation. Further priorities will be identified at a local level in different parts of the STP footprint. In Hammersmith and Fulham – one of the eight CCG areas making up the North West London STP footprint – neurology, respiratory and atrial fibrillation have been identified as areas for local action.

The level of detail about how these variations will be addressed in practice varies, perhaps unsurprisingly, between the five plans. One of the more granular plans can be found in North Central London, where a set of high-level interventions has been defined to provide a framework for delivering elective orthopaedic care across providers. The interventions include:

- better use of non-medical support and education (such as gyms and online information)
- expert first point of contact for patients (for example, a GP with a special interest or physiotherapist who knows the full range of treatment options)
- use of a structured referral template (so all the right information is available in one place)
- improved diagnostic protocols (for example, to reduce duplication of tests)
- North Central London-wide clinical protocols (to ensure consistency across providers and teams)
- ensuring patients are only referred when ready for treatment (to avoid second GP appointments and re-referrals)
- better monitoring and transparency of practices (for example, peer review of practices to allow improvement and dialogue between clinicians)
- one-stop outpatient clinics (to co-locate assessment and diagnostics and avoid unnecessary follow-ups)
- multidisciplinary team clinics (including consultants, physios and GPs)
- pre-operative assessments conducted at the first outpatient appointment (to help plan rehab and post-operative packages prior to referral)
- re-check prior to surgery by contacting patients 48–72 hours before treatment (to reduce risk of late cancellations)
- short-notice reserve list (to fill gaps in late cancellations with people ready for treatment)
- consultant-level feedback (to allow peer challenge of utilisation and case volumes per list)

- more effective planning for discharge (for example, by planning earlier in the process to give greater access to community support and reduce delayed transfers of care)
- enhanced recovery pathways (to give patients more understanding of their expected length of stay in hospital and details around how to avoid staying for longer)
- ring-fenced elective beds (to reduce wasted theatre time and risk of infection)
- optimised theatre utilisation (for example, through better scheduling).

North Central London's plan also describes other specialties that have been identified for similar pathway redesign. As well as improving care for patients, the plan assumes that these changes will improve productivity and efficiency. The plan estimates that 'optimising the elective care pathway' will deliver savings of £55 million, with the assumption that £4 million will need to be invested in elective care to achieve this. Other STPs in London also assume that financial savings can be achieved by reducing variations in clinical care. In North West London, reducing variations in a range of clinical areas (including those outlined above) is expected to deliver a gross saving of £12.4 million for an initial investment of £2 million.

Improving productivity and efficiency

The need to improve productivity and efficiency runs through all five STPs. The plans calculate projected gaps in NHS and social care finances by 2020/21 if organisations 'do nothing' to transform how care is delivered. Table 1 sets out the NHS 'do-nothing' gaps by 2020/21 in each STP footprint (based on data from the finance and activity templates submitted to NHS England in October). Table 19 on p 66 sets out these figures in more detail.

Table 1 NHS 'do-nothing' gaps in NHS finances by STP, 2020/21

STP	NHS 'do-nothing' gap 2020/21 (£m)
North Central London	797
North East London	590
North West London	1,113
South East London	934
South West London	659

Source: STP finance and efficiency templates, submitted to NHS England, October 2016 (see Table 19)

The various service changes proposed in the plans – including the first five themes described above – are expected to contribute to closing the gaps in NHS finances. But these changes alone are not enough to bring the NHS back into financial balance. In all five STPs, organisational efficiency improvements (often described as business as usual (BAU) efficiencies and cost improvement programmes (CIPs)) are forecast to make the single largest contribution to closing the gaps in NHS finances by 2020/21. There is little detail in the plans on how these savings will be made, with the expectation that these opportunities will be identified and delivered by individual organisations. Other significant opportunities to improve productivity are identified through providers working together, as well as productivity improvements made by commissioners. Savings are also expected in the specialised commissioning budget.

We analyse the assumptions made in the plans about improving NHS productivity and efficiency in more detail on p 29.

Supporting and developing the health and care workforce

The plans identify 'enablers' for implementing their proposals. The most important of these is the need to support and develop the NHS and social care workforce.

STPs emphasise the significant workforce pressures facing health and social care services in London. In North West London, for example, the lack of enough skilled staff to deliver seven-day services is described in the STP as 'the biggest, most intractable problem' facing the system. This is one of the factors behind plans to reconfigure acute hospital services. Similar issues are identified in South West London, where organisations do not believe that they can recruit or pay enough clinical staff to operate safe services across their existing acute sites. Major pressures also exist outside hospitals. North East London's plan, for example, describes a 'retirement bubble' in general practice, where 25 per cent of GPs in one borough are currently over retirement age. In North East London, 17.5 per cent of registered roles in social care services are vacant.

Some plans also highlight the issues facing NHS and social care staff working in London. South West London's plan, for example, states that house prices in London are now around 11 times the average London NHS salary, compared to 8.4 times in 2010. North East London also highlights the lack of affordable housing as an important workforce issue.

As well as the need to address current workforce pressures, the plans also describe the new skills and roles that need to be developed to support improvements in services. Delivering more co-ordinated care in the community,

for example, will require NHS and social care staff to work together in teams. New roles, such as health coaches, may also be needed.

Common proposals to address these challenges include:

- developing STP-wide approaches to recruitment, retention and workforce planning (for example, by introducing shared staff banks, developing 'career pathways' across the health and care system, sharing HR functions, and developing local apprenticeships)
- promoting London as an attractive place to work (for example, by actively marketing the benefits of living and working in London)
- improving the health of the NHS and social care workforce (for example, by introducing healthy workplace charters and, as is proposed in South West London and North East London, by working with the London Mayor to address high housing and transport costs for NHS staff)
- changing the way that existing staff work together (for example, by introducing multidisciplinary teams, training staff in working across organisational boundaries, and encouraging hospital specialists to work more closely with community staff)
- developing new skills within the existing workforce (for example, training staff in health coaching, ensuring that staff are trained to 'make every contact count', and introducing greater flexibility to work across care settings)
- developing new roles to support the delivery of new care models (for example, physician associates, care navigators and health coaches)
- drawing on the wider public sector workforce and community assets (for example, through working with the voluntary sector, introducing social prescribing programmes, and developing partnerships with housing associations and the London Fire Brigade).

STPs in North Central London and North West London also mention the skills needed for implementing improvements to services. North Central London's STP describes an ambition for all health and care staff to be trained in a single approach to quality improvement. In North West London, programmes will be put in place to support leaders to implement change across systems and support the development of emerging GP leaders and practice managers. A programme is also being created to help teams work together between organisations.

Closer working between NHS and social care staff is a central theme running throughout all five plans. But the impact of workforce pressures in social care

receives less attention than the need to address pressures within the NHS. In North Central London, the plan describes the need to quantify the investment that might be needed in the social care workforce over the coming years, for example, to increase the number of domiciliary care workers.

These workforce plans have financial implications. Additional training, recruitment and new roles across the health and care system will require investment by STPs and the organisations within them. But the plans also assume that financial savings can be made through more collective approaches to workforce management. In South East London, for example, the plan estimates that 'optimising the workforce' (including a joint approach to managing temporary staff and improvements in workforce productivity) will deliver a recurrent saving of £61 million by 2020/21, with a required non-recurrent investment of £7.8 million. In North East London, the plan estimates that 'workforce management' will deliver savings of £22 million by 2020/21. And in South West London, savings of £4 million are estimated in 2020/21 from implementing a shared staff bank model (for all staff groups including nursing, medical and administrative staff).

Developing the supporting infrastructure

The two other key enablers described in the plans are IT and estates. Proposals for improvements in IT and digital services vary in detail between the London STPs, and draw on London's existing 'local digital roadmaps' (LDRs). Common ambitions across the five STPs include:

- using apps and digital technology to enable people to manage their own health
- introducing e-consultations and other methods of virtual communication
- better information sharing between health and social care, as well as with patients
- using joined-up population-level data to plan services and interventions
- using individual-level data and algorithmic tools to support clinical decision-making.

These IT plans have capital implications. The capital assumptions included in the five plans are set out in Table 21 on p 75. In North Central London, for example, delivering the digital strategy will require investment of £159 million, with a further £21 million to be invested in 2021/22. In South East London, the LDR will require capital investment of £35 million.

The plans also outline a range of measures to improve and develop the NHS estate, including proposals to:

- improve and maintain existing buildings (for example, North East London's plan describes how Whipps Cross University Hospital requires critical maintenance work)
- develop new sites and buildings in the community (for example, North Central London's plan involves developing new community hubs and primary care facilities)
- develop new sites and buildings to support new models of hospital care (for example, as part of acute reconfiguration plans in North West London)
- make better use of existing assets (for example, South East London's plan involves reducing the amount of under-utilised and non-clinical estate)
- develop more co-ordinated approaches to using the public sector estate (for example, through 'one public estate' approaches proposed in South West London).

Like IT and digital services, these estate plans have significant capital implications. In North East London's plan, for example, an estimated net capital investment of £500–600 million is required for NHS estates. Maintenance work on Whipps Cross University Hospital alone will require around £80 million. In North Central London, plans to develop new community hubs and primary care facilities will require an estimated investment of £111 million.

The estate plans in STPs are closely related to plans for a London-wide devolution deal. North Central London's plan, for example, describes the complexity of the existing estate system and capital funding processes in the NHS and makes the case, as part of the London Devolution programme, for a range of London-specific capital powers. This includes:

- local retention of capital receipts
- a London-specific capital business case approval process
- new value-for-money definitions (to include social benefit)
- new flexibilities over primary and community estate
- powers to pay off PFI (private finance initiative) debt using capital sales.

A London Estates Board has been established to provide a single forum for estate discussions in London. A major proposal being considered as part of

London's devolution deal is to increase the powers of the London Estates Board over key estate planning decisions in the capital.

Changes to incentives and organisational arrangements

Changes to NHS structures and incentives are also proposed to support the service changes described in the plans. This includes plans for more integrated approaches to commissioning – both within the NHS and between the NHS and local government – new contracting models and payment systems focused on local population care outcomes, and collaboration between NHS and social care providers. The plans also set out basic principles and approaches to STP governance.

In North Central London, for example, the five CCGs have agreed to come together to work more closely to commission NHS services across their STP footprint. The CCGs will develop a common commissioning and financial strategy. They will appoint a shared Accountable Officer, Chief Finance Officer, Director of Strategy, and Director of Performance. This single management team will work in partnership with the individual CCGs to commission services. The five CCGs will continue to work closely with local authorities to commission services at a local level. The commissioning system will become more 'strategic', holding providers to account for outcomes of care and developing population-based budgets for services.

In North West London, the plan describes how 'accountable care partnerships' will be developed to support the delivery of integrated services for older people. Budgets for older people's health and care services will be pooled – building on work already under way between the NHS and local government through the Better Care Fund – and commissioners will develop population-based contracts covering all older people's services in defined geographical areas. These contracts will define outcomes of care to be delivered within the budget. Relevant providers – being called 'accountable care partnerships' – will work together to deliver these services.

A variety of forms of collaboration between health and social care providers are described in STPs – and in most cases these build on existing work and national initiatives. South East London's plan, for example, describes how Dartford and Gravesham NHS Trust and Guy's and St Thomas' NHS Foundation Trust are working together to deliver acute services as an 'acute care collaboration vanguard' – one of the models being supported by NHS England's new care models programme. The plan also describes how 15 GP federations have already been established across South East London. In North Central London, The Royal Free NHS Foundation Trust is working with other acute hospitals as part of a 'provider chain'.

In North East London, a provider partnership called Tower Hamlets Together has been developed, bringing together local GPs, Barts Health NHS Trust, East London NHS Foundation Trust, and the London Borough of Tower Hamlets. The aim is for the partnership to deliver integrated community services. The STP describes how three 'accountable care systems' will be developed across North East London, bringing together health and social care providers to deliver care for geographically defined populations.

4 What are the main issues to be addressed in the content of the plans?

In this section of the report, we set out some of the main issues and risks to be addressed in the content of the plans, drawing on our review of the plans and relevant evidence and experience. This analysis is not intended to be exhaustive. We focus on the main issues that emerge when looking across all five plans, rather than offering a detailed assessment of the proposals in individual STPs. We focus primarily on the service changes proposed – although we also comment on some the assumptions made about NHS finances.

We focus on the following areas:

A: providing more care in the community and developing new models of care

B: moderating demand for acute hospital services and reducing hospital capacity

C: prioritising prevention and early intervention

D: reconfiguring acute and specialised services

E: closing gaps in NHS finances

F: securing capital investment

G: implementing the plans.

A. Providing more care in the community and developing new models of care

Every London STP aims to deliver more co-ordinated health and social care services in the community. This involves a variety of different elements (*see* p 18), including health and social care staff working together in multidisciplinary teams, improving access to GP and other community services, and developing new ways to co-ordinate services and manage care in the community. The plans

assume that these new models of care will help to moderate demand for hospital services and deliver financial savings for the NHS (*see* p 43).

Our view is that new models of integrated care are needed for the NHS and local government to meet the health needs of the population (Goodwin *et al* 2012; Ham *et al* 2012; Curry and Ham 2010). This is particularly important for people with long-term conditions and other complex health needs. These people often need care and support that spans traditional service boundaries, including those within the NHS – for example, between GPs and hospital care, between NHS and social care, and with other services like employment and housing.

These ambitions are not new. NHS and local government organisations in London have been working together to develop more co-ordinated health and care services for several years. This includes work through the integrated care 'pilot' and 'pioneer' programmes (Erens *et al* 2016; RAND Europe and Ernst & Young 2012), as well as the current 'vanguard' programme designed to test and develop the new care models described in the Forward View. Similar initiatives are also developing outside these national initiatives – for example, through the Southwark and Lambeth Integrated Care programme in South East London.

How long will new care models take to implement and deliver results?

The challenge is that these new models of care are not a quick fix. Previous experience in the NHS suggests that new models of community-based care can take several years to develop and deliver results (Bardsley *et al* 2013; Goodwin *et al* 2013; Steventon *et al* 2011). This is echoed by the experience of the 'whole-systems integrated care programme' currently under way in North West London. An evaluation of the programme's early stages (February 2014 to April 2015) found that the process of delivering change was complex, faced a range of internal and external barriers, and had taken longer than expected (particularly as the programme moved from design to implementation) (Wistow *et al* 2015). Despite being a well-resourced programme (with an investment of £24.9 million over three years), committed to involving as many local people as possible in its design, in its early stages it did not deliver significant frontline service changes.

Will investment be made available?

The process of implementing new care models also requires investment. This includes resources to cover the costs of staff time (for example, spending time learning and developing new ways of working), programme infrastructure (for example, putting people and processes in place to manage the transformation programme), physical infrastructure (for example, improving the use of digital technology), and double-running costs (to allow new services to be set up while

still providing existing services) (The Health Foundation and The King's Fund 2015).

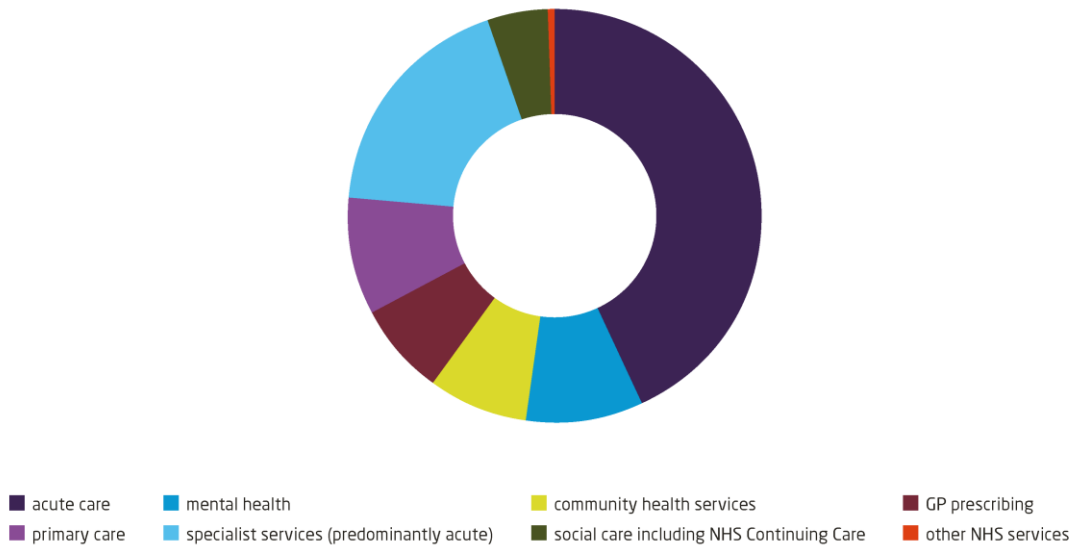
Even without the task of redesigning how care is delivered, primary and community services are likely to require additional investment just to cope with growing demand for services. Our work has identified growing pressures across the range of community-based health services, including in general practice (Baird *et al* 2016), district nursing (Maybin *et al* 2016), mental health (Gilburt 2015) and adult social care (Humphries *et al* 2016). These pressures include gaps in staffing in a range of services, including GPs and district nurses.

Where will this investment be found? Additional resources for the NHS made available through the Sustainability and Transformation Fund have been used primarily to reduce NHS deficits rather than to invest in new care models in the community. NHS capital funding is also extremely limited. This is explored in more detail below (*see* p 74).

We looked at the commissioning intentions of London's CCGs and NHS England to see if a major shift in resources was being planned from acute hospitals into the community. Figure 1 illustrates the current distribution of NHS spending in London between different services. Figure 2 shows how the distribution of NHS spending is planned to change by 2020/21.

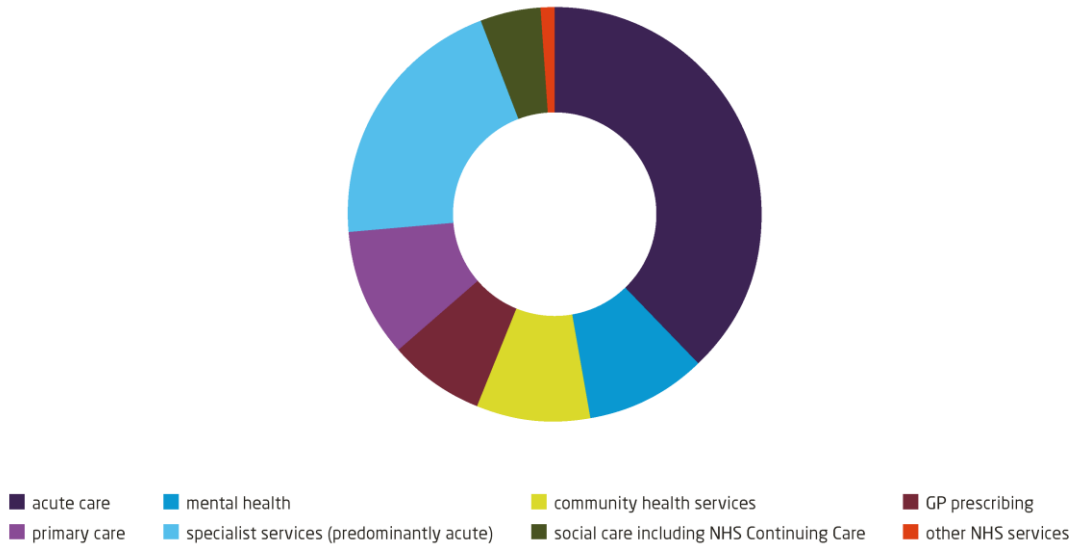
This data suggests that the share of spending by London CCGs and NHS England on acute and specialised services will fall by 3 percentage points between 2015/16 and 2020/21. The share of spending on primary care, GP prescribing, community health services and mental health services combined is planned to increase by 2.5 percentage points by 2020/21.

Figure 1 Current distribution of NHS London spending, 2015/16



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

Figure 2 Planned distribution of NHS London spending, 2020/21



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

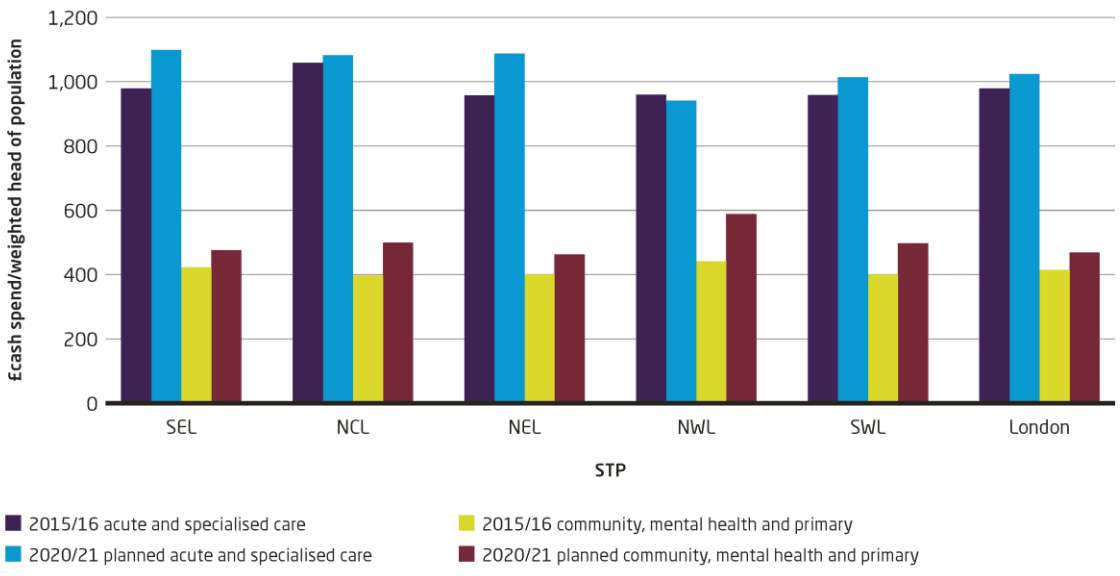
At an aggregate level, therefore, the shift of resources from acute to community-based health services appears to be modest. Breaking this data down to an STP level reveals variation in planned spending between different areas (*see* Figure 3), especially when expressed as spending per head of the population (our figures here use NHS England's 'weighted population' projections, which adjust for demographic factors linked to the use of NHS resources, such as age and deprivation).

Looking at the spending plans in cash terms, the largest increase in spending per head on community-based services is being planned in North West London, the only one of the five STPs that plans to reduce the cash amount spent per head on acute and specialised services between 2015/16 and 2020/21.

It is worth recognising that this data simply reflects how NHS commissioners plan to allocate resources. This does not necessarily reflect how these resources will be spent in practice. The data in Figure 3 reflects only how much commissioners plan to pay hospital, community and other service providers in cash terms, not how much it will cost those providers to run their services. Providers are expected to face cost-inflation pressures of around 2.6 per cent a year over the five years to 2015/16, affecting costs such as pay, fuel and drugs.

When commissioner spending plans are adjusted to account for that level of provider cost inflation, planned spend per head on acute and specialised services will fall in each of the five STP areas (*see* Figure 4). Providers will be asked to absorb some of this reduction through efficiency savings, which we discuss further on p 68. Again, it is worth recognising that these figures represent aspirations rather than the reality of how resources will be spent. Recent evidence suggests that acute hospitals tend to absorb additional NHS resources leaving little for investment in other areas of care.

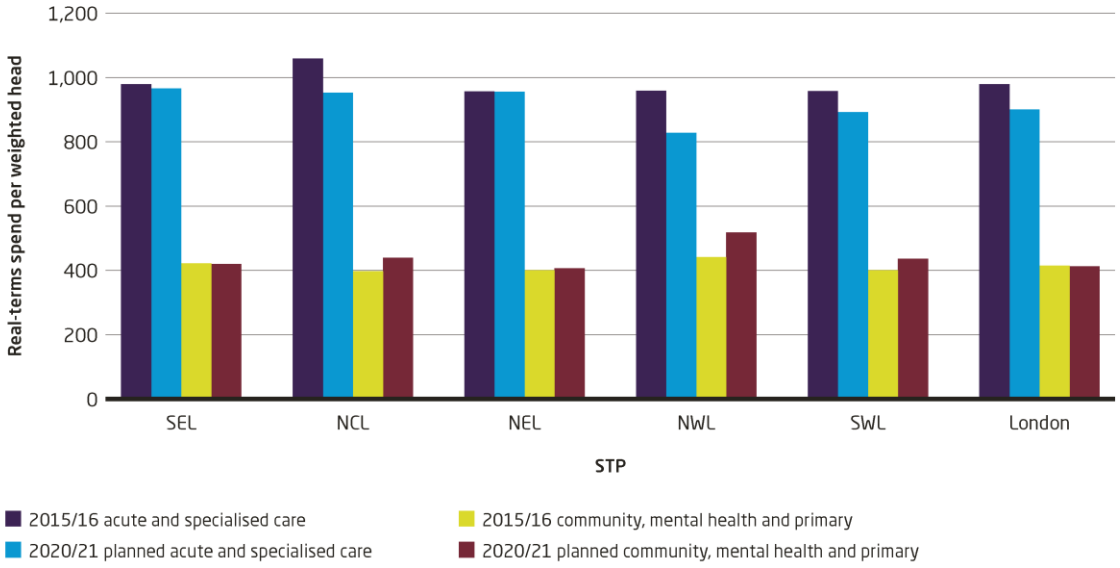
Figure 3 Planned changes in cash spending per head on acute and specialised care, and community-based services by STP area, 2015/16 to 2020/21



Note: Community, mental health and primary care spending excludes planned expenditure on primary care prescribing.

Source: STP finance and efficiency templates submitted to NHS England, October 2016; NHS England weighted CCG populations 2016/17 to 2020/21.

Figure 4 Planned changes in real-terms spending per head on acute and specialised care, and community-based services by STP area, 2015/16 to 2020/21



Note: NHS Improvement's economic assumptions for provider cost inflation to 2020/21 do not currently recognise measures announced at the March 2016 Budget. These measures included a change in the public sector pension discount rate which we estimate will increase NHS provider costs by a further 0.7 per cent in 2019/20. The average level inflation cited here (2.6 per cent a year) reflects this. Without the change in the discount rate, provider cost inflation 2015/16 to 2020/21 would average at 2.5 per cent a year.

Community, mental health and primary care spending excludes planned expenditure on primary care prescribing.

Source: STP finance and efficiency template submissions to NHS England, October 2016; NHS England weighted CCG populations 2016/17 to 2020/21; NHS Improvement economic assumptions 2016/17 to 2020/21.

What impact will new care models have on hospital use and costs of care?

The potential impact of more integrated models of care is also often overstated, particularly in relation to expected reductions in hospital demand and activity. By providing more co-ordinated and proactive care in the community, STPs aim to reduce reliance on acute hospital services by preventing avoidable hospital admissions and by supporting people to leave hospital more quickly. This is expected to reduce costs of care for the NHS.

There are opportunities to provide alternatives to hospital care in the community. Around one in five emergency admissions to hospital are thought to be avoidable with better and more co-ordinated care management in the community (Blunt 2013). Once people are admitted to hospital, they often stay there longer than is medically necessary. Our analysis of HES (hospital episode statistics) data in London suggests that a very small proportion of hospital

patients (around 5 per cent) spend more than 14 days in hospital at a time, occupying a large proportion (around 50 per cent) of total hospital bed days. Audit data from hospitals in London suggests that some of these patients could be discharged home, and others could be cared for in the community (*see* p 54).

The challenge is being able to turn these opportunities into actual reductions in hospital activity. A recent review (Imison *et al* 2017) looked at evidence of the impact of 27 initiatives to move care out of hospital, covering five broad areas:

- changes in the elective care pathway
- changes in the urgent and emergency care pathway
- time-limited initiatives to avoid admission or facilitate hospital discharge
- managing 'at risk' patients (such as people in nursing homes)
- support for patients to manage their own health or access community resources.

The review assessed the impact of each initiative on quality and costs of care. It found that many of the initiatives had the potential to improve patient outcomes and experience of care. But there was limited evidence to suggest that these initiatives had significantly reduced hospital activity. Other reviews have also found limited evidence that particular interventions can significantly reduce unplanned hospital admissions (Purdy *et al* 2012).

International experience, in places like Canterbury in New Zealand and Southcentral Foundation in Alaska, offers greater hope that hospital demand can be moderated through more systemic models of community-based care (Schluter *et al* 2016; Collins 2015; Timmins and Ham 2013). The transformation of the Veteran's Health Administration in the United States in the 1990s led to a significant reduction in hospital use while quality of care improved (Curry and Ham 2010). These health systems have sought to fundamentally redesign how care is delivered in the community. Doing this in the NHS will require both time and investment (as above).

Even if a shift in care from hospitals to the community can be achieved, making financial savings as a result – as is projected in STPs – is much more difficult than often assumed. The ability to make financial savings from these changes depends on a range of factors, including the ability to remove fixed costs (Monitor 2015). There is little evidence to suggest that efforts to date to shift care into the community have significantly reduced costs of care – and in some cases the evidence suggests that community-based care can increase costs (Imison *et al* 2017; Nolte and Pitchforth 2014). We assess the assumptions in

London's STPs about reducing hospital demand and capacity in more detail below. We also assess the assumptions made in STPs about their ability to reduce fixed and other costs on p 71.

Summary

Delivering more co-ordinated services in the community is the right thing to do. But NHS and local government leaders must be realistic about what can be achieved by 2020/21. Designing and implementing new care models will require both time and investment, including for double-running costs while new services are being established. The expected benefits to hospital demand and activity, as well as costs of care, should not be overstated. Current pressures on services in the community, including adult social care, will have a direct impact on the ability of STPs to deliver ambitions to provide more care in the community. Even if additional investment can be found for services in the community, current workforce pressures suggest that it may not be possible to recruit staff needed to deliver them.

B. Moderating demand for acute hospital services and reducing hospital capacity

London's STPs make assumptions about the ability of the NHS to moderate growth in demand for acute hospital services by putting in place new ways of delivering care. This includes changes to the way that primary and community services are delivered (*see* p 18), as well as concentrating some clinical services on fewer sites (*see* p 24). Some plans assume that they will be able to reduce the number of beds needed in their area by 2020/21 as a result.

But how realistic are these assumptions? We analysed broad trends in hospital activity and population growth to test the assumptions made in STPs about hospital activity and bed use.

What are the key trends and statistics in London?

Numbers of general and acute hospital beds in London have been falling by around 2.3 per cent a year since 2005/06[1], and 2.4 per cent a year in England as a whole (*see* Table 2). This average rate of decrease disguises significant fluctuations in the year-on-year rate. More importantly, the longer-term fall in beds has slowed significantly in recent years, with the average annual rate of reduction falling to just 0.3 per cent for London, and 0.7 per cent for England.

[1] The data shows that both nationally and in London there was a large drop in the number of beds in 2010/11. This is probably explained by a change in the data collection and recording methods rather than an actual significant fall in the number of beds.

Beds in maternity services show similar levels of year-on-year fluctuations, and have increased slightly in London since 2005/6 (*see* Table A1 in Appendix A).

Table 2 General and acute beds in London and England, 2005/6 to 2016/17

Financial year	England, bed count	England, year-on-year change (%)	London, bed count	London, year-on-year change (%)
2005/6	132,826		20,305	
2006/7	126,976	-4.4	19,003	-6.4
2007/8	122,374	-3.6	18,159	-4.4
2008/9	122,538	0.1	18,185	0.1
2009/10	121,756	-0.6	17,926	-1.4
2010/11	108,958	-10.5	16,352	-8.8
2011/12	105,703	-3.0	15,974	-2.3
2012/13	104,737	-0.9	15,920	-0.3
2013/14	104,581	-0.1	15,953	0.2
2014/15	104,653	0.1	16,212	1.6
2015/16	102,986	-1.6	15,888	-2.0
2016/17	102,195	-0.8	15,769	-0.7
Total change in beds 2005/6 to 2016/17	-30,631		-4,536	
Total change in beds 2011/12 to 2016/17	-3,508		-205	
Average annual change 2005/6 to 2016/17 (per cent)		-2.4		-2.3
Average annual change from 2011/12 (per cent)		-0.7		-0.3

Source: Authors' analysis of NHS Digital data

Recent reductions in beds appear to have been made at the expense of increases in bed-occupancy levels (the proportion of hospital beds filled) both nationally and in London (*see* Table A2 in Appendix A). Bed-occupancy levels in London have been at 87 per cent or above since 2005/6. The current level of bed occupancy in London – at around 90 per cent – is unlikely to be sustainable and leaves the health system vulnerable to fluctuations in demand, with a knock-on effect on its ability to handle emergency admissions and discharge patients (Department of Health 2000). Patients face increasing risks once bed-

occupancy rates exceed 85 per cent, including risk of acquiring health care-acquired infections (Kaier *et al* 2012; Bagust *et al* 1999).

A crucial factor in assumptions about bed use is length of stay and there has been a slow downward trend in the length of time people stay in hospital in London since 2008/9 (*see* Table 3). London's acute hospitals have slightly higher lengths of stay compared with England more generally.

Table 3 Average length of stay in acute hospitals in London and England, 2008/9 to 2014/15, number of days

Financial year	England	London
2008/9	3.1	3.5
2009/10	3.0	3.4
2010/11	2.9	3.2
2011/12	2.7	3.0
2012/13	2.7	2.9
2013/14	2.6	2.9
2014/15	2.5	2.8

Source: Authors' analysis of NHS Digital data

Overall acute hospital activity in London has been increasing over recent years (*see* Table 4), as it has been elsewhere in England. (The components of this growth (both elective and non-elective activity) are shown in Appendix A, Tables A3 and A4). These activity levels – as in the rest of England – are significantly above the levels of increase that would have been predicted purely by population growth and other changes in demography.

Table 4 Acute hospital activity growth in London, total number of spells (elective and non-elective)

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	7.2	2.3
North East London	0.2	3.6
North West London	2.1	2.9
South East London	2.7	3.3
South West London	2.4	3.3
London	2.9	3.4
England	2.7	3.3

Source: Authors' analysis of NHS Digital data

London has tended to be seen as 'over-bedded' compared with other parts of England. Table 5 shows hospital spells (the continuous period that a patient spends in hospital) and bed days per 1,000 weighted CCG population in 2015/16, mapped to the five STP areas. This suggests that Londoners are actually using fewer hospital beds and have fewer admissions than might have been expected, although there are some limitations to this data[2] which mean the results should treated with some caution.

Table 5 Number of hospital spells and bed days in London 2015/16 per 1,000 weighted population

STP	Spells	Bed days
North Central London	300	516
North East London	238	552
North West London	240	570
South East London	263	555
South West London	256	583
London	257	556
England	270	623

Source: Authors' analysis of NHS Digital data

[2] The weighted populations used for CCG allocations may not fully reflect important differences that might influence bed use.

London has a higher rate of A&E utilisation when compared with England as a whole. Table 6 sets out A&E attendance rates by STP in London. This is likely to reflect some of the characteristics of the population in London – mobile, younger and often commuting to central London.

Only 24 per cent of patients attending major A&E departments in London are admitted to hospitals, compared with 28 per cent nationally. For all types of A&E department, the figures are 15 per cent for London and 19 per cent nationally. This suggests that there is a higher proportion of less serious cases attending London A&E departments than in other parts of the country.

Table 6 Rate of accident and emergency (A&E) attendances per 1,000 population by STP area, 2012/13

STP	A&E attendances /1,000
North Central London	397
North East London	409
North West London	459
South East London	400
South West London	460
London	426
England average rate	340
Median England	315

Source: NHS atlas of variation

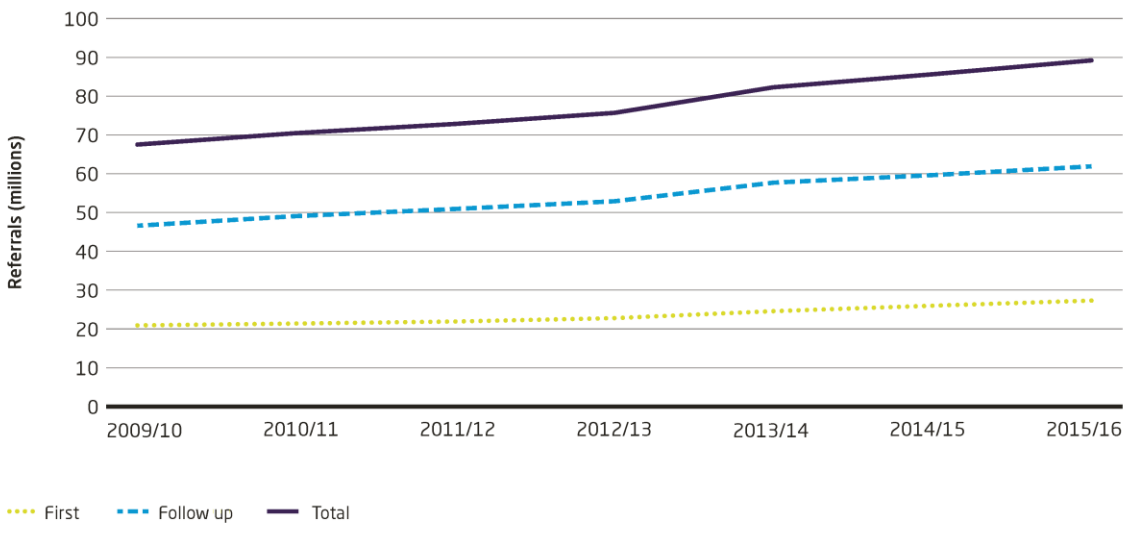
London has a similar rate of use of outpatient care as England as a whole (*see* Table 7). Rates of outpatient referral and activity over the past five years have risen by 4–5 per cent nationally (*see* Figure 5). London showed a steeper rise in GP referrals and first appointments between 2014/15 and 2015/6 compared with the previous five-year period.

Table 7 Rate of outpatient utilisation per 1,000 by STP weighted population, 2015/16

STP	GP referrals made	Other referrals made	First attendance seen	Follow up
North Central London	252	173	364	753
North East London	277	149	366	773
North West London	264	133	335	734
South East London	235	182	326	622
South West London	297	119	331	742
London	264	151	344	724
England	269	158	363	750

Source: Authors' analysis of NHS Digital data

Figure 5 Outpatient referral and activity in England, 2009/10 to 2015/16



Source: Authors' analysis of NHS Digital data

As we detail earlier (*see* p 18), a key ambition in London's STPs is to support and develop primary care and other community services. These changes are expected to help moderate demand for hospital care.

London currently has more GPs per 1,000 population than the rest of England (*see* Table 8). Part of the reason for this is that London has a higher number of GP registrars than other parts of the country. There is also a sense that with London's high rate of population turnover and mobility, there is a greater GP

workload per head of population than elsewhere. There is limited data on activity and staffing in other community-based services.

Table 8 GPs in London (whole-time equivalents) per 1,000 weighted population, September 2016

STP	GPs (wte)/1,000
North Central London	0.61
North East London	0.58
North West London	0.58
South East London	0.52
South West London	0.61
London	0.58
England	0.53
London excluding GP registrars	0.53
England excluding GP registrars	0.45

Source: Authors' analysis of NHS Digital data

What impact will demographic change have on hospital activity?

To help assess the proposals made in STPs about moderating acute activity, we need to understand how hospital demand and activity might change between now and 2020/21.

A key factor influencing this will be the impact of demographic changes in London. Other factors – such as the expansion of available treatments, new technology, and the specialisation of clinical staff – will be important too. NHS England estimates that these non-demographic factors will increase the growth in demand for general and acute hospital care from an average of 1.5 per cent growth a year due to demographic-only change to 2.5 per cent a year from 2016/17 onwards. For specialised care, the impact of these non-demographic factors is even greater, increasing growth in demand from around 1.5 per cent a year due to demographic change to 4.3 per cent overall (NHS England 2016a).

For the purposes of this analysis, however, we have simply looked at the potential impact of demographic changes on hospital use in London. This means that we will almost certainly be understating the potential growth in hospital activity.

We have used 2016 as the base year for looking at the impact of demographic changes on hospital activity, as this is the year for which we have the most up to

date activity data.[3] London will experience rapid population growth from 2016 to 2021 (*see* Table 9). The older population in London is growing at a slower rate when compared with the rest of England and the number of young people is growing rapidly. Unsurprisingly, this translates into an increase in number of births equivalent to the workload of a large maternity unit (*see* Table 10).

Table 9 Rate of population growth in London, 2016 to 2021, by age group

STP	All ages (% change)	age 75 (% change)	age 0-14 (% change)
North Central London	7.0	14.3	8.4
North East London	8.1	7.7	9.6
North West London	5.3	13.1	6.9
South East London	6.4	8.1	9.8
South West London	6.0	12.1	10.8
London	6.5	11.1	9.0
England	3.7	15.0	5.2

Source: ONS, 2014-based subnational population projections for clinical commissioning groups in England, May 2016

Table 10 Additional births in London by STP area, 2016 to 2021

STP	Extra births/year	2016 to 2021 (% change)
North Central London	1,920	7
North East London	1,029	5
North West London	362	1
South East London	1,066	5
South West London	2,565	8
London	6,942	5

Source: ONS, 2014-based subnational population projections for clinical commissioning groups in England, May 2016

[3] STPs work in financial years – April to March. Where possible we have also used financial year data. However, ONS population figures are based on calendar years, and so we have used 2016 as the comparable calendar year for financial year 2015/16, and 2021 for financial year 2020/21.

The impact of population and demographic changes on health services in London will be significant. Every STP area can expect growth in acute activity across all specialties over the five years to 2021 if the current rate of hospitalisation continues – ranging from 8.1 per cent in North West London to 9.9 per cent growth in North Central London, and averaging 8.8 per cent across London (*see* Table 11). As we set out above, this minimal projection does not include the range of other factors (such as expanding treatments and new technologies) that have historically increased activity over and above the impact of demographic changes.

As the second and third columns of Table 9 show, the rate of growth in the very young and the very old population in London is faster than in other age groups. This will have a striking impact on the likely number of acute and general hospital beds needed by 2021. This is primarily because of the significant relationship between age and co-morbidity, recovery time and complexity which translates into longer lengths of stay (*see* Figure 6).

Using recent trend data showing hospital and bed-day use by age band, we have modelled the potential impact of London's changing age profile on demand for acute and general hospital care in 2021. Table 12 sets out the potential increase in bed days in London by 2021, and then calculates the related increase in beds required based on two bed-occupancy scenarios.

At 85 per cent bed occupancy, our analysis suggests that London may need 1,600 additional acute and general hospital beds by 2021 to keep up with demographic changes alone. At 80 per cent bed occupancy, 1,700 additional beds may be needed.

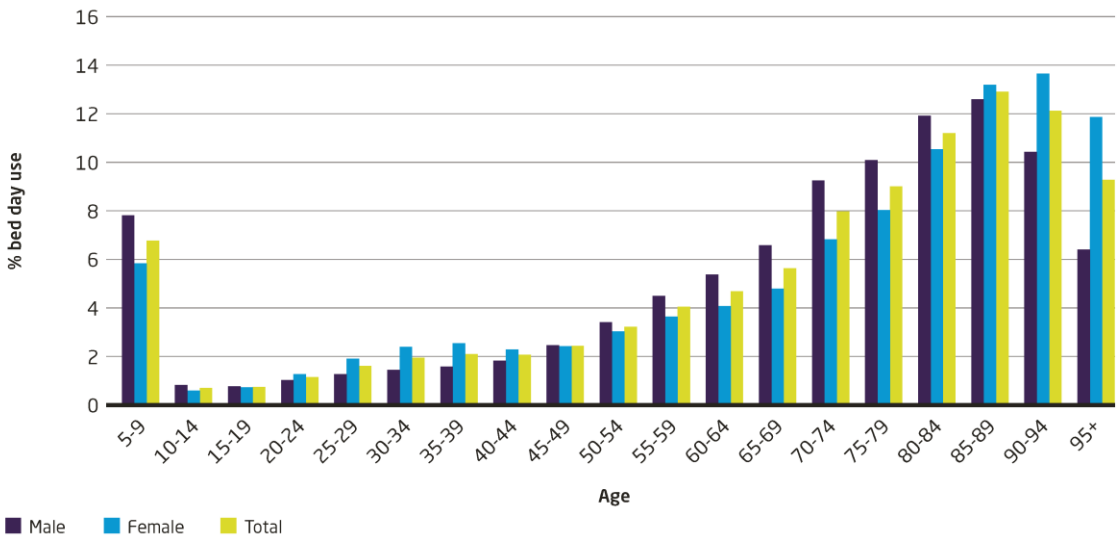
While 85 per cent bed occupancy is often considered to be a reasonable level for managing acute hospital demand, lower bed-occupancy rates may be needed to sustain further reductions in length of stay. This is because fewer patients with extended stays in hospital will lead to both a higher turnover of patients and a higher proportion of patients with complex care needs.

Table 11 Projected growth in acute hospital activity in London resulting from population changes, 2016 to 2021

STP	2016 to 2021 (% change)
North Central London	9.9
North East London	9.6
North West London	8.1
South East London	8.5
South West London	8.2
London	8.8
England	6.4

Source: Authors' projections

Figure 6 General and acute hospital bed day use in England by age group, 2015



Source: Authors' analysis of NHS Digital data

Table 12 Potential growth in general and acute bed days in London, 2016 to 2021, for given bed-occupancy rates

STP	Bed day growth (% change)	Additional beds needed, for given occupancy rate		
		80%	85%	90%
North Central London	11.0	290	273	258
North East London	9.9	364	343	324
North West London	10.4	436	411	388
South East London	8.9	327	307	290
South West London	9.6	283	266	252
London	9.9	1,700	1,600	1,511
England	9.0	11,218	10,558	9,971

Source: Authors' projections

What reductions in activity are being proposed in STPs?

Table 13 sets out the projections made in each of the five STPs about their ability to reduce elective activity by 2020/21, if they are able to successfully implement the service changes they propose. Table 14 sets out the projections made in STPs about non-elective activity. The figures in these tables reflect absolute changes against the 2015/16 baseline.

The most significant reduction in elective activity is expected in North West London's plan, a reduction of 19 per cent by 2020/21. The most significant reduction in non-elective activity is expected in North Central London, a reduction of 21 per cent.

A range of strategies are proposed to achieve these reductions, including avoiding admissions to hospital (for example, through active care management for people with long-term conditions), managing care more effectively in the community (for example, by providing more specialist support outside of hospital), and reducing length of stay in hospital (for example, by offering early supported discharge). These approaches are typically proposed in combination in STPs. Example interventions are described in Section 3.

Table 13 Projected changes in elective activity in London's STPs, 2015/16 to 2020/21

STP	STP 'do nothing' % change 2015/16 to 2020/21	STP 'do something' % change 2015/16 to 2020/21
North Central London	15	-9
North East London	12	9
North West London	10	-19
South East London	11	-6
South West London	16	-11

Source: STP planning documents

Table 14 Projected changes in non-elective activity in London's STPs, 2015/16 to 2020/21

STP	STP 'do nothing' % change 2015/16 to 2020/21	STP 'do something' % change 2015/16 to 2020/21
North Central London	15	-21
North East London	10	-8
North West London	28	-11
South East London	4	-12
South West London	18	3

Source: STP planning documents

Some STPs make assumptions about their ability to reduce the number of general and acute hospital beds as a result of adopting these strategies. South West London's plan, for example, assumes that a 44 per cent reduction in inpatient bed days can be achieved by 2020/21. This could translate into a reduction of around 450 beds. When set against the potential impact of demographic changes in London described above, which might require an additional 252 hospital beds in South West London, these planned reductions are significant.

Are there opportunities to reduce activity?

Bed audit data from London hospitals suggests that, as in other parts of the country, around 10–15 per cent of hospital admissions could potentially be avoided through better management in primary and community settings

(unpublished Oak Group data). As we set out on p 36, however, acting on these opportunities by shifting care into the community is extremely difficult.

Long-term reductions in length of stay in NHS hospitals have helped mitigate the need to build additional hospital beds in the past – and variations in length of stay suggest that further reductions are possible in future (Alderwick *et al* 2015b). Inpatient bed audits in ten London hospitals suggest that a large proportion (around 50–60 per cent) of patients in hospital could potentially be cared for in other settings (unpublished Oak Group data). Some of these patients could be sent home with no further care, while most others require a range of support including high intensity nursing home care (*see* Table A5 in Appendix A).

It should be stressed, however, that it would not be practical to move all these patients out of hospital. 'Snap shot' audits like those mentioned above typically identify some patients as 'inpatients' shortly before they are about to be discharged from hospital anyway. International experience suggests that in practice it would not be possible to move around 30 per cent of patients identified in audits as potentially eligible for other forms of care (Oak Group, personal communication).

It is also worth recognising that the long-term trend of falling length of stay in London and England is slowing (*see* Table 3). And as average length of stay goes down, making further improvements becomes more difficult. There is also a danger of double-counting; if hospital admissions are avoided for patients who could be cared for elsewhere, then the opportunity to reduce length of stay for the same set of patients disappears.

Are reductions on the scale assumed by STPs credible?

We tested a range of assumptions to show what it would take to make reductions in hospital activity and bed use in London on the scale assumed in STPs.[4] We combined the impact of demographic change (which increases demand for hospital care – as we set out on p 49) with varying assumptions about the ability of the NHS and social care system to hold back and reverse overall hospital demand by 1 per cent, 5 per cent, and 10 per cent between 2016 and 2021.

[4] For the purposes of this analysis, we have had to assume that the changes in hospital activity projected by the STPs apply both to general and acute as well as to specialised care. This is because NHS England has yet to provide STPs with any detailed projections on its planned changes in specialised commissioning.

To show the impact that these varying levels of demand will have on the number of hospital beds needed in London, we then made a range of assumptions about the NHS's ability to further reduce length of hospital stay by 2021, ranging from no further reduction in length of stay through to reductions of 2 per cent, 5 per cent, 10 per cent and 15 per cent. The results presented in Table 15 assume average occupancy remains at 90 per cent.

As we set out on p 44, bed occupancy of 90 per cent is in fact too high to run a hospital smoothly and safely, particularly if it is assumed that length of stay will fall significantly. We have therefore also modelled the same set of variables but for a bed-occupancy rate of 85 per cent (*see* Table 16), which is more appropriate but nonetheless ambitious for the NHS given existing pressures on services. To enable a like-for-like comparison, the changes in Table 16 are still set against the current baseline (where bed occupancy stands at 90 per cent).

Table 15 Change in the use of beds in London 2016 to 2021 under different scenarios, current (90 per cent) occupancy rates

Length of stay (% change)	Change in demand against demographic change (% change)		
	-10	-5	0*
0 (no change from current)	-160	676	1,511
-2	-461	358	1,177
-5	-912	-118	676
-10	-1,665	-912	-160
-15	-2,417	-1,706	-996

***change in demand at level of demographic change**

Source: Authors' analysis

Table 16 Change in the use of beds in London 2016 to 2021 under different scenarios, 85 per cent occupancy rates

Length of stay (% change)	Change in demand against demographic change (% change) -10	-5	0*
0 (no change from current)	725	1,610	2,495
-2	406	1,274	2,141
-5	-72	769	1,610
-10	-868	-72	725
-15	-1665	-912	-160

*change in demand at level of demographic change

Source: Authors' analysis

Tables 15 and 16 show that reducing the number of hospital beds in London would require significant improvements in length of stay and in the ability of the system to reduce demand for hospital care. Indeed, our modelling shows that significant improvements in these areas will be needed just to avoid extra hospital beds being required to meet the needs of the population.

These challenges will become even harder if London's hospitals are able to bring bed-occupancy rates down from 90 per cent to 85 per cent. Doing this would require a heroic effort by all parts of the health and care system – and would certainly require additional services to be available in the community to manage additional demand and provide more complex care. It may also require changes to staffing ratios within hospitals, as making significant reductions in length of stay would leave a greater proportion of hospital patients with more acute needs. Simon Stevens, Chief Executive of NHS England, recently stated that bed reductions should not go ahead unless STP leaders can show that sufficient services are available in the community prior to beds being closed (Campbell 2017).

As we set out above, none of these opportunities is easy to realise. Even if significant investment were to be made available for services in the community, the research evidence does not suggest that significant reductions in hospital use are easy to achieve within the timescales available. Based on our analysis, the reductions in hospital use in London being proposed in STPs are highly unlikely to be achievable.

Summary

The impact of population growth in London on hospital demand and activity will be significant. Other factors will also increase hospital use. STPs assume that they can moderate growth in acute hospital activity – and, in some cases, make absolute reductions in demand and, therefore, also in the number of acute hospital beds. Data suggests there are opportunities to avoid hospital admissions and improve length of stay. But achieving these opportunities in practice is challenging and will require both time and additional investment in health and care services in the community. Even then, it is highly unlikely that the ambitious projections to reduce hospital activity can be achieved. Indeed, with expected growth in London's population, heroic efforts will be needed simply to manage rising demand with existing hospital capacity.

C. Prioritising prevention and early intervention

The plans describe ambitions to prioritise prevention and early intervention to improve people's health (*see* p 17). The plans focus heavily on encouraging healthy behaviours and supporting people to manage their own health. Inequalities in health outcomes are identified as a key issue to be addressed, and the importance of tackling the wider social, economic and environmental context and determinants of health is also acknowledged.

These ambitions should be welcomed. Potentially preventable behavioural risk-factors – like having an unhealthy diet, smoking and being physically inactive – make the biggest contribution to years lost to death and disability for people in England (Newton *et al* 2015). These behaviours are firmly embedded within people's social context; there is an inverse relationship between socio-economic status and healthy behaviours (Pampel *et al* 2010). The social determinants of health, such as people's housing, relationships, income and employment, have a significant impact on health outcomes (Booske *et al* 2010; Marmot *et al* 2010). Failure to address these non-medical factors has an impact on health care use and costs (Bachrach *et al* 2014). As well as improving people's lives, investment in prevention and public health services can be cost effective and provide both short- and long-term returns on investment (Masters *et al* 2017; McDaid *et al* 2015; World Health Organization 2013).

Is there enough detail in the plans?

The challenge lies in turning this knowledge of the problems and the ambitions to address them in STPs into actual improvements in population health. As in other parts of the country, London's STPs often lack clarity on how ambitious goals to prioritise prevention and early intervention will be delivered in practice. Missing details include specific aims for improvement, how interventions will be funded, and who will be responsible for implementation. While public health

services formally fall under the responsibility of local government, improving population health and wellbeing will require collaboration between the NHS, local authorities, wider public services, the voluntary sector, employers and local people. This is because the influences on people's health are spread widely across society and communities.

STPs should define in more detail how this collective action to improve population health will be led, co-ordinated and delivered both within STPs and across London. This should include the defined role of NHS services in identifying and addressing the non-medical needs of their patients. An agreed set of measures, including, for example, indicators to monitor local NHS performance in tackling socio-economic health care inequalities (Cookson *et al* 2016), should be used to monitor the impact of interventions and report on progress.

London's STPs describe how NHS services will draw on 'community assets' as part of their plans for prevention. But there are few details included on how this will be done. Community assets are the positive capabilities held within communities that can be used to promote health, including people's time and skills, existing support groups or social networks, buildings or physical spaces like churches, schools or libraries, and businesses that provide jobs for local people. Participating in community activities and having social networks can improve people's health and wellbeing (Munford *et al* 2017; Holt-Lunstad *et al* 2015). Various tools and resources can be used by STP leaders to help understand the 'assets' available within their communities, how they can be harnessed, and the impact of different approaches in supporting them (Foot 2012; Nelson *et al* 2011). Lessons can also be learnt from existing 'social prescribing' schemes operating in London, such as those in Tower Hamlets.

Will the investment be available?

An added challenge will be delivering ambitions to improve population health and wellbeing at a time when public health budgets are being cut. At a national level, local authority public health budgets will fall by nearly 10 per cent in cash terms between 2015/16 and 2020/21 (Local Government Association 2016). This is on top of an in-year cut of £200 million in 2015/16. Wider local authority budgets – which cover a range of services that have a direct impact on people's health, such as education and children's services – are also shrinking. Forecasts for 2016/17 suggest that local authority funding has shrunk by 26 per cent in real terms since 2009/10 (after accounting for changes to commissioning responsibilities) (Smith *et al* 2016).

We looked at recent trends in public health and wider local authority spending in London. Data on public health spending by local authorities in London starts in 2013/14, when many public health functions were transferred from the NHS to

local government. A number of changes made to public health budgets in 2015/16 – including an in-year budget cut and a (larger) transfer of funding for public health services for children under five from the NHS to local authorities – make comparisons across years difficult.

We stripped out the value of this transfer of funding for 2015/16 and 2016/17 to make the figures broadly comparable between years. We then compared local authority budgets (what was planned to be spent) and outturn (what was actually reported as spent) for public health services in London between 2013/14 and 2016/17. Table 17 shows that spending grew in 2014/15 but fell in 2015/16. Budgets fell by nearly 8 per cent between 2015/16 and 2016/17. These figures are all expressed in cash terms and so do not take into account the pressures of inflation and demographic changes.

Table 17 London local authority public health budgets and outturn cash values (stripping out services for children under five), 2013/14 to 2016/17

Year	Budget	Outturn	Budget (% change)	Outturn (% change)
2013/14	£558,712,000	£530,579,000		
2014/15	£587,566,000	£564,378,000	5.2	6.4
2015/16	£575,100,000	£538,730,000	-2.1	-4.5
2016/17	£529,443,000		-7.9	

Source: Authors' analysis of Department of Communities and Local Government 2017

How might this spending change in future? At a national level, we know that the public health grant faces further cuts of 9.6 per cent cash to 2020/21[5] but we do not know how that reduction will be cascaded down to individual local authorities. If we assume that local authority budgets all fall in line with the planned national reduction, then we can construct a budgetary estimate for London boroughs' public health spending to 2020/21. This is presented in Table 18.

We include figures for the total planned public health budget and for the 'comparable' public health budget, the latter stripping out the transfer of spending on public health services for children under five. Again, these figures

5 www.local.gov.uk/documents/10180/11531/Letter+to+local+authorities+on+Spending+Review+2015/9935879f-b1a1-4064-b35f-7b9e588bdd27

are all presented in cash terms, which means they understate the reductions in spending power experienced by local authorities and do not adjust for population growth. This projection shows the likely continual reduction in public health spending in cash terms to 2020/21 for both the overall budget and the more comparable stripped out figures. The latter suggests London's local authorities will have less cash in 2020/21 than they were budgeting in 2013/14 for the same functions.

Table 18 London local authorities' public health raw and comparable budget cash values (stripping out services for children under five), forecasts to 2020/2021

Financial year	Budget (£)	'Comparable' budget (£)	% change raw budget	% change 'comparable' budget
2013/14	£558,712,000	£558,712,000		
2014/15	£587,566,000	£587,566,000	5.2	5.2
2015/16	£664,002,000	£575,100,000	13.0	-2.1
2016/17	£690,782,000	£529,443,000	4.0	-7.9
2017/18	£673,512,450	£516,206,925	-2.5	-2.5
2018/19	£656,001,126	£502,785,545	-2.6	-2.6
2019/20	£638,945,097	£489,713,121	-2.6	-2.6
2020/21	£638,945,097	£489,713,121	0.0	0.0

Wider local authority spending on services such as housing and education also has a significant impact on public health. Like elsewhere in England, local authority budgets in London have been falling over recent years. We have not calculated the specific effects of these reductions on different areas of local authority spending in London. But national data suggests that these reductions will have a substantial impact on local authorities' capacity to support wider functions that improve health (Buck 2014).

Summary

London's STPs emphasise the importance of prioritising prevention and early intervention to improve health and reduce inequalities. But the plans often lack detail on how this will be done in practice and the role of different organisations in delivering improvements. The direct contribution of the NHS in addressing non-medical needs and reducing inequalities should be defined. Concrete plans to involve communities in improving population health should be made. Funding for public health services and wider local authority services has been falling over

recent years and is likely to continue to fall over the years to 2020/21. This will make ambitions to prioritise prevention harder to deliver.

D. Reconfiguring acute and specialised services

All STPs include proposals to change the way that acute and specialised services are delivered. As we set on p 24, these proposals range in scope from commitments to review whether some specialised services should be reconfigured to more concrete plans to consolidate acute services. Workforce shortages and opportunities to improve quality of care are commonly identified as the main drivers for acute reconfiguration. The financial sustainability of services is also identified as a factor. In some STPs, these changes are proposed alongside plans to reduce the number of acute hospital beds required in future.

These proposals continue a series of changes in the way that acute and specialised services have been delivered in London which have taken place over many years. Stroke and major trauma services are two recent examples (Appleby *et al* 2011). Evidence suggests that the centralisation of stroke services in London has led to reductions in patient mortality, length of stay in hospital, and cost per patient (Morris *et al* 2014; Hunter *et al* 2013).

What does the evidence say about reconfigurations of acute and specialised services?

We have not reviewed the evidence base for individual clinical service changes being proposed in London's STPs. This was outside the scope of this work. But relevant lessons can be drawn from a major review of the evidence underpinning clinical reconfigurations in the NHS carried out by The King's Fund in 2014 (Imison *et al* 2014). The authors analysed reviews of service reconfigurations conducted by the National Clinical Advisory Team. The report looked at the evidence behind a range of reconfigurations, including whole-trust reconfiguration, mental health services, A&E and urgent and emergency care services, acute medical services, acute surgical services, elective surgical care, trauma, stroke care, specialist vascular surgery, maternity services, neonatal services and paediatric services. STPs in London are planning or considering service reconfigurations in some of these clinical areas.

The review concluded that reconfigurations are an important approach to improve quality in the NHS, but are insufficient on their own. It found that those taking forward major clinical service reconfiguration do so in the absence of a clear evidence base or robust methodology with which to plan and make judgements about service changes. The review summarised the evidence on clinical service reconfigurations as follows.

- Evidence to support the impact of large-scale reconfigurations of hospital services on finance is almost entirely lacking.
- Evidence on the impact on quality is mixed, being much stronger in relation to specialist services than other areas of care.
- Evidence on the importance of senior medical and other clinical input to care is strong, particularly for high-risk patients; however, there is uncertainty about how many senior staff are needed, of what type, and for what time periods.
- Evidence suggests that some services can be provided safely through the use of non-medical staff.
- Technology offers opportunities to sustain local access to some services that previously might have been centralised, although the evidence on this is still developing.
- Gaps in the evidence will often lead to different and sometimes conflicting views on the best way of providing safe, high-quality services within available budgets. This is particularly the case for non-specialist services where the evidence on the net benefit of centralisation is often lacking.

Workforce shortages in the NHS have become a more important consideration in clinical reconfigurations over recent years. In South West London, for example, the STP states that 'clinicians do not believe that we will be able to recruit or pay for sufficient workforce to deliver seven-day services at five acute sites'. These staffing pressures have a clear impact on the ability to deliver safe care. A lack of consultant presence, for example, is a threat to patient safety (Cullinane *et al* 2005). Working in clinical networks offers one way to make use of scarce specialist expertise between hospital sites (Edwards 2002), and NHS providers are increasingly working in partnership to address workforce shortages (Monitor 2014). But in some cases, clinical reconfigurations may be needed to improve the quality and safety of patient care within current financial and workforce constraints (Ham *et al* 2017).

Whatever their impact, clinical service reconfigurations represent a major organisational distraction. They take time and effort to implement. They also require support from a wide range of stakeholders, including clinicians, politicians and the public. The argument that quality of care may be improved by concentrating specialised services on fewer sites, especially when there are shortages of clinical staff, needs to be articulated more clearly and consistently. All proposals to reconfigure services will have to weigh up the varying considerations and complex trade-offs between access, quality, workforce issues and cost, as well as the potential role of digital technology in transforming how

care can be delivered (Imison *et al* 2014). Different stakeholders are likely to weight the value of these considerations differently (Imison 2011).

Will capital funding be available to support them?

Proposals to reconfigure clinical services in London's STPs will require capital funding. Taken together, the five London STP plans call for capital investment totalling £5.7 billion over the next four years (to 2020/21). Capital funding at national level is extremely constrained. It is therefore unlikely that capital funding will be available for all the projects described in London's STPs. We look in more detail at capital funding in STPs on p 74.

Summary

Reconfigurations of acute and specialised services are being proposed in London's STPs. The evidence base for clinical reconfigurations is mixed. Evidence that reconfigurations produce financial savings is almost entirely lacking and, whatever their impact, changes to hospital services represent an organisational distraction. Capital funding to support any changes is also constrained. But some clinical reconfigurations may be necessary to improve the quality and safety of patient care within current financial and workforce constraints particularly where there are staff shortages. Each case will have to be considered on its merits.

E. Closing gaps in NHS finances

In common with all 44 STPs in England, each London STP has calculated the funding gap it faces by 2020/21 without further action and service transformation. This is called the 'do-nothing' gap. These gaps essentially represent each STP area's share of the £22 billion funding gap described in the Forward View. We used the financial templates submitted by STPs to NHS England in October 2016 and related modelling work[6] to understand how these gaps were calculated, the major schemes being proposed to close them, and some of the assumptions underpinning these calculations.

[6] We have used two sources of information for this analysis: unpublished modelling material provided by each of the STPs, as well as data submitted by the STPs to NHS England in October 2016 (the finance and efficiency templates). It should be stressed that much of the financial modelling undertaken by STPs remains work in progress. Many of the savings and schemes referred to in this section reflect 'top-down' estimates developed in time for STP submissions to NHS England for October. Since then, STPs have been revising those estimates. However, they have been unable to complete these estimates in time for the outcome of this review.

What is the size of London's gap?

The aggregate London NHS 'do-nothing' gap is £4.1 billion as estimated by the STPs themselves (*see* Table 19). NHS England has said that around £5 billion of the £22 billion saving required across England will be made through central initiatives such as pharmaceutical pricing and continued NHS pay restraint, leaving around £17 billion to be found through local STPs. If London's 'do-nothing' gap was proportionate to its projected weighted population for 2020/21 (16 per cent of the total population in England) it would stand at around £2.7 billion. It is not clear if the significantly larger scale of London's 'gap' in STPs is an indication that the size of the overall NHS gap has grown since NHS England's initial analysis, or if London faces a more significant challenge than elsewhere (for example, due to the higher level of deficits experienced at London's provider trusts[7]).

Within London, the scale of the 'do-nothing' financial challenge relative to each area's projected population size also varies. Quantified as a gap per head of weighted population, the scale of the challenge for London's STP's ranges from £286 a head in North East London to £510 a head in North Central London. The reasons for these differences are likely to be related to the uneven distribution of provider deficits, and the significant variation in the rate of funding increases – determined largely by projected demographic changes – that commissioners can expect over the next four years.

[7] By the end of the third quarter of 2016/17, the year-to-date underlying NHS-wide provider deficit (after emergency 'sustainability funding' is excluded) stood at £2.24 billion, the equivalent of £39 per head of population. Of that, £582 million was held at London's provider organisations – the equivalent of £65 per weighted head of population in the capital.

Table 19 Projected financial 'gaps' in London's STPs by 2020/21

STP	'Do-nothing' NHS gap, 2020/21 (£m)	% share London's 2020/21 'do-nothing' gap	% share London weighted population, 2020/21	'Do- nothing' gap per head of weighted population (£)	Expected % annual growth in CCG allocations by STP area, 2015/16 to 2020/21[8]
North Central London	797	19.5	16.7	510	2.7
North East London	590	14.4	22.0	286	4.2
North West London	1,113	27.2	23.6	503	2.4
South East London	934	22.8	21.3	467	3.0
South West London	659	16.1	16.4	430	3.1
London	4,093			437	3.1

Source: STP Finance and Efficiency Templates, submitted to NHS England, October 2016; NHS England overall weighted populations for core CCG allocations, 2016-17 to 2020-218

STPs have also attempted to supplement their forecast NHS 'do-nothing' gap with a further funding gap attributable to adult social care. Only one STP area (North West London), however, was confident enough to include a figure for this in its formal (unpublished) data submission to NHS England in October (increasing its total gap by a further £300 million).

How is the gap calculated?

The 'do-nothing' gap for each STP has been calculated by STP analysts using a similar method to that used by NHS England to forecast the original £22 billion gap for the whole NHS. This involves projecting forward the STP footprint's current expenditure on providing NHS services by forecast levels of NHS cost inflation (averaging at around 2.6 per cent a year 2015/16 to 2020/21)[9] and by

[8] CCG allocations for recurrent programme spending, excluding (administrative) running cost allowance.

[9] NHS Improvement's economic assumptions for provider cost inflation to 2020/21 do not currently recognise measures announced at the 2016 Spring Budget. These measures included a change in the public sector pension discount rate which we estimate will increase NHS provider costs by a further 0.7 per cent in 2019/20. The average level inflation cited here (2.6 per cent a year) reflects this. Without the change in the discount rate, provider cost inflation 2015/16 to 2020/21 would average at 2.5 per cent a year.

forecast levels of activity increase, determined in part by expected population growth and change, but also by the recent trend that has seen the volume of NHS activity increase at an average rate of around 3 per cent a year. The resulting expenditure projection for 2020/21 is then compared to the forecast funding allocation for the area, with the difference equalling the 'do-nothing' gap. As specialised services are commissioned centrally, NHS England has notified each STP area of an additional gap, representing its share of the expected gap in the specialised commissioning budget for 2020/21. The specialised commissioning gap makes up £651 million of the total £4.1billion 'do-nothing' gap for London, which is broadly proportionate with the overall size of the specialised commissioning budget nationally.

There is very little information available about how NHS England has calculated the specialised commissioning gap, but our understanding is that the gap is equivalent to around a 4.4 per cent annual gap between 'do-nothing' expenditure and available resources. There are, again, significant variations in the size of the specialised commissioning 'gap' between London's STPs – ranging from just £36 million in North East London to around £190 million in both South East London and North West London.

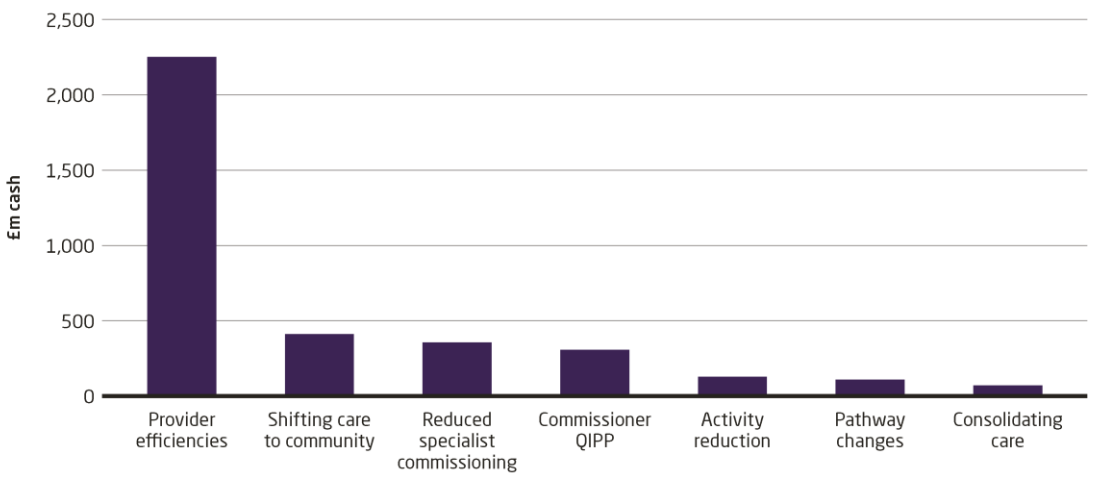
Each STP then shows how its proposed service transformations and efficiencies will close their 'do-nothing' gaps, through 'do-something' measures. None of the five STPs believe they will be able to close their gap completely through transformation and efficiencies alone. Instead, they plan to reduce the gap from a potential £4.1 billion to £650 million in 2020/21.

To close the remaining gap, NHS England has given each STP area an indicative share of the £3.8 billion Sustainability and Transformation Fund for 2020/21, ring-fenced at the time of the 2015 Spending Review. This money is to be spent on shoring up NHS provider finances and investment in service transformation. London's expected share of the Sustainability and Transformation Fund is £624 million. After factoring in their share of the Fund, four out of the five STP areas plan modest surpluses in 2020/21, aggregating to £46 million. One London STP area, North Central London, has stated that it does not believe it is possible to completely close its gap by 2020/21. It plans instead to end 2020/21 with a £75 million deficit, down from a 'do-nothing' gap of £797 million and equivalent to around 2.5 per cent of its spending allocation for that year. As of October 2016, the net plan for London as a whole is to end 2020/21 with a £29 million deficit.

How do STPs plan to close the gap?

Figure 7 sets out the main components of the financial savings assumed in London's STPs.

Figure 7 London's planned savings by 2020/21



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

Provider efficiencies

Of the 'do-something' financial savings set out by each of the five London STPs, more than one-third relate to so-called 'business as usual' efficiencies by NHS providers. These 'business as usual' efficiencies are planned to cumulatively reduce total 'do-nothing' provider costs by £1.4 billion by 2020/21. Averaged over the four years between 2016/17 and 2020/21, those efficiencies equate to an average annual recurrent reduction in total operating costs of 1.8 per cent.

In addition to 'business as usual' provider efficiencies, all the London STPs assume providers will also find further recurrent efficiencies through measures such as collaborative procurement and the rationalisation of their estates. These additional efficiencies increase the total planned level of provider efficiency by £562 million, increasing the average annual recurrent reduction in costs to 2.5 per cent.

NHS England has indicated that it will expect around 45 per cent of the £651 million London-wide specialised commissioning gap to be filled through provider efficiencies. This means that the average rate of planned provider efficiencies for STPs in London between 2016/17 and 2020/21, against the 'do-nothing' scenario, stretches to around 2.9 per cent – just under two-thirds of the total effort to 'fill' the gap.

There are variations in the rate at which London's STP are asking providers to make these operational efficiencies (ranging from 2.4 per cent to 3.7 per cent a year over the four years from 2016/17). These differences may be a result of how these opportunities are classified between STP areas. For example, a

number of the initiatives regarded primarily as service changes also involve provider cost efficiencies – such as reductions in the length of stay for inpatients. This means that there is a risk that some plans may double-count the opportunity to make savings from 'provider efficiencies' and savings from 'service transformation'.

Are the levels of provider efficiencies expected in the plans achievable? In the three years between 2013/15 and 2015/16, the average annual rate of recurrent efficiency saving reported by regulators was 2.2 per cent. Throughout 2016/17, NHS providers struggled to meet the financial targets set out in their operating plans (with 'slippage' of around £500 million expected in the final accounts for the year). NHS providers will therefore need to make additional 'catch-up' efficiencies – somewhere in the region of a further 1 per cent – in the years from 2017/18 onwards above and beyond those included in the STPs.

Once these additional catch-up efficiencies are included, the level of year-on-year cost savings being expected of providers in STPs looks unsustainable, if not unachievable. Indeed, the prime driver of the deficit found in the NHS provider sector today is the inability of the sector to meet earlier annually recurrent efficiency requirements of 4 per cent between the years 2011/12 and 2014/15 in order to match year-on-year real-terms reductions in payments to hospitals of the same proportion (Gainsbury 2016).

It is also worth noting that the recent level of recurrent efficiencies in the NHS was achieved in the context of year-on-year increases in provider activity, averaging around 3 per cent. Similar efficiencies will be hard to achieve if other measures contained within the STPs to reduce the volume of hospital activity (either in absolute or relative terms) are successful.

Commissioner efficiencies

In addition to 'business as usual' provider efficiencies, four out of the five London STPs have also pencilled in significant savings from 'business as usual' commissioner efficiencies – referred to as 'commissioner QIPP'. These are CCG savings schemes badged under the 'quality, innovation, productivity and prevention' (QIPP) programme, established in 2010.

The background finance documents prepared by each STP show that around £300 million worth of savings are planned to come from commissioner QIPP schemes by 2020/21 (around 8 per cent of the total savings planned). There is very little information available, however, about what these are likely to entail. In general, QIPP schemes involve reducing commissioner spend through initiatives that reduce demand or activity rates in acute care and other services. There is therefore another risk of double-counting the potential savings in STPs,

as savings assumed from QIPP schemes may overlap with separate savings assumed from service transformation schemes.[10]

Service transformation

Around 16 per cent of the savings planned across London are due to come from transforming services. In Figure 7 (p 68) we have loosely categorised these transformation schemes as: shifting care from acute settings into the community; consolidating planned and cancer care to improve quality and efficiency; and changes to the pathway of care for common conditions. As with provider efficiencies, there is no set way to categorise these measures and in practice it is possible for individual schemes to involve elements of all three – such as a change to a musculoskeletal pathway involving elective care at a centralised acute provider, followed by physiotherapy delivered in the community.

What the schemes all have in common, however, is that they involve a planned reduction in the cost of acute care through a mixture of clinical efficiencies (such as standardising practice to avoid the need to readmit patients) and reducing activity in acute hospitals (for example, by managing people with long-term conditions better, or reducing follow-up outpatient appointments). A further 10 per cent of the total 'do-something' savings are due to come from the specialised commissioning budget and are expected to involve a mixture of activity reductions and clinical efficiencies through service consolidation. Another 3 per cent of savings (around £130 million) appear to be related purely to planned activity reductions and decommissioning (for example, of services deemed to be of low clinical value). In total, these 'service transformation' schemes are planned to contribute more than £1 billion towards closing London's 'do-nothing' gap.

How have STPs costed savings attributed to reduced acute activity?

A number of these transformation schemes assume that financial savings can be made by reducing acute hospital activity and the resulting costs of care. In contrast to primary, community and mental health care, costing in the acute sector is relatively transparent and advanced. Patients are coded when they come into contact with hospitals according to their disease group, diagnosis and the type of care, procedures or treatments they receive. This is then reflected in the price hospitals charge commissioners for that care, usually determined by the national tariff. Providers also collect data on the costs of the care they

[10] One STP – North Central London – attempts to guard against double-counting savings that may be made through QIPP and those that may be found through other schemes, as it only counts QIPP savings made in respect of commissioner savings in non-acute budgets.

deliver, including diagnostics such as x-rays, surgical procedures, and nursing care in a hospital bed. The dataset containing these costs is called reference costs.

Over recent years a significant gap has opened up between the tariff prices paid by commissioners for each unit of hospital care, and the actual, higher costs of providing that care. By the end of 2015/16, the average gap stood at 5 per cent, and this is the prime driver behind the deficit position most acute providers find themselves in today (Gainsbury 2016). At the level of individual patients and individual activities within a hospital, however, the discrepancy between tariff price and the actual cost to the provider can be much larger. This discrepancy between cost and price can also go in either direction: for some services, providers will make a nominal 'profit' which will be used to cross-subsidise other services. For other types of patient care, providers will make a 'loss', sometimes far in excess of 5 per cent.

This presents an obvious problem for estimating savings that can be made by reducing acute activity: what 'cost' is being saved? The cost (or price) paid by the commissioner, or the cost of provision born by the hospital? In terms of ensuring NHS system-wide savings, costs need to be removed from providers rather than just commissioners. The problem becomes more complex when trying to account for the varying share of fixed and semi-fixed costs between different types of procedure. It becomes even more complex when trying to account for the additional costs that will be incurred when care is shifted from hospitals into the community, often called re-provision costs.

STPs vary widely in their approach to costing these savings, both between themselves and between the individual schemes that make up their plans (*see* Table 20).

Table 20 Summary of range of assumptions used in London's STPs on fixed and reprovision costs

Type of costs	Range of assumptions
Reprovision costs, elective care	20% to 80% of acute costs
Reprovision costs, non-elective care	40% to 75% of acute costs
Acute provider fixed costs below the current baseline of activity	0 to 50%
Acute provider fixed costs of mitigated activity growth above current baseline	0 to 50%

Source: STP finance modelling for October 2016 submission to NHS England

In many cases, STPs have rightly considered that if acute providers experience a reduction in their activity (and therefore income from commissioners) they will be unable to recoup the full cost of that activity in the form of financial savings. Instead, the provider may be able to save the variable cost (such as the drugs the patients will no longer consume, and the cost of paying for the staff time which will no longer be needed to care for them), but its fixed costs are likely to remain the same unless the physical space no longer required for that patient's care can be closed and the fixed costs reduced proportionately. If the fixed costs and overheads do remain, the upshot for providers can be to increase the unit costs of care for the activity that remains, as the fixed costs are effectively shared across the lower volume of activity.

Some STPs have tried to account for this problem by assuming that, where activity reduces, a certain proportion of costs will remain within providers, and so cannot be planned as savings against their 'do-nothing' gap. In North Central London, for example, the STP has assumed that acute providers face fixed costs of around 40 to 50 per cent of their reference cost for each activity. When activity in A&E and admitted patient care is reduced in absolute terms – below the level of activity in 2015/16 – the STP assumes that only 50 to 60 per cent of costs can be saved by providers. Alternatively, when growth is mitigated (against the 'do-nothing' 2020/21 scenario) it assumes that 100 per cent of this future, unrealised 'do-nothing' cost can be removed. The STP has assumed that the costs of re-provision will be around 45 per cent of the acute care tariff price.

In other cases, STPs have assumed that they can recoup the full cost of acute activity reductions. In North East London, for example, the STP's savings from reducing acute activity are based on the assumption that 100 per cent of acute costs can be removed over a five-year period, even where activity is reduced below the 2015/16 baseline. This is very unlikely to be achievable. As with other STPs, re-provision costs are assumed at around 40 per cent of acute costs.

South West London's STP, by contrast, has supplemented its modelling with 'bottom-up' estimates from its providers quantifying how much they anticipate they will be able to save by discharging non-elective patients into community and home-based care. Savings estimates from its four acute providers range from 60 to 80 per cent of the NHS-wide full cost of a non-elective bed day. Re-provision costs are similarly estimated through a 'bottom-up' approach that takes into account the staff needed to care for patients in alternative settings, which suggests re-provision costs will be 75 per cent of the current cost.

South West London assumes far lower re-provision costs for its programme aimed at reducing elective care activities – around 20 to 30 per cent of current acute cost. However, this relatively low cost assumption may reflect the

emphasis in the programme on using demand management and digital tools to reduce activity and referral rates, rather than provide alternative forms of community-based care. Provider savings from reduced elective activity are assumed at 100 per cent of their current cost.

In North West London, plans to change elective pathways to shift more care into the community and primary care hubs assume that re-provision costs will average 80 per cent of the acute care tariff.

What might this mean for the workforce?

For NHS providers, staff pay costs make up around 65 per cent of operating expenses. It is therefore inevitable that a substantial element of the £3.4 billion savings plans for London will be found through a reduction in expenditure on staff, at least when set against the 'do-nothing' scenario.

STPs are in the early stages of working out the impact their savings plans will have on the shape and size of their future workforce. Analysts working on STPs in London indicated to us that the figures cited in their planning documents were highly tentative and in places incomplete. One London STP – North West London – did not provide us with any workforce estimates as the figures it had provided NHS England in October were being corrected as this report was being drafted.

Across the four STPs that were able to include some early estimates, the reported impact of their combined savings plans was to reduce, in absolute terms, whole-term equivalent staffing numbers between 2016/17 and 2020/21 by 1.4 per cent, or slightly more than 2,000 staff. This included 3,800 fewer registered nurses, midwives and health visitors (a reduction of 7 per cent against the 2016/17 level) and 600 fewer hospital doctors and dentists (a reduction of 3 per cent). These reductions would be partially off-set by a projected one-third increase in GP and GP support staff (3,670 extra WTEs). Some STPs are likely to seek to manage these reductions in qualified clinical staff by increasing the numbers of trained health care support staff working in the community.

Summary

The 'do-nothing' gaps in NHS finances projected in London's STPs are significant - totalling £4.1 billion by 2020/21. These financial gaps vary widely between STP areas. It is assumed that efficiencies made by providers and commissioners will make a large contribution to closing these financial gaps. The plans lack detail on how these savings will be achieved. Providers are being asked to deliver a higher level of efficiencies than the NHS has been able to achieve over recent years, and in a more challenging environment. There are differences in the way that STPs calculate potential savings from reducing acute activity and in some

cases the plans may overstate the savings that might be achieved. Early projections in STP finance templates about reductions in staff numbers must be heavily stress-tested to ensure that they align with the vision for transforming services set out in the rest of the STP.

F. Securing capital investment

London's STPs set out the capital spending they think is required to support plans for transforming services. The plans are seeking capital to invest in a variety of different initiatives including, for example, the development of new facilities in primary care, improving existing acute hospital facilities, or to support plans to consolidate services on a single site. Capital is also required to invest in IT and other technologies, for example, where plans to reduce outpatient appointments are predicated on the use of telemedicine or other remote monitoring technologies.

STPs also describe the need to invest in the day-to-day maintenance of existing buildings and facilities, as well as the need to update or renew IT and equipment such as CT (computerised tomography) scanners. Across the five London STPs, this 'business as usual' capital requirement totals £3.7 billion between 2017/18 and 2020/21. The capital requirements associated with the 'do-something' measures set out by the STPs then add a further £2 billion (*see* Table 21).

This means that London's STPs hope to be able to access and invest £5.7 billion of capital over the next four years. The STPs believe that they can generate just over a quarter of that money through a combination of internally generated cash surpluses (11 per cent) and through the proceeds of selling parts of their estate (16 per cent). But even if London's STP areas were able to identify sources for the remaining funds, the size of the total spending requirement risks breaking the Department of Health's capital expenditure limit. That limit is set at £6 billion a year between 2017/18 and 2020/21 – although in practice it is likely that a proportion of the Department of Health's capital budget, as in the past two financial years, will need to be transferred to the revenue budget to offset revenue overspends.

London's capital total requirement for the years 2017/18 to 2020/21 would represent a quarter of the Department of Health's total capital expenditure limit for the period. For 2016/17, the Department of Health allocated NHS providers a capital spending limit of £2.7 billion. If a similar limit is set for 2017/18, London's five STPs would consume 60 per cent of that.

Table 21 Total capital requirements in London's STPs by 2020/21

STP	Total over four years to 2020/21 without transformation £m (cash)	Total over four years to 2020/21 with transformation £m (cash)
North Central London	948	1,491
North East London	478	721
North West London	733	1,561
South East London	625	787
South West London	892	1,130
London	3,676	5,691

Source: STP finance modelling for October 2016 submission to NHS England; STP October submissions

Summary

STPs in London are seeking a total capital investment of £5.7 billion by 2020/21. Around £2 billion of this investment relates to initiatives described in the STPs, while the remaining £3.7 billion is effectively the 'business as usual' capital requirement for running London's NHS services as they currently stand. Given the constraints on capital funding at a national level, it is unlikely that all the investment asked for by STPs will be available.

G. Implementing the plans

The STP process so far has focused primarily on defining *what* service changes are needed by 2020/21. Less attention has been given to *how* these changes will be delivered in practice and the contribution of different organisations in taking forward the plans. All STP areas have been working since October to develop more detailed delivery plans to support their STP.

This task is made more difficult by the complex and fragmented organisational landscape in the NHS. Every STP area includes many different organisations and services, each held to account for their own performance rather than their collective impact. Formal decision-making responsibilities sit with these organisations rather than with STPs. While STPs provide a framework for joint planning, they have neither the power nor resources to deliver them. This means that the implementation of STPs must be led by existing statutory organisations within STP areas.

Doing this will require action at multiple levels, including:

- within CCG and local authority areas (for example, to develop more integrated health and social care services based around GP practices)

- between groups of CCGs working together (for example, to commission services jointly, as is already happening across London)
- by NHS providers working both individually and collectively (for example, to reduce unwarranted variations in care and develop shared approaches to back-office services)
- within STP areas (for example, to address system-wide workforce pressures)
- across multiple STP areas (for example, to improve specialised services)
- across the whole of London (as we explore in the final section of the report).

STP leaders and their teams have an important role to play in co-ordinating these efforts and ensuring that they form part of a mutually reinforcing approach rather than a disjointed set of initiatives. Making this happen will rely on alliances and collaborations in different parts of their system (Timmins 2015; Senge *et al* 2014). STPs also have a role to play in bringing together professionals from different services to agree standard operating procedures and processes to improve care (Dixon-Woods and Martin 2016).

While STPs should avoid creating new layers of bureaucracy, dedicated teams and resources will be needed to help manage the STP process and support service changes that span organisational boundaries. National NHS bodies have an important role to play in this process too, by ensuring that their approach to regulation and performance management supports collaboration between organisations rather than making it more difficult (Alderwick *et al* 2016).

Skills and resources for improvement

London's STPs must also consider the practical skills and resources needed to support staff to make improvements in care, including the quality improvement methods that will be used (and how staff will be trained to used them), how the impact of service changes will be measured and reported, and how patients and families will be involved in redesigning services. Some of London's STPs, for example, North Central London and North West London, describe the need for staff to be trained in quality improvement methods and leading change across systems (*see* p 31). But, overall, the focus on quality improvement skills and approaches across the five London STPs is limited. Addressing these gaps is likely to involve support from various organisations across London – such as academic health science centres, the Healthy London Partnership, and the regional teams of NHS England and NHS Improvement (*see* final section of this report).

Defining the priorities for implementation

As in other parts of the country (*see* Ham *et al* 2017), the proposals in London's STPs are broad in scope, covering prevention and care in the community through to highly specialised services in hospitals. The proposals also vary in detail both within and between STP areas. As the process moves from planning to implementation, a key task for local leaders must be to identify the top priorities for improving care in their area. This is particularly important given the limited investment available to fund new services. Our view is that proposals to redesign care in the community and strengthen prevention and early intervention should be given high priority in all areas. The most contentious proposals are likely to be those involving changes to acute hospital services. Priority should be given to taking forward the most advanced proposals where the case for change has been clearly made.

Summary

STPs lack detail on how their ambitious goals for improvement will be delivered in practice. This includes detail on the overall approach to making change happen, as well as how individuals and teams will be equipped with the skills and resources to improve services. Implementing STPs will depend on collaboration between organisations. STPs must find ways of leading and co-ordinating improvements across their local system. But delivering improvements in care will require different partnerships and approaches at multiple geographical levels. Each STP must define the top priorities for improvement in its area.

5 An agenda for action across London

In this section of our report, we discuss a number of issues that need to be addressed across London to support implementation of the ambitious proposals set out in STPs. These issues are: prevention, estate, workforce, specialised services, innovation, and system leadership.

Prevention

The report of the London Health Commission in 2014, *Better health for London*, offered a comprehensive analysis of the health of Londoners and a programme of action to address the main health challenges in the city. These challenges need to be addressed in neighbourhoods, boroughs, the areas covered by STPs, and across London as a whole. They include tackling obesity, supporting Londoners to eat more healthily, getting London walking, improving air quality and making London smoke-free. London's NHS has a major role to play in delivering these ambitions through its spending power, its role as an employer, and by playing its part in the 'radical upgrade in prevention'. Simon Stevens has argued for in the Forward View.

The aim of *Better health for London* was to make London the healthiest major global city. The London Health Commission argued that achieving this aim would require significant leadership from the Mayor, local councillors, the NHS, Public Health England and many other organisations in London, with the public at the heart of the changes needed. The need for leadership on these issues remains – and the Mayor's recent intervention on air quality and his focus on tackling health inequalities are examples of where this is happening.

The transfer of public health responsibilities from the NHS to local authorities underlines the need for co-ordination to make progress on these issues – as, for example, in the case of sexual health services (Baylis *et al* 2017). Addressing the wider social, economic and environmental determinants of health requires collective action between many individuals and organisations. STPs offer an opportunity to improve this co-ordination across London.

Estate

One of the opportunities identified by the London Health Commission was better use of the NHS estate. This opportunity needs to be seized if the ambitious proposals in STPs are to be taken forward. There is little capital available to fund new investments at a national level, making it even more important that value is realised from underused and, in some cases, unused NHS estate. This includes investments in general practice and community services to enable the development of new care models. There is also the opportunity to be more creative in driving greater social (as well as financial) value from the use of NHS estate, including by considering how the NHS estate could be used help to address London's severe housing need.

The Commission highlighted the absence of a London-wide strategic overview of the NHS estate, fragmented responsibility for decision-making, and complex and inconsistent rules on how land and associated assets should be used for the benefit of patients and the public. The establishment of the London Estates Board should enable some of these issues to be addressed. The London devolution deal, which is yet to be formally agreed, has the potential to provide new flexibilities to use receipts from the sale of NHS land and property within and across the city. There are potentially significant benefits to be realised from this if common ground can be found between the many organisations that have a stake in these issues.

Workforce

The NHS and social care workforce is critical to improving health and health care in the city. Workforce issues and their impact on care are identified as a key priority in London's STPs. These issues have become more important since publication of *Better health for London*, with growing evidence of workforce shortages and concerns about the impact of Brexit on EU staff working in the NHS in London. Workforce concerns exist right across England, but are accentuated in London by the higher costs of living and the lack of affordable housing.

The establishment of the London Workforce Board signifies the importance of these issues and recognition of the need to co-ordinate action by NHS trusts and other employers with the work of the institutions responsible for education and training. Addressing these issues is also linked to work on NHS estates and the opportunity to use the redevelopment of NHS land and buildings to include affordable housing for NHS staff and other key workers. This will require close partnership between the NHS and local authorities, as well as strategic oversight by the Workforce Board and the Mayor. There are also opportunities to consider

how costs of transport in London could be reduced for key health and care staff working in the city.

The Workforce Board also has a potentially important role in supporting health and social care integration – for example, through changes to training and development and the use of the apprenticeship levy. This includes co-ordinating work already under way in different STP areas in London to introduce new staff roles such as care co-ordinators and health coaches.

Specialised services

There is a greater concentration of specialised services in London than in any other city in England. These services are used by people from across the country, as well as by those living in London. STPs include proposals for improving specialised services. In some cases, these proposals require collaboration between two or more STPs in London (as, for example, in work under way in south London) and in other cases will depend on collaboration with STPs outside London (as, for example, in plans under development across the south of England). The London Specialised Services Commissioning Board has been set up to provide leadership in this area. The need for co-ordinated action on these issues is highlighted by the scale of the financial pressures facing specialised commissioning budgets in London by 2020/21 (*see* p 27), as well as the limited detail in STPs about how these gaps will be closed.

Innovation

The concentration of world-leading universities and centres of medical excellence in London offers an opportunity for the city to become a global leader in research and innovation. The presence of three academic health sciences centres, the Crick Institute and other research facilities such as Google DeepMind creates a strong platform to build on. Closer collaboration is needed to realise the connections that exist between these organisations and build links with pharmaceutical and other companies – for example, through MedCity, as argued in *Better health for London*.

Realising this opportunity will require ongoing partnership between the Mayor, the NHS, local authorities, universities and others to develop and implement a strategy on medical innovation. The involvement and support of the government will be needed as part of its commitment to life sciences if London is to compete globally on these issues. The economic benefits of such an approach could be considerable, but will not be achieved without a much stronger London-wide strategy than has been evident to date.

Innovation is also important in supporting STPs deliver their plans. This will require an ability to identify and share learning about service improvements, wherever they occur, and to offer expertise on improvement methods and how innovations in care can be spread. Work on quality improvement being taken forward by the Improvement Collaborative, under the aegis of Healthy London Partnership, with the involvement of London's three academic health sciences centres is an attempt to do this more systematically.

Leadership

The abolition of the strategic health authority in 2013 created a vacuum in system leadership in the NHS in London. This vacuum has been filled in part by the work of NHS England and NHS Improvement and the increasing alignment of their activities in London. Since its formation in 2015, the Healthy London Partnership has provided NHS leadership on issues such as cancer care, mental health and health care for people who are homeless as part of a collaboration between the Mayor, Public Health England, CCGs and NHS England.

System leadership is also exercised through the London Health Board, which is chaired by the Mayor. The Board is composed of leaders of three local authorities, the London-wide clinical commissioning council, two senior representatives from NHS England and Public Health England in London, as well as the Mayor and Mayoral Health Adviser. The Board has a focus on tackling health inequalities and on advancing devolution in London, among other things, in association with London Councils.

The emergence of STPs requires greater alignment between the work being done within individual STP areas and the work of organisations operating across London. Alignment will help to avoid wasteful duplication of activities, identify common issues to be addressed, and enable the best use of scarce expertise and resources.

This board could help to provide strategic oversight of STPs in London. This should involve supporting changes to NHS services where they will improve care for Londoners, including changes to hospital services where the clinical case for change has been made. The Mayor also has a role in ensuring that the NHS has sufficient resources to deliver these improvements and to meet the needs of the growing and changing population in London.

Next steps

In identifying these six issues for action across London, we would re-iterate that implementing STPs requires work to be undertaken at various levels and by

various organisations or combinations of organisations. The issues we have discussed in this section are those that, in our view, would benefit from London-wide co-ordination – recognising that many other STP proposals can and should be taken forward more locally based on the principle of subsidiarity.

Appendix A: additional data

Table A1 Number of maternity beds in London, 2005/6 to 2016/17

Financial year	England, bed count	England, year-on-year % change	London, bed count	London, year-on-year % change
2005/6	8,881		1,557	
2006/7	8,643	-2.7	1,539	-1.2
2007/8	8,441	-2.3	1,488	-3.3
2008/9	8,386	-0.7	1,546	3.9
2009/10	8,392	0.1	1,526	-1.3
2010/11	7,874	-6.2	1,452	-4.8
2011/12	7,922	0.6	1,535	5.7
2012/13	7,851	-0.9	1,510	-1.6
2013/14	7,751	-1.3	1,469	-2.7
2014/15	7,804	0.7	1,566	6.6
2015/16	7,759	-0.6	1,555	-0.7
2016/17	7,809	0.6	1,587	2.1
2005/6 to 2016/17	-1,072		30	
2011/12 to 2016/17	-113		52	
Average annual change 2005/6 to 2016/17		-1.2		0.2
Average annual change from 2011/12		-0.3		0.7

Table A2 General and acute bed occupancy in London and England, 2005/6 to 2016/17

Financial year	England (%)	London (%)
2005/6	86	87
2006/7	85	87
2007/8	85	88
2008/9	87	88
2009/10	87	87
2010/11	87	89
2011/12	87	87
2012/13	88	88
2013/14	88	89
2014/15	89	90
2015/16	89	89
2016/17	90	89

Table A3 Elective activity growth in London

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	4.69	4.49
North East London	0.22	2.19
North West London	3.88	6.86
South East London	1.28	2.69
South West London	1.93	2.69
England	2.92	2.31

Table A4 Non-elective activity growth in London

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	9.20	0.60
North East London	0.15	4.64
North West London	0.34	-1.16
South East London	3.89	3.78
South West London	2.82	3.78
England	2.56	1.86

Table A5 Requirements for additional alternative care provision for hospital patients who could be cared for elsewhere, based on Oak Group audit data

Service	Additional provision required (%)
Home with services	24
Home no services	13
Intermediate care	10
Community hospital	9
Nursing home	8
Rehab community	8
Other	6
Sub-acute care	5
Rehab alternative	5
Rehab complex	3
Palliative or Hospice	3
Home with support services	2
Psychiatric facility	2
Long-term care	1
Residential care	1
Home with clinical services	1

Appendix B: London's STPs

North Central London:
www.candi.nhs.uk/about-us/north-central-london-sustainability-andtransformation-plan

North East London:
www.nelstp.org.uk/

North West London:
www.healthiernorthwestlondon.nhs.uk/documents/sustainabilityand-transformation-plans-stps

South East London:
www.ourhealthiersel.nhs.uk/about-us/

South West London:
www.swlccgs.nhs.uk/category/questions-and-answers/stpfa

References

Alderwick H, Dunn P, McKenna H, Walsh N, Ham C (2016a). *Sustainability and transformation plans in the NHS: how are they being developed in practice?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/stps-in-the-nhs (accessed on 28 March 2017).

Alderwick H, Ham C (2017). 'Sustainability and transformation plans for the NHS in England: what do they say and what happens next?'. *BMJ,* 356, j1541.

Alderwick H, Ham C (2016a). 'The NHS in England embraces collaboration in tackling biggest crisis in its history'. *BMJ*, 352, i1022.

Alderwick H, Robertson R, Appleby J, Dunn P, Maguire D (2016b). *Better value in the NHS: the role of changes in clinical practice.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/better-value-nhs (accessed on 29 March 2017).

Alderwick H, Vuik S, Ham C, Patel H, Siegel S (2016c). *Healthy populations: designing strategies to improve population health*. Report of the WISH Healthy Population Forum 2016. Doha: World Innovation Summit for Health. Available at: www.kingsfund.org.uk/publications/articles/healthy-populations (accessed on 23 May 2017).

Alderwick H, Ham C, Buck D (2015a). *Population health systems: going beyond integrated care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/population-health-systems (accessed on 29 March 2017).

Anandaciva S (2017). 'The capped expenditure process explained'. The King's Fund. Available at: www.kingsfund.org.uk/publications/capped-expenditure-process-explained (accessed on 4 September 2017).

Appleby J, Ham C, Imison C, Harrison T, Boyle S, Ashton B, Thompson J (2011). *Improving health and health care in London: who will take the lead?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-health-and-health-care-london (accessed on 29 March 2017).

Bachrach D, Pfister H, Wallis K, Lipson M (2014). *Addressing patients' social needs: an emerging business case for provider investment*. New York: The Commonwealth Fund. Available at: www.commonwealthfund.org/publications/fund-reports/2014/may/addressing-patients-social-needs (accessed on 29 March 2017).

Bagust A, Place M, Posnett J (1999). 'Dynamics of bed use in accommodating emergency admissions: stochastic simulation model'. *BMJ*, vol 319, no 7203, pp 155–8.

Baird B, Charles A, Honeyman M, Maguire D, Das P (2016). *Understanding pressures in general practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/pressures-in-general-practice (accessed on 29 March 2017).

Bardsley M, Steventon A, Smith J, Dixon J (2013). *Evaluating integrated and community-based care: how do we know what works?* London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/evaluating-integrated-and-community-based-care-how-do-we-know-what-works (accessed on 29 March 2017).

Baylis A, Buck D, Anderson J, Jabbal J, Ross S (2017). *The future of HIV services in England: shaping the response to changing needs.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/future-hiv-services-england (accessed on 23 May 2017).

Blunt I (2013). *Focus on preventable admissions: trends in emergency admissions for ambulatory care sensitive conditions, 2001 to 2013*. London: The Health Foundation, Nuffield Trust. Available at: www.health.org.uk/publication/qualitywatch-focus-preventable-admissions (accessed on 29 March 2017).

Booske BC, Athens JK, Park H, Kindig DA, Remington PL (2010). *Different perspectives for assigning weights to determinants of health* [online]. County Health Rankings Working Paper. University of Wisconsin, Population Health Institute website. Available at: http://uwphi.pophealth.wisc.edu/publications/other/different-perspectives-for-assigning-weights-to-determinants-of-health.pdf (accessed on 29 March 2017).

Buck D (2014). 'Public health gains despite slimmer budgets'. Blog. Public Finance website. Available at: www.publicfinance.co.uk/2014/11/public-health-gains-despite-slimmer-budgets (accessed on 29 March 2017).

Buck D, Gregory S (2013). *Improving the public's health: a resource for local authorities.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-publics-health (accessed on 29 March 2017).

Campbell D (2017). 'NHS England chief brings in new rules on ward bed closures'. *The Guardian*, 2 March. Available at: www.theguardian.com/society/2017/mar/02/nhs-england-chief-brings-in-new-rules-on-hospital-bed-closures (accessed on 29 March 2017).

Collins B (2015). *Intentional whole health system redesign: Southcentral Foundation's 'Nuka' system of care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/commissioned/intentional-whole-health-system-redesign-nuka-southcentral (accessed on 29 March 2017).

Cookson R, Asaria M, Ali S, Ferguson B, Fleetcroft R, Goddard M, Goldblatt P, Laudicella M, Raine R (2016). 'Health equity indicators for the English NHS: a longitudinal whole-population study at the small-area level'. *Health Services and Delivery Research*, vol 4, no 26.

Cullinane M, Findlay G, Hargraves C, Lucas S (2005). *An acute problem*? London: National Confidential Enquiry into Patient Outcome and Death. Available at: www.ncepod.org.uk/2005aap.html (accessed on 29 March 2017).

Curry N, Ham C (2010). *Clinical and service integration: the route to improved outcomes.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/clinical-and-service-integration (accessed on 29 March 2017).

Department of Communities and Local Government (2017). 'Local authority revenue expenditure and financing'. GOV.UK website. Available at: www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing (accessed on 29 March 2017).

Department of Health (2000). *Shaping the future NHS: long term planning for hospitals and related services. Consultation document on the findings of the national beds inquiry.* Available at: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Consultations/Closedconsultations/DH_4102910 (accessed on 29 March 2017).

Dixon-Woods M, Martin G (2016). 'Does quality improvement improve quality?'. *Future Hospital Journal*, vol 3, no 3, pp 191– 4.

Dunhill L (2017). 'Revealed: "strongest" STPs to share £325m of new investment'. *HSJ* website, 19 July. Available at: www.hsj.co.uk/finance-and-efficiency/revealed-strongest-stps-share-325m-of-new-investment/7020132.article (accessed on 4 September 2017).

Edwards N (2016). *Sustainability and transformation plans: what we know so far*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/resource/sustainability-and-transformation-plans-what-we-know-so-far (accessed on 23 May 2017).

Edwards N (2002). 'Clinical networks. Advantages include flexibility, strength, speed, and focus on clinical issues'. *BMJ*, vol 324, p 63.

Erens B, Wistow G, Mounier-Jack S, Douglas N, Jones L, Manacorda T, Mays N (2016). *Early evaluation of the integrated care and support pioneers programme: final report*. London: Policy Innovation Research Unit.

Foot J (2012). *What makes us healthy? The asset approach in practice – evidence, action, evaluation* [online]. Jane Foot website. Available at: www.janefoot.co.uk/downloads/index.html (accessed on 23 May 2017).

Gainsbury S (2016). *Feeling the crunch: NHS finances to 2020*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/feeling-the-crunch-nhs-finances-to-2020 (accessed on 29 March 2017).

Goodwin N, Smith J, Davies A, Perry C, Rosen R, Dixon A, Dixon J, Ham C (2012). *Integrated care for patients and populations: improving outcomes by working together*. London: The King's Fund, Nuffield Trust. Available at: www.kingsfund.org.uk/publications/integrated-care-patients-and-populations-improving-outcomes-working-together (accessed on 30 March 2017).

Goodwin N, Sonola L, Thiel V, Kodner D (2013). *Co-ordinated care for people with complex chronic conditions: key lessons and markers for success*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/co-ordinated-care-people-complex-chronic-conditions (accessed on 30 March 2017).

Gilburt H (2015). *Mental health under pressure*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/mental-health-under-pressure (accessed on 30 March 2017).

Ham C (2017). 'The general election, the NHS and social care'. *BMJ,* 357: j2840. Available at: www.bmj.com/content/357/bmj.j2840.full (accessed on 4 September 2017).

Ham C, Alderwick H, Dunn P, McKenna H (2017). *Delivering sustainability and transformation plans: from ambitious proposals to credible plans.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/delivering-sustainability-and-transformation-plans (accessed on 28 March 2017).

Ham C, Alderwick H (2015). *Place-based systems of care: a way forward for the NHS in England*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/place-based-systems-care (accessed on 30 March 2017).

Ham C, Dixon A, Brooke B (2012). *Transforming the delivery of health and social care: the case for fundamental change*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/transforming-delivery-health-and-social-care (accessed on 30 March 2017).

Ham C, Edwards N, Brooke B (2013). *Leading health care in London: time for a radical response*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/leading-health-care-london (accessed on 30 March 2017).

Holt-Lunstad J, Smith T, Baker M, Harris T, Stephenson D (2015). 'Loneliness and social isolation as risk-factors for mortality: a meta-analytic review'. *Perspectives on Psychological Science*, vol 10, no 2, pp 227–37.

Humphries R, Thorlby R, Holder H, Hall P, Charles A (2016). *Social care for older people: home truths*. London: The King's Fund, Nuffield Trust. Available at: www.kingsfund.org.uk/publications/social-care-older-people (accessed on 30 March 2017).

Hunter RM, Davie C, Rudd A, Thompson A, Walker H, Thomson N, Mountford J, Schwamm L, Deanfield J, Thompson K, Dewan B, Mistry M, Quoraishi S, Morris S (2013). 'Impact on clinical and cost outcomes of a centralized approach to acute stroke care in London: a comparative effectiveness before and after model'. *PLoS ONE*, vol 8, no 8: e70420.

Imison C (2011). *Reconfiguring hospital services*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/articles/briefing-reconfiguring-hospital-services (accessed on 30 March 2017).

Imison C, Curry N, Holder H, Castle-Clarke S, Nimmons D, Appleby J, Thorlby R, Lombardo S (2017). *Shifting the balance of care: great expectations*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/shifting-the-balance-of-care-great-expectations (accessed on 30 March 2017).

Imison C, Sonola L, Honeyman M, Ross S (2014). *The reconfiguration of clinical services: what is the evidence?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/reconfiguration-clinical-services (accessed on 30 March 2017).

Kaier K, Mutters N, Frank U (2012). 'Bed occupancy rates and hospital-acquired infections – should beds be kept empty?'. *Clinical Microbiology and Infection*, vol 18, no 10, pp 941–5.

Local Government Association (2016). *Public health funding in 2016/17 and 2017/18* [online]. Local Government Association website. Available at: www.local.gov.uk/sites/default/files/documents/public-health-funding-201-690.pdf (accessed on 30 March 2017).

London Health Commission (2014). *Better health for London* [online]. Available at: www.london.gov.uk/sites/default/files/better_health_for_london.pdf (accessed on 30 March 2017).

Marmot M, Allen J, Goldblatt P, Boyce T, McNeish D, Grady M, Geddes I (2010). *Fair society, healthy lives: the Marmot review. Strategic review of health inequalities in England post-2010.* London: The Marmot Review. Available at: www.gov.uk/dfid-research-outputs/fair-society-healthy-lives-the-marmot-review-strategic-review-of-health-inequalities-in-england-post-2010 (accessed on 30 March 2017).

Masters R, Anwar E, Collins B, Cookson, Capewell S (2017). 'Return on investment of public health interventions: a systematic review'. Journal of Epidemiology and Community Health. doi: 10.1136/jech-2016-208141

Maybin J, Charles A, Honeyman M (2016). *Understanding quality in district nursing services: learning from patients, carers and staff.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/quality-district-nursing (accessed on 30 March 2017).

McDaid, D, Sassi F, Merkur S (eds) (2015). *Promoting health, preventing disease: the economic case*. Maidenhead: Open University Press.

Monitor (2014). *Facing the future: smaller acute providers*. London: Monitor. Available at: www.gov.uk/government/consultations/challenges-facing-small-acute-nhs-hospitals (accessed on 31 March 2017).

Morris S, Hunter R, Ramsay A *et al* (2014). 'Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis', *BMJ*, vol 349: g4757.

Munford L, Sidaway M, Blakemore A, Sutton M, Bower P (2017). 'Associations of participation in community assets with health-related quality of life and healthcare usage: a cross-sectional study of older people in the community'. *BMJ Open*; 7: e012374. Available at: http://bmjopen.bmj.com/content/7/2/e012374 (accessed on 31 March 2017).

National Maternity Review (2016). *Better births: improving outcomes of maternity services in England* [online]. NHS England website. Available at: www.england.nhs.uk/mat-transformation/mat-review/ (accessed on 28 March 2017).

Nelson B, Campbell J, Emanuel J (2011). *Development of a method for asset-based working* [online]. Available at: https://mmu.rl.talis.com/items/1BF07176-5736-1118-B7A1-58EEA515D4BE.html (accessed on 23 May 2017).

Newton J, Briggs ADM Murray CJL *et al* (2015). 'Changes in health in England, with analysis by English regions and areas of deprivation, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013'. *The Lancet*, vol 386, no 10010, pp 2257–74.

NHS England (2017a). *Next steps on the NHS five year forward view* [online]. NHS England website. Available at: www.england.nhs.uk/publication/next-steps-on-the-nhs-five-year-forward-view (accessed on 23 May 2017).

NHS England (2017b). *Sustainability and transformation partnerships progress dashboard – baseline view*. Available at: www.england.nhs.uk/publication/sustainability-and-transformation-partnerships-progress-dashboard-baseline-view/ (accessed on 4 September 2017).

NHS England (2016a). *NHS five year forward view recap briefing for the Health Select Committee on technical modelling and scenarios*. Technical briefing. Available at: www.england.nhs.uk/2016/05/fyfv-technical-brief/ (accessed on 30 March 2017).

NHS England (2016b). *Sustainability and transformation plan footprints* [online]. NHS England website. Available at: www.england.nhs.uk/wp-content/uploads/2016/02/stp-footprints-march-2016.pdf (accessed on 30 March 2017).

NHS England, Care Quality Commission, Health Education England, Monitor, NHS Trust Development Authority, Public Health England (2014). *NHS five year forward view* [online]. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs (accessed on 28 March 2017).

NHS England, NHS Improvement, Health Education England, National Institute for Health and Care Excellence, Public Health England, Care Quality Commission (2015). *Delivering the Forward View: NHS planning guidance 2016/17–2020/21*. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/ (accessed on 31 March 2017).

NHS England, NHS Improvement (2016). *NHS shared planning guidance: NHS operational planning and contracting guidance 2017–2019*. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/ (accessed on 31 March 2017).

Nolte E, Pitchforth E (2014). *What is the evidence on the economic impacts of integrated care?* Policy summary 11. Copenhagen: World Health Organization. Available at: www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/what-is-the-evidence-on-the-economic-impacts-of-integrated-care (accessed on 31 March 2017).

Oxford E (2017). 'New London devolution deal postponed'. *HSJ* website, 14 March. Available at: www.hsj.co.uk/topics/policy-and-regulation/new-london-devolution-deal-postponed/7016494.article (accessed on 4 September 2017).

Pampel F, Krueger P, Denney T (2010). 'Socioeconomic disparities in health'. *Annual Review of Sociology*, vol 36, pp 349–70.

Purdy S, Paranjothy S, Huntley A, Thomas R, Mann M, Huws D, Brindle P, Elwyn G (2012). *Interventions to reduce unplanned hospital admission: a series of systematic reviews*. Available at: www.bristol.ac.uk/media-library/sites/primaryhealthcare/migrated/documents/unplannedadmissions.pdf (accessed on 31 March 2017).

RAND Europe, Ernst & Young LLP (2012). *National evaluation of the Department of Health's integrated care pilots*. Cambridge: RAND Corporation.

Royal College of Emergency Medicine (2017). Winter flow final report, 2016/2017. Available at:

www.rcem.ac.uk/RCEM/Quality_Policy/Policy/Winter_Flow_Project/RCEM/Quality-Policy/Policy/Winter_Flow_Project.aspx (accessed on 4 September 2017).

Schluter P, Hamilton G, Deely J, Ardagh M (2016). 'Impact of integrated health system changes, accelerated due to an earthquake, on emergency department attendances and acute admissions: a Bayesian change-point analysis'. *BMJ Open*, vol 6: e010709. Available at: http://bmjopen.bmj.com/content/6/5/e010709 (accessed on 31 March 2017).

Senge P, Hamilton H, Kania J (2014). 'The dawn of system leadership'. *Stanford Social Innovation Review*, winter, pp 27–30.

Smith N A, Phillips D, Simpson P, Eiser D, Trickey M (2016). *A time of revolution? British local government finance in the 2010s* [online]. Institute for Fiscal Studies website. Available at: www.ifs.org.uk/publications/8705 (accessed on 31 March 2017).

Steventon A, Bardsley M, Billings J, Georghiou T, Lewis G (2011). *An evaluation of the impact of community-based interventions on hospital use*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/an-evaluation-of-the-impact-of-community-based-interventions-on-hospital-use (accessed on 31 March 2017).

The Health Foundation, The King's Fund (2015). *Making change possible: a transformation fund for the NHS*. London: The Health Foundation. Available at: www.kingsfund.org.uk/press/press-releases/making-change-happen-transformation-fund-nhs (accesses on 31 March 2017).

Timmins N, Ham C (2013). *The quest for integrated health and social care: a case study in Canterbury, New Zealand*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/quest-integrated-health-and-social-care (accessed on 31 March 2017).

Timmins N (2015). *The practice of system leadership: being comfortable with chaos*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/practice-system-leadership (accessed on 14 September 2015).

Turner S, Ramsay A, Perry C, Boaden R, McKevitt C, Morris S, Pursani N, Rudd A, Tyrrell P, Wolge C, Fulop N (2016). 'Lessons for major system change: centralization of stroke services in two metropolitan areas of England'. *Journal of Health Services Research and Policy*, vol 21, no 3, pp 156–65.

West D, Dunhill L, Clover B, Coggan A (2017). 'New national savings drive will "challenge the values" of NHS leaders'. *HSJ* website, 5 June. Available at: www.hsj.co.uk/topics/finance-and-efficiency/exclusive-new-national-savings-drive-will-challenge-the-values-of-nhs-leaders/7018461.article (accessed on 4 September 2017).

Wistow G, Gaskins M, Holder H, Smith J (2015). *Putting integrated care into practice: the North West London experience*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/putting-integrated-care-into-practice-the-north-west-london-experience (accessed on 31 March 2017).

World Health Organization (2013). *The case for investing in public health: a public health summary report for EPHO 8*. Luxembourg: World Health Organization. Available at: www.euro.who.int/en/health-topics/Health-systems/public-health-services/publications/2015/the-case-for-investing-in-public-health (accessed on 31 March 2017).

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Chris Ham is Chief Executive of The King's Fund. He rejoined the Fund in 2010, having previously worked here between 1986 and 1992. He has held posts at the universities of Birmingham, Bristol and Leeds and is currently emeritus professor at the University of Birmingham. He is an honorary fellow of the Royal College of Physicians of London and The Royal College of General Practitioners.

Chris was director of the strategy unit in the Department of Health between 2000 and 2004, has advised the WHO and the World Bank, and has acted as a consultant to a number of governments. He has been a non-executive director of the Heart of England NHS Foundation Trust, and a governor of the Health Foundation and the Canadian Health Services Research Foundation.

Chris researches and writes on all aspects of health reform and is a sought-after speaker. He was awarded a CBE in 2004 for his services to the NHS and an honorary doctorate by the University of Kent in 2012.

Hugh Alderwick is Senior Policy Adviser to Chris Ham. Since joining the Fund in 2014, Hugh has published work on NHS reform, integrated care and population health, and opportunities for the NHS to improve value for money.

Before he joined the Fund, Hugh worked as a management consultant in PricewaterhouseCoopers' (PwC) health team. At PwC, Hugh provided research, analysis and support to a range of local and national organisations on projects focusing on strategy and policy.

Hugh was also seconded from PwC to work on Sir John Oldham's Independent Commission on whole-person care, which reported to the Labour Party at the beginning of 2014. The Commission looked at how health and care services can be more closely aligned to deliver integrated services meeting the whole of people's needs.

Nigel Edwards is Chief Executive at the Nuffield Trust. Before becoming Chief Executive in 2014, Nigel was an expert adviser with KPMG's Global Centre of Excellence for Health and Life Sciences and a Senior Fellow at The King's Fund.

Nigel was Policy Director of the NHS Confederation for 11 years and joined the organisation from his former role as Director of the London Health Economics Consortium at the London School of Hygiene and Tropical Medicine, where he remains an honorary visiting professor.

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Before joining the Trust, Sally was an investigative journalist at the *Financial Times*, working on UK and international investigations spanning public spending, tax avoidance and money laundering. Before joining the *FT,* Sally was chief reporter and news editor at *Health Service Journal*.

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13 November 2017

Dear Alan,

Re: Referral to Healthier Communities Select Committee

Thank you for the Overview and Scrutiny Committee's recent referral concerning local NHS GP services and the future of the walk-in centre in New Cross.

The Committee received your Committee's comments at its last meeting, prior to its review of the recent consultation on the future of the walk-in centre. The Committee then held a thorough discussion on the early findings of the consultation, hearing from the Clinical Commissioning Group (CCG), ward councillors, and representatives of other stakeholders and members of the public.

Following this, the CCG agreed to the Committee's request to provide a further update, once the responses to the consultation have been analysed fully, at its next meeting, on Wednesday 24th January.

The Committee thanks you for the observations of the Overview and Scrutiny Committee on this matter.

Yours sincerely

Councillor John Muldoon (Chair of the Healthier Communities Select Committee)

To Diana Braithwaite
Director of Commissioning
Lewisham CCG

New Cross Walk-in Centre:
Save Lewisham Hospital points arising from the CCG report on the consultation

Dear Diana Braithwaite,
We have read your report in response to the public consultation on the New Cross Walk in Centre (NCWIC) and appreciate the detailed responses to concerns raised by the Save Lewisham Hospital Campaign, Councillors and other organisations.

However, we wish to emphasise a number of our previous points prior to your discussion of the issue in January.

1**. Providing a service which is as good or better than NCWIC**
If the closure of the NCWIC is to be seen as not simply a cut, then the amalgam of all the different parts of the existing service (for example provision for unregistered patients, nurses to carry out wound dressings, provision at the Lewisham Extended Hours GP service) needs to provide a service that is as good as or better than what it is replacing. You will understand that for patients who cannot get GP appointments normally for several weeks, the removal of the service is viewed with real anxiety.

2. Pockets of unmet need
We are still concerned that there are pockets on of unmet need that would arise from the closure of the the NCWIC including provision for migrants and other other individuals who may be unable or unwilling to provide an address. We would like you to be explicit in your plans to be in place to avoid failure to meet these needs.

3. Community based hubs
According to the CCG's community based care plan Lewisham is being divided into 4 hubs, one of which is based at the Waldron. Why could not the key aspects of the Walk-in Centre be added in to this provision at the Waldron Including a walk in element? In fact one of the suggestions made by the public as part of the consultation was exactly this.

4. Public suggestions for an improved service
We would be interested to know your responses to the number of excellent suggestions coming from the public listed at the end of your report. Would it not be in the true spirit of consultation to consider these, and even if they are not achievable or desirable in your view, to say why.

4. **Monitoring**
In order to ascertain whether all the different elements you intend to put in place are working, we would like to know what procedures and measures will be put in place to monitor these. The take up and effectiveness of the the Lewisham Extended Hours Practice being one of these areas; the effectiveness of provision for unregistered patients is another; provision for those requiring wound dressings another. Because it is increasingly hard for patients to have basic access to their GPs and because surgeries are under such pressure, it seems to us that monitoring is essential.

5. Publicity
Finally, we would like to know what measures will be put in place to ensure that patients know

when, where and how key services previously accessed at the NCWIC will be provided, whether or not the closure does go ahead,.

With best wishes
The Save Lewisham Hospital Campaign

Building a Safer Future

Independent Review of Building Regulations and Fire Safety: Interim Report

December 2017

Dame Judith Hackitt DBE FREng

Cm 9551

Building a Safer Future

Independent Review of Building Regulations and Fire Safety: Interim Report

Presented to Parliament
by the Secretary of State for Communities and Local Government
by Command of Her Majesty

December 2017

Cm 9551

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Foreword

A personal view from Dame Judith Hackitt

In the early hours of 14 June 2017, a fire spread through Grenfell Tower. Seventy-one people died, many homes were destroyed and countless lives have been affected. The fire appeared to be accelerated by the building's exterior cladding system, leading to a national programme of extensive testing of the cladding on other high-rise buildings. This revealed widespread use of aluminium composite materials which did not meet the limited combustibility requirements of building regulations guidance, and raised concerns for the safety of others.

Further concerns soon came to light about the adequacy of the structural design of cladding systems when materials fell from a building in Glasgow. A subsequent series of fire and rescue service audits of tower blocks led to the temporary evacuation in London of the Chalcots Estate, Camden, and resulted in the discovery of structural safety issues with four buildings at the Ledbury Estate, Southwark.

With these events unfolding, I was asked by the Secretary of State for the Department for Communities and Local Government (DCLG) and the Home Secretary to conduct an Independent Review of Building Regulations and Fire Safety with a particular focus on their application to high-rise residential buildings.

I have been asked to present timely recommendations to provide assurance to everyone, and in particular to residents of high-rise buildings, that urgent steps are being taken to improve the safety of buildings and to address what could be seen as evidence of systemic failings in the regulatory system and deeper problems in the industry.

This tragic incident should not have happened in our country in the 21st century. We now all have the opportunity to respond in a way that will lead to lasting change that makes people safer in the future. I have seen the improvements in safety in the oil and gas industry that followed the Piper Alpha oil production platform disaster in 1988 and I hope this review can have a similar impact.

This review is work in progress and a final report will follow in spring 2018. The review is future-focused and has not been charged with investigating the specific circumstances at Grenfell – these are matters for the ongoing police investigation and the Grenfell Tower Inquiry. It is key that we share what we have learned to date and outline the direction of travel over the next few months. There has been an outstanding response from stakeholders through meetings, written responses to our call for evidence and subsequent roundtable discussions. From the very earliest stages of the process, the people we have spoken to have indicated that the current regulatory system falls short of what is required to be effective. While some have argued for specific short-term measures, most have recognised that the current overall system is not working effectively and needs to be overhauled.

As the review has progressed, it has become clear that the whole system of regulation, covering what is written down and the way in which it is enacted in practice, is not fit for purpose, leaving room for those who want to take shortcuts to do so.

This should not be interpreted as meaning that buildings are unsafe. Major building failures, including large-scale fires, are very rare and there are many construction firms, building owners, landlords and others in the system who do the right thing and recognise their responsibilities. The unprecedented verification, interim mitigation and remediation work undertaken by fire and rescue services, local authorities and building owners since the summer have ensured that measures are in place to assure residents of high-rise buildings of their safety. My focus is to create a better system for the future which will be easier to work with, deliver better solutions everywhere and rebuild confidence.

I have set out to look at the whole system, including the people working within it, and how the various parts interact to deliver outcomes on the ground. This includes the roles and responsibilities of people designing, planning and constructing buildings; the roles and responsibilities of different enforcing bodies and those who set standards; and the roles and responsibilities of all those who interact with the system during the use of a building, which often involves highly complex ownership models. The regulatory system comprises all of these elements, not just what is written in statute.

One of the major outputs at this stage of the review is a map, which shows how the current regulatory system should work in practice. Carrying out this system mapping has been fundamental to understanding where the current weaknesses are and in providing the basis for developing a simpler and more effective framework for the future. This approach could have more widespread application across other regulatory frameworks, with the potential to deliver better overall results than other regulatory reviews conducted to date.

As an engineer, much of my career has been spent working in the chemicals industry where any project undertaken has to be specified, designed to that specification and properly reviewed; any changes have to be properly managed, reviewed and recorded. At the end of the project, a full record of what has been built must be handed over to those who will operate the project. This same philosophy continues throughout the life cycle of the entity that has been built, when any further changes or improvements are made.

After some four months leading this review, it is clear that this same systematic, controlled approach to construction, refurbishment and management of occupied buildings is not by any means universal. There is plenty of good practice but it is not difficult to see how those who are inclined to take shortcuts can do so. Change control and quality assurance are poor throughout the process. What is initially designed is not what is being built, and quality assurance of materials and people is seriously lacking.

I have been shocked by some of the practices I have heard about and I am convinced of the need for a new intelligent system of regulation and enforcement for high-rise and complex buildings which will encourage everyone to do the right thing and will hold to account those who try to cut corners.

During close to a decade as Chair of the Health and Safety Executive, I saw the construction industry respond to the challenge of improving its performance in managing the safety of its workforce on projects of all sizes. With an effective regulatory framework in place, the industry was willing and able to show leadership, to take responsibility for delivering a culture change and to move away from simply accepting that construction is a dangerous sector to work in. A cultural and behavioural change of similar magnitude is now required across the whole sector to deliver an effective system that ensures complex buildings are built and maintained so that they are safe for people to live in for many years after the original construction. The mindset of doing things as cheaply as possible and passing on responsibility for problems and shortcomings to others must stop. Everyone's focus must be on doing the right things because it is their responsibility as part of a system which provides buildings that are safe and sustainable for those who will live in and use them for many decades.

Changes to the regulatory regime will help, but on their own will not be sufficient unless we can change the culture away from one of doing the minimum required for compliance, to one of taking ownership and responsibility for delivering a safe system throughout the life cycle of a building.

At the heart of this required change is a shift of ownership. Despite being advised at the outset that the regulatory system for building was outcomes and performance-based, I have encountered masses of prescription which is complex and in some cases inconsistent. The prescription is largely owned by government, with industry – those who should be the experts in best practice – waiting to be told what to do and some looking for ways to work around it.

We know that many owners and landlords are taking responsibility and initiating remedial work where required. But even now I am aware that some building owners and landlords are waiting for direction from this review on what materials should be used to replace cladding that has been identified as inadequate. I would urge them not to wait but to consider what materials have already been identified and tested as safe. They must also take steps to ensure that those whom they commission to carry out any remedial works are competent to do the work and that the work is quality assured.

A systemic review of the regulations by a non-expert in construction was never going to recommend detailed changes to the technical requirements – this is beyond my area of competence. Any attempt to modify details of the regulation without addressing the clear systemic failings would be akin to adding a paint job and decorations to a fundamentally non-roadworthy vehicle. My goal is to ensure that we create, within a much more robust overall system, a process that ensures there is effective oversight of materials, people and installation.

I have been deeply affected by the residents of high-rise buildings I have met and I have learned so much from them. These buildings are their homes and their communities. They are proud of where they live, but their trust in the system has been badly shaken by the events of the last few months. We need to rebuild that trust.

I have also met some stakeholders during this process who think that there is one 'fix' typified by the 'if we just do this one thing, it will all be better' response. Some of this is driven by vested interest, but also by a desire to 'do something' quickly. I believe we must be very wary of this type of thinking, and the evidence tells me that this is not what residents want.

I have been impressed by the reasonableness and pragmatism of the residents I have met despite what has happened. If we are to regain their trust and create a better system for the future, we must do so by engaging them in deciding what solution is right for them in their particular situations, all of which are different given the histories of the many different buildings. There is no doubt that residents want timely resolution of issues but they are also realists and know that things must be prioritised – that means listening to them, involving them and respecting their views.

This interim report provides a summary of what has been learned so far, the proposed direction of travel for the next phase of work and the rationale for that. It also identifies some early actions which can and should be taken to support the future direction of travel; these will help to ensure delivery in an appropriately timely manner. There is a strong desire among all of those with whom I have engaged thus far to learn the lessons of the tragic event which took place at Grenfell Tower and to build a better system for the future. Our challenge now is to turn that into a reality and not to allow ourselves to move on without achieving lasting change.

Your comments and feedback on this interim report would be very welcome and we are planning to build in ways to gather those views as we move on to the next stage of the review. Most immediately, I intend to hold a summit of key stakeholders early in 2018. Many of the interim findings in this report already identify areas of work which it is appropriate to ask others to lead on in parallel with phase two of the review itself.

I would also like to thank the team of staff in DCLG and the Home Office who are providing outstanding support in this review. Despite the circumstances which led to this team being brought together, there is a strong sense that we can make a difference if we are bold enough to make the changes which are needed.

"Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius – and a lot of courage – to move in the opposite direction." E.F. Schumacher

DAME JUDITH HACKITT

Summary

Summary of the report

Aim

The Independent Review of Building Regulations and Fire Safety aims to make recommendations that will ensure there is a sufficiently robust regulatory system for the future and provide further assurance to residents that the buildings they live in are safe and will remain so.

This interim report sets out the findings to date and the direction of travel for the final report.

Interim report key findings

The work of the review to date has found that **the current regulatory system for ensuring fire safety in high-rise and complex buildings is not fit for purpose**. This applies throughout the life cycle of a building, both during construction and occupation, and is a problem connected both to the culture of the construction industry and the effectiveness of the regulators.

The key reasons for this are:

- Current regulations and guidance are too complex and unclear. This can lead to confusion and misinterpretation in their application to high-rise and complex buildings.
- Clarity of roles and responsibilities is poor. Even where there are requirements for key activities to take place across design, construction and maintenance, it is not always clear who has responsibility for making it happen.
- Despite many who demonstrate good practice, the means of assessing and ensuring the competency of key people throughout the system is inadequate. There is often no differentiation in competency requirements for those working on high-rise and complex buildings.
- Compliance, enforcement and sanctions processes are too weak. What is being designed is not what is being built and there is a lack of robust change control. The lack of meaningful sanctions does not drive the right behaviours.
- The route for residents to escalate concerns is unclear and inadequate.
- The system of product testing, marketing and quality assurance is not clear.

Direction of travel

The Independent Review will now undertake its second phase of work and publish a final report in spring 2018. This will include targeted work in partnership with the sector and other stakeholders. This interim report sets the direction for change that will underpin that report and covers six broad areas.

Regulation and guidance

- The rules for ensuring high-rise and other complex buildings are built safe and remain safe should be more risk-based and proportionate. Those responsible for high-risk and complex buildings should be held to account to a higher degree.
- There should be a shift away from government solely holding the burden for updating and maintaining guidance, towards greater responsibility for the sector to specify solutions which meet the government's functional standards.
- Regulations and guidance must be simplified and unambiguous.

Roles and responsibilities

- Primary responsibility for ensuring that buildings are fit for purpose must rest with those who commission, design and build the project. Responsibility and accountability must rest with clearly identifiable senior individuals and not be wholly dispersed through the supply chain.
- Roles and responsibilities across the whole life cycle of a building must be clearer.

Competence

- There is a need to raise levels of competence and establish formal accreditation of those engaged in the fire prevention aspects of the design, construction, inspection and maintenance of high-rise residential and complex buildings.

Process, compliance and enforcement

- There needs to be a golden thread for high-rise residential and complex buildings so that the original design intent, and any subsequent changes or refurbishment, are recorded and properly reviewed, along with regular reviews of overall building integrity.
- There is a need for stronger and more effective enforcement activity, backed up with sufficiently powerful sanctions for the few who do not follow the rules.

Residents' voice and raising concerns

- Residents need to be reassured that an effective system is in place to maintain safety in their homes.
- There must be a clear, quick and effective route for residents' concerns to be addressed.

Quality assurance and products

- Products must be properly tested and certified and there is a need to ensure oversight of the quality of installation work.
- Marketing of products must be clear and easy to interpret.

Conclusion

In summary, this is a call to action for an entire industry and those parts of government that oversee it. True and lasting change will require a universal shift in culture. The industry has shown this is possible in the way the health and safety of construction workers has seen a positive transformation in culture and practice over the last decade. This change needs to start now. A summit will be called in early 2018 with key stakeholders to discuss taking this work forward.

Chapter 1 Findings and direction of travel

Contents

Background

1.1
The government announced an independent forward-looking review of building regulations and fire safety on 28 July 2017. This review was commissioned by the Secretary of State for the Department for Communities and Local Government (DCLG) and the Home Secretary as part of the ongoing response to the Grenfell Tower disaster.

1.2
As set out in the review's terms of reference,[1] published on 30 August, this review is running in parallel with the work of the Grenfell Tower Inquiry. The review is independent and covers the system of regulation for all high-rise residential buildings. It will, however, provide useful background and input into the Inquiry.

1.3
The review team was formed in August 2017, led by Dame Judith Hackitt DBE FREng, and charged with providing an interim report in 2017 and a final report by spring 2018. The production of this interim report marks the first key milestone in the review. It is an important opportunity to share the findings so far and to indicate the proposed direction of travel for the final report.

1 Independent Review terms of reference available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/640790/Hackitt_Review_terms_of_reference.pdf

Review methodology

1.4
From the outset, the work of the review has taken a systemic view of fire safety, focused on the overall regulatory system and not on the detail of specific requirements. In order to do this, the review has used a range of techniques:

- Research into the history of the regulatory system. A short summary is included at Chapter 2.
- An in-depth mapping exercise, developed through a series of workshops, covering the regulatory system throughout the life cycle of a building. This sets out how the current system is supposed to work, and how it actually works in practice, from initial planning and design through to construction, completion, handover, ongoing use and improvement/modification. The map includes other relevant areas of legislation which overlap with building regulations and fire safety regulations, including the Housing Act 2004, the Health and Safety at Work etc. Act 1974 and Construction (Design and Management) Regulations 2015. This is included at Chapter 3.
- A call for evidence was issued in September and received more than 250 responses. These responses are well considered and offer hundreds of suggestions for improvements to the system. A summary and analysis are included at Chapter 4.
- The review has engaged with a large number of stakeholders (see Appendix C for details). In addition, the themes arising from the call for evidence have been explored at a series of roundtable events which took place during November. An overview is included at Chapter 4.
- A series of meetings and visits have taken place to gather information on other international regulatory regimes for fire safety and to gain a better understanding of regulatory systems in other sectors with comparable levels of safety risk. More detail is set out in Chapter 5.

1.5
The terms of reference of the review[2] set out that it should have a 'particular focus' on high-rise residential buildings, while recognising that it will cover the regulatory system for all buildings. It became clear, when thinking about a proportionate approach for different types of building, that it would not always make sense to separate high-rise residential buildings from other large or complex buildings where many people live or stay. This report therefore refers to either high-rise residential buildings or to 'complex and high-risk' buildings. This latter category includes other buildings for which exceptional events could lead to the risk of large-scale fatalities; for example, other purpose-built flats, student accommodation and sheltered housing. The review will provide a more precise definition of 'complex and high-risk' categories for future government use in its final report.

2 Independent Review terms of reference available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/640790/Hackitt_Review_terms_of_reference.pdf

Findings to date

1.6
The overall conclusion is that the current regulatory system is not fit for purpose in relation to high-rise and complex buildings. The following sections highlight the major concerns based on the evidence gathered to date.

1.7
It became clear quite early in the review that there is a need for significant improvement in the current system in a number of areas. These relate to matters of:

- regulation and guidance;
- roles and responsibilities;
- competence;
- process, compliance and enforcement;
- residents' voice and raising concerns; and
- quality assurance and products.

Regulation and guidance

Current regulation and guidance is both complex and unclear

1.8
The Building Regulations 2010 are clear about the outcomes to be achieved but not about where responsibilities lie.

1.9
There is widespread confusion about what constitutes the regulations and what is guidance. The guidance on ways to meet the Building Regulations, set out in the Approved Documents, are frequently referred to as 'the regulations'.

1.10
The Approved Documents are not produced in a user-friendly format. The current format of covering each requirement (fire safety, thermal insulation, noise abatement, etc.) in separate sections leads to multiple, separate specifications for overlapping or common elements of a building, with no easy means for these to be integrated into a single, compliant specification.

1.11
Key definitions are unclear; for example, 'high rise', 'persons carrying out the work', 'limited combustibility' and 'material alteration', leaving too much open to interpretation.

1.12
The Building Regulations Advisory Committee (BRAC) for England has a statutory role to advise government on the Building Regulations. Its focus over recent years has been mainly on energy efficiency and the deregulatory agenda and less on fire safety and other aspects of the regulations. While this has been in line with prevailing government policy and the trend in the evidence base of a declining number of fire deaths year on year, it is not clear whether BRAC's role is to proactively advise on initiatives and priorities or purely to take direction from government.

Roles and responsibilities

Clarity of roles and responsibilities within the system is poor

1.13
There is a general lack of clarity around, or statement of, roles and responsibilities throughout the system.

1.14
Even where there are requirements for key activities to take place it is not always clear who has responsibility for making these happen.

1.15
There is no requirement for identifiable, named dutyholders responsible for ensuring and proving compliance with the Building Regulations.

1.16
'Responsible persons' under the Regulatory Reform (Fire Safety) Order 2005 are frequently not identified when the building is due to be handed over following construction and therefore people are not aware of their responsibilities and often assume they are for someone else to do.

1.17
There is a widespread culture in relation to building and fire standards of waiting to be told what to do by regulators rather than taking responsibility for building to correct standards. The approach is very much driven by aiming for minimum compliance, not ensuring safety for the lifetime of the building.

1.18
Even where regulations or guidance call upon people to consult with others in the system as part of meeting the requirements of the legislation, there is no clear understanding of the need to do that at an appropriate time or to take account of views expressed.

Competence

The means of assessing and ensuring appropriate levels of competence throughout the system are unclear and inadequate

1.19
The competence of those involved in the design, construction, ongoing operational management and maintenance of complex and high-risk buildings has been called into question. While there are many instances of competent people planning, building and maintaining buildings in a conscientious way, there is no consistent way to assess or verify their competence. Numerous examples have been quoted, demonstrating lack of competence among designers, builders, fire engineers, fire consultants, fire risk assessors, building control inspectors and others, which compromises the fire safety of buildings.

1.20
In particular, for fire risk assessors undertaking risk assessments on complex and high-risk buildings there are no statutory registration or accreditation requirements.

1.21
Private sector Approved Inspectors are required under legislation and their code of conduct to demonstrate and maintain relevant qualifications and experience and are subject to audit by an independent body, whereas there is no such statutory competence framework for Local Authority Building Control inspectors (LABCs).

1.22
Some safety-critical tradespeople, for example gas engineers, must be registered for different types of work, but others do not have such requirements.

1.23
This is one area where England and Wales appears to be lagging behind many other parts of the world that require key personnel throughout the system to be properly trained, assessed and in many cases licensed to carry out specific roles.

Process, compliance and enforcement

Enforcement and sanction measures are poor and do not provide adequate means of compliance assurance, deterrence or redress for non-compliance

1.24
There is widespread deviation from what is originally designed to what is actually built, without clear and consistent requirements to seek authorisation or review, or to document changes made. The current trend for 'design and build' contracts (where a main contractor is appointed to design and build the project rather than the client appointing separate designers and contractors) has been identified as being particularly problematic in facilitating evolutionary design, which fails to be properly documented or reviewed.

1.25
There is no requirement in the Building Regulations for existing buildings to be brought up to the latest fire safety standards, as long as during any refurbishment the existing provisions are not made worse.

1.26
Across the life cycle of a complex and high-risk building, the different regulations that apply can overlap, and have varying approaches to responsibility and demonstrating compliance.

1.27
There is evidence of a number of key control stages of the process not being followed as intended; for example, the handover of fire safety information and the issuing of Completion Certificates.

1.28
There are wide differences of view regarding the benefits of the partial privatisation model introduced into building control which offers a choice between LABCs and private sector Approved Inspectors. The latter are perceived to be less independent of the clients and have no means of enforcement action available to them other than to refer cases to LABCs. This referral process is rarely used.

1.29
While informal enforcement activity by building control bodies generally leads to compliance, where non-compliance is identified, LABCs are deterred from taking formal enforcement actions by the cost of pursuing cases through the courts, and the historical failure of the courts to impose robust sanctions.

1.30
Some instances of non-compliance are not picked up at all because key work is encapsulated within the fabric of the building before being inspected. The review has heard repeatedly that construction often begins before the full plans have been approved by building control.

1.31
The information flow and documented evidence provided by developers to building control bodies does not provide an adequate public record to ensure building safety throughout the life of the building.

1.32
Information provided to residents of complex and high-risk buildings on the key fire safety measures, their importance and residents' responsibilities is highly variable and too often non-existent.

1.33
Fire and rescue service[3] personnel may raise concerns about compliance with the Fire Safety Order which are not acted upon because of cost, because the building work is too far advanced to make changes or because their advice is ignored.

1.34
Once a building is occupied there is a requirement for a fire risk assessment to be carried out regularly by a 'responsible person', but no requirement for this to be reported to a regulator or for this to be shared with residents.

Residents' voice and raising concerns

The route for residents' concerns to be raised and addressed is unclear and inadequate

1.35
Multiple occupancy residential buildings often have complex ownership and management models involving managing agents, varying leasehold contracts, residents' associations and so on, making it difficult to identify who to contact to raise concerns or to get responses to concerns when raised.

1.36
Roundtable discussions with residents have shown wide variation in practice by landlords from the very good to non-existent. We have heard from residents who are afraid to raise concerns for fear of eviction, and about the particular difficulties of reporting on things which involve the activities of other residents – their neighbours.

1.37
Many of the problems which are reported and fixed, for example propping open of fire doors or obstructions in access ways, very quickly revert to being a problem and there is no effective means of ensuring that residents meet their responsibilities to their fellow residents.

1.38
Regulators often face similar problems in getting concerns and defects addressed following investigation.

Quality assurance and products

Current methods for testing, certification and marketing of construction products and systems are not clear

1.39
DCLG's Building Safety Programme identified more than 200 high-rise residential buildings across England fitted with aluminium composite materials cladding systems that are likely to present a fire hazard. There does not appear to be a single, simple reason to explain why so many buildings are affected.

1.40
Products are marketed with specification data presented in ways which can easily be misinterpreted.

1.41
Individual elements are being used as part of compound systems that are not being fully tested as systems.

1.42
The widespread use of desktop studies to assess equivalence of products and systems

3 Fire and rescue services are the delivery body of fire and rescue authorities (the enforcing authority for the Regulatory Reform (Fire Safety) Order 2005). In this report we use the term fire and rescue services.

is not properly managed or controlled in terms of both the circumstances in which they can be used and the qualifications and experience of those undertaking them.

1.43
Test results, desktop studies, and the details of those who produce them, are not made public.

1.44
A number of people engaged in the system have said that the test conditions used do not adequately reflect real-life conditions.

1.45
The integrity and efficacy of product and system classifications are highly dependent on correct installation by competent and knowledgeable persons.

International regulatory regimes

There are some lessons to be learned and applied from other international regulatory regimes

1.46
Fires in high-rise buildings have occurred elsewhere in the world and a number of corrective measures have been put in place or are under consideration. The review will use examples of what has worked well in other countries to support the work during phase two.

1.47
A number of other regulatory regimes have more stringent standards for fire protection and require key roles within the system to be formally licensed.

1.48
Other countries have been more proactive in requiring formal accreditation of those engaged in all aspects of high-risk buildings.

1.49
Some countries have been more proactive in calling for the retrospective upgrade of existing buildings.

Other regulatory systems

There could be greater alignment of the regulatory regime for building and fire safety with other regulatory systems

1.50
A number of respondents have cited the greater clarity and effectiveness of UK health and safety legislation in relation to construction and, in particular, the Construction (Design and Management) Regulations 2015 which is due to the clearer assignment of roles and responsibilities.

1.51
There has been a widespread call for greater consistency of use of terms to identify key responsibilities within the system.

1.52
There is also significant scope for greater collaboration, intelligence sharing and combined inspections by regulators.

Direction of travel for phase two of the review

1.53
The review's findings to date indicate that there is a clear need for a full overhaul of the regulatory system to address the wide-ranging issues outlined. This includes roles and responsibilities, competence and the lack of a joined up, effective system to deliver and sustain complex and high-risk buildings which are fit for purpose.

1.54
Phase two of this review will focus on defining a revised regulatory system which will be simpler, clearer to all involved and deliver better overall outcomes. It will be important for this revised system to continue to allow innovation in building design and construction and not introduce disproportionate delays or cost into building processes. Any additional time spent at the front end of designing and specifying a building is likely to yield significant benefits in time, cost and safety in construction and throughout the building's life cycle.

1.55
The revised system must be risk-based and proportionate and therefore not burden low-risk, small-scale or simple projects with requirements which are intended for complex and high-risk buildings where both the risk and consequences of catastrophic events are intrinsically considerably higher.

1.56
Many of the findings to date clearly identify the need for a major cultural shift across all of those who are part of the system within the construction, operation and maintenance of complex and high-risk buildings. The focus must shift from achieving lowest cost to providing buildings which are safe and fit for people to live in for years to come. Work on developing some elements which will be required within a new system can be started now and can be delivered by a range of organisations. This is not simply a task for central government through revised legislation.

1.57
The following section sets out the direction of travel in more detail. The challenge for phase two of the review will be to establish how the aspirations set out below can best be delivered and to bring forward recommendations to support this delivery. Stakeholders should prepare themselves for an early call to action to create a more effective regulatory system. The review is keen to work with residents and other stakeholders on shaping these recommendations.

Direction of travel – Regulation and guidance

1.58
The regulatory system needs to become more risk-based. Simple guidance which covers all elements of what is required to build simple residential dwellings would be much more accessible and user-friendly than the current detailed, tram-lined system of guidance. These simple types of dwellings are also handed over at the end of the process to a single owner.

1.59
In the case of complex and high-risk buildings with complex ownership and occupancy models, a more rigorous risk-based process must be put in place to ensure that building integrity is maintained throughout the life cycle. It is important that the construction and maintenance of these buildings is treated proportionately and that those responsible for such buildings are held to account to a higher degree.

1.60
To implement a risk-based system it will be necessary to define what we consider to be 'complex and high-risk buildings'. It is envisaged that this would include buildings where multiple people live or stay and for which exceptional events could lead to the risk of large-scale fatalities.

1.61
The current system of building regulation relies heavily on central government to keep all regulations and supporting documents up to date, advised by BRAC, a statutory body with wide representation. It is inappropriate for the burden of keeping up to date with technology to rest solely with government in this way. It is clearly the role of government to set the basic framework of standards which must be achieved and to make it clear who has responsibility for delivering those standards of performance throughout the life cycle. However, it should not be for government to lead on the specification of the detailed solutions as to how those standards will be met. The scope of BRAC's role in the future should be considered in this context.

1.62
Most responses to the call for evidence have indicated that there is a need for Approved Document B to be simplified and brought up to date. The usability of all of the Approved Documents could be significantly improved by more fundamental changes to their structure which would also close a number of the current gaps which are left open to interpretation and confusion.

1.63
Recommendation: The government should consider how the suite of Approved Documents could be structured and ordered to provide a more streamlined, holistic view while retaining the right level of relevant technical detail, with input from the Building Regulations Advisory Committee. Given that reframing the suite of guidance may take some time, in the meantime I would ask the government to consider any presentational changes that will improve the clarity of Approved Document B as an interim measure.

Direction of travel – Roles and responsibilities

1.64
Primary responsibility for ensuring that buildings are built to the correct standards and are fit for purpose must rest with those who commission the work and those who design and build the project. Those commissioning must ensure that those they commission to do the work have the right levels of competence and are appropriately supervised.

1.65
Responsibilities must not be dispersed through the chain as they are now. Even in an environment where there are multiple layers of sub-contracting there must be a clear, responsible dutyholder who is held to account for the performance or non-performance of all of those to whom sub-contracts are let at all stages in the life of a building.

1.66
It has also been observed that the use of 'value engineering' is almost always about cutting cost out of a project, at times without due reference to key specification requirements. Such processes must be undertaken by those with the responsibility and the competence to ensure the integrity of the building design and function, especially when considering the equivalence of substituted materials.

1.67
Given the extent of innovation which is taking place in industry there should be greater industry responsibility for demonstrating that all buildings are designed and built to be fit for purpose, including the introduction of new techniques and materials into construction.

1.68
The role of regulators should be to seek assurance that standards are being adhered to throughout all stages of construction and use. It is for industry to demonstrate to the regulators that compliance with those standards is being achieved, including through innovation. Where there is failure to comply there must be a more effective means of ensuring not only that the deficiencies are put right but that those who were responsible for compliance with the standards are held accountable for their failure.

1.69
After completion and handover of a building there must be clear responsibility assigned to a known person or persons for ensuring that the building remains fit for purpose throughout its life cycle. Where and when ownership changes, responsibilities must also be formally handed over.

1.70
The assignment of responsibilities in blocks of flats, where there are boundaries between areas which are the responsibility of residents and those which fall to landlords or owners, must be clarified. The definition of the 'common parts' of such buildings, and clarification of who is qualified and able to properly inspect both common areas and individual properties, are critical elements of maintaining overall building integrity but are currently unclear due to the confusing overlap between the Housing Health and Safety Rating System Regulations 2005 and the Fire Safety Order.

Direction of travel – Competence

1.71
Those working on complex and high-risk buildings need to have the appropriate qualifications and experience and be able to evidence that qualification and experience. The design, construction, inspection and maintenance of complex buildings would normally require a higher degree of competence and expertise than that of small-scale or simple buildings.

1.72
The task of raising levels of competence and establishing formal accreditation of those engaged at every stage of design, construction, inspection and maintenance of complex and high-risk buildings can and should be led by those professional bodies which cover the sector. The system needs to be designed to ensure that competence is measured, is made transparent to those engaging the individuals and has a means of recourse in the event that work delivered is substandard. This is a challenge to the current less rigorous and disjointed approach to registration or certification which allows many individuals to practice with questionable qualifications or without a requirement for competence to be assessed and accredited.

1.73
Recommendation: There is a need to be certain that those working on the design, construction, inspection and maintenance of complex and high-risk buildings are suitably qualified.

The professional and accreditation bodies have an opportunity to demonstrate that they are capable of establishing a robust, comprehensive and coherent system covering all disciplines for work on such buildings. If they are able to come together and develop a joined up system covering all levels of qualification in relevant disciplines, this will provide the framework for regulation to mandate the use of suitable, qualified professionals who can demonstrate that their skills are up to date. This should cover as a minimum:

- engineers;
- those installing and maintaining fire safety systems and other safety-critical systems;
- fire engineers;
- fire risk assessors;
- fire safety enforcing officers; and
- building control inspectors.

I would ask these bodies to work together now to propose such a system as soon as practicable. I will launch this work at a summit in early 2018.

Direction of travel – Process, compliance and enforcement

1.74
The current interaction of different regulatory regimes leads to a complex system with different bodies responsible for enforcement and a varied approach to assurance and demonstrating compliance. The whole process needs to be streamlined and made consistent.

1.75
There is a need to ensure that the right people are engaged and consulted at the earliest stages of complex projects and that their views are taken into account at the design stage. This is particularly important in relation to fire safety.

1.76
Recommendation: Consultation with the fire and rescue services is required on plans for buildings that are covered by the Fire Safety Order, but does not work as intended. Consultation by building control bodies and by those commissioning or designing buildings should take place early in the process and fire and rescue service advice should be fully taken into account. The aim should be to secure their input and support at the earliest stage possible so that fire safety can be fully designed in.

1.77
There needs to be a golden thread for all complex and high-risk building projects so that the original design intent is preserved and recorded, and any changes go through a formal review process involving people who are competent and who understand the key features of the design.

1.78
When a building or part of a building is completed, there is a need for the project as built to be documented. A thorough, independent review needs to take place and a handover process completed before the building, or part of the building, can be occupied. Phased occupation of buildings does occur and, where it does, this must be handled rigorously with a clear handover process. During the next phase of work the review will conduct further research into the potential for Building Information Modelling (BIM) to transfer the documentation process onto a digital platform.

1.79
Recommendation: Building developers need to ensure that there is a formal review and handover process ahead of occupation of any part of a new high-rise residential building. While there are legitimate reasons to allow

occupation in a phased way, the practice of allowing occupancy of buildings without proper review and handover presents barriers to the implementation of any remedial measures identified as part of the completion process.

1.80

Recommendation: There is a need for building control bodies to do more to assure that fire safety information for a building is provided by the person completing the building work to the responsible person for the building in occupation. Given the importance of such information for ongoing maintenance and fire risk assessment, proof should be sought that it has been transferred.

1.81

Once a complex and high-risk building is occupied and in use, there must be a clearly identified responsible person who continues to monitor the condition of the building and is responsible for all changes and maintenance work carried out within it. It must be clear to occupants and anyone who works in the building who that responsible person is, and they must be held to account. Residents must be provided with clear guidance on how to proceed if they choose to carry out work themselves or bring in contractors to their own flats.

1.82

Future modification and upgrade to complex and high-risk buildings must be subject to the same rigorous processes as during original construction and must be undertaken with reference to the original design criteria. Changes must be formally reviewed by competent professionals, documented after completion and formally handed over.

1.83

Complex and high-risk buildings must also be subject to regular and thorough reviews of their overall integrity, even if they are not subject to major change. The integrity of such buildings can be compromised by a series of minor changes which lead to a cumulative degradation of protection. It is envisaged that these reviews would be the responsibility of the building owner but must be reported to the regulator and accessible information about them made available to residents. It may also be of interest to those who underwrite the risk for such buildings.

1.84

Recommendation: It is currently the case under the Fire Safety Order that fire risk assessments for high-rise residential buildings must be carried out 'regularly'. It is recommended that the responsible person ensures these are undertaken at least annually and when any significant alterations are made to the building. These risk assessments should be shared in an accessible way with the residents who live within that building and notified to the fire and rescue service.

1.85

The lifetime of a building in use is orders of magnitude more than the time spent on its construction. Integrity must be maintained throughout the life cycle. Technology does not stand still and as new methods of improving the safety of buildings become available it is not sufficient for regulation only to make these a requirement for buildings of the future. There is a responsibility to give due consideration to what it is reasonable and practicable to do to upgrade and improve the fire safety of existing facilities throughout their lifespan, not merely to ensure that they do not deteriorate beyond how they were originally designed and built.

1.86

There needs to be a demonstration that there are sufficient layers of protection to ensure that building safety does not rely heavily on compartmentation. There is a high risk of compartmentation being breached during building use, whether as the result of residents' own actions or of maintenance work carried out in the whole building. There are a range of fire protection measures that can be retrofitted to or amended in existing buildings; for example, extra staircases and smoke ventilation or sprinkler systems. Rather than prescribe one measure over others, it should be for building owners and landlords, with the right expert advice and the involvement of residents, to demonstrate that appropriate risk mitigation measures are in place.

1.87

There is a need for stronger and more effective enforcement within the system but this requires the necessary resources to be available and demonstrably independent. Those charged with enforcing must have appropriate enforcement powers accompanied by sanctions and penalties which are suitably severe.

1.88

The cost of achieving compliance must be significantly less than the sanctions which may be imposed on those who do not follow the rules and fail to achieve the standards set, in order to create the right incentive to comply and a deterrent to seeking to circumnavigate requirements.

1.89
The current model of partial privatisation with clients being able to decide whether to choose between the use of LABCs or Approved Inspectors does not resolve the enforcement issue, raises concerns about independence and adds pressure on the resources within local authorities. While there may be scope to continue with a partial privatisation of the market, it is essential that effective enforcement is ensured and the work of Approved Inspectors is demonstrably independent.

Direction of travel – Residents' voice and raising concerns

1.90
Residents need to be reassured that an effective system is in place to maintain safety in the buildings which are their homes. Their trust in the current system has been shaken and needs to be rebuilt by a more transparent system in which residents feel included, not 'done to' by others without consultation.

1.91
Many residents have told us that they have good systems in place and good relations with their landlords. However, where this is not the case, there should be a clear, quick and effective route established for residents' concerns on fire safety to be raised and addressed with an external enforcement body. Many have expressed the wish for this to include the fire and rescue services.

1.92
The results of regular surveys of building integrity must be shared with the residents and they should be consulted about plans to modify buildings. It is also important for residents to understand the various layers of protection which are fundamental to fire safety.

Direction of travel – Quality assurance and products

1.93
It is important that products are properly tested, certified and marketed clearly, and that desktop studies are only used when appropriate, to ensure that suitable materials are used on different types of buildings, delivering the multiple different standards required. During phase two of this review, the case must be examined for a requirement for product testing data to be made transparent and publicly available and for a much clearer system of product classification and labelling.

1.94
Recommendation: The government should significantly restrict the use of desktop studies to approve changes to cladding and other systems to ensure that they are only used where appropriate and with sufficient, relevant test evidence. Those undertaking desktop studies must be able to demonstrate suitable competence. The industry should ensure that their use of desktop studies is responsible and in line with this aim.

1.95
A number of respondents have called for a reinstatement of the former role of Clerk of Works or similar to act as the primary gatekeeper of quality assurance on significant projects. There is a need to ensure oversight of the quality of installation work carried out as well as of the materials delivered to site and used.

Interim recommendations and challenges

1.96
While there is more work to be done to develop some of the ideas highlighted here and turn them into final recommendations, there are already some clear actions and initiatives which can and should be taken now, which would be entirely consistent with the likely future direction of travel. These are brought together below.

1.97
By way of underpinning all of these interim recommendations, the industry must recognise the need for significant cultural and behavioural change, where the sector demonstrates similar responsibility for the buildings they create as they have shown they can take for the safety of people working on construction projects under the Construction (Design and Management) Regulations 2015. There is no reason why this culture change cannot begin voluntarily now ahead of the final recommendations and any legislative changes. There is already evidence of good practice despite the shortcomings in the system itself.

A. **The government** should consider how the suite of Approved Documents could be structured and ordered to provide a more streamlined, holistic view while retaining the right level of relevant technical detail, with input from the Building Regulations Advisory Committee. Given that reframing the suite of guidance may take some time, in the meantime I would ask the government to consider any presentational changes that will improve the clarity of Approved Document B as an interim measure. (Paragraph 1.63)

B. There is a need to be certain that those working on the design, construction, inspection and maintenance of complex and high-risk buildings are suitably qualified. **The professional and accreditation bodies** have an opportunity to demonstrate that they are capable of establishing a robust, comprehensive and coherent system covering all disciplines for work on such buildings. If they are able to come together and develop a joined up system covering all levels of qualification in relevant disciplines, this will provide the framework for regulation to mandate the use of suitable, qualified professionals who can demonstrate that their skills are up to date. This should cover as a minimum:

- engineers;
- those installing and maintaining fire safety systems and other safety-critical systems;
- fire engineers;
- fire risk assessors;
- fire safety enforcing officers; and
- building control inspectors.

I would ask these bodies to work together now to propose such a system as soon as practicable. I will launch this work at a summit in early 2018. (Paragraph 1.73)

C. Consultation with the fire and rescue services is required on plans for buildings that are covered by the Fire Safety Order, but does not work as intended. Consultation by **building control bodies** and by **those commissioning or designing buildings** should take place early in the process and fire and rescue service advice should be fully taken into account. The aim should be to secure their input and support at the earliest stage possible so that fire safety can be fully designed in. (Paragraph 1.76)

D. **Building developers** need to ensure that there is a formal review and handover process ahead of occupation of any part of a new high-rise residential building. While there are legitimate reasons to allow occupation in a phased way, the practice of allowing occupancy of buildings without proper review and handover presents barriers to the implementation of any remedial measures identified as part of the completion process. (Paragraph 1.79)

E. There is a need for **building control bodies** to do more to assure that fire safety information for a building is provided by the person completing the building work to the responsible person for the building in occupation. Given the importance of such information for ongoing maintenance and fire risk assessment, proof should be sought that it has been transferred. (Paragraph 1.80)

F. It is currently the case under the Fire Safety Order that fire risk assessments for high-rise residential buildings must be carried out 'regularly'. It is recommended that **the responsible person** ensures these are undertaken at least annually and when any significant alterations are made to the building. These risk assessments should be shared in an accessible way with the residents who live within that building and notified to the fire and rescue service. (Paragraph 1.84)

G. **The government** should significantly restrict the use of desktop studies to approve changes to cladding and other systems to ensure that they are only used where appropriate and with sufficient, relevant test evidence. Those undertaking desktop studies must be able to demonstrate suitable competence. **The industry** should ensure that their use of desktop studies is responsible and in line with this aim. (Paragraph 1.94)

Next phase of the review

1.98
The review intends to focus on developing recommendations that will deliver the direction of travel set out above ahead of the final report.

1.99
The review has heard a range of views from the call for evidence and from our stakeholder engagement to date. As well as continuing to draw upon this evidence, the next phase will involve targeted work in partnership with the sector and other stakeholders in order to make rapid progress towards recommendations for the system in the final report.

1.100
The next milestone will be a summit in early 2018. Key stakeholders will be invited to attend this event which will set the direction and ensure co-ordination of the work we need a number of them to engage in during the spring in support of the development of the review's final recommendations.

1.101
We would welcome feedback on this report which can be sent to BuildingRegulationsandFireSafetyReview@communities.gsi.gov.uk or in writing to:

Independent Review of Building Regulations and Fire Safety
3rd Floor Fry Building
2 Marsham Street
London SW1P 4DF

Chapter 2 A brief history of the current regulatory system

Contents

Introduction

2.1
This chapter sets out a high-level history of the regulatory system, charting its developments and changes, contrasted with the latest fire incident trends. This overview provides useful background context on how the system has evolved, against which the mapping of the current system (Chapter 3) and the stakeholder engagement (Chapter 4) can be viewed.

Key findings

2.2
The legislative landscape has been built up in a piecemeal fashion – often by the government changing specific aspects in response to an event or disaster. In making recommendations for the future, this review is taking a systemic approach that looks at the full landscape as it is in order to design a system for the future that is more effective and more streamlined.

The evolution of building regulations and fire safety legislation

2.3
There is a long history of rules and restrictions in place in England to lower the risk of fire. In the aftermath of a disastrous fire in Southwark, London, during 1212, a council of 'reputable men' established a series of conditions that local buildings should meet, covering roofing materials, provisions for fire-fighting, distance between buildings and internal standards.[1] These policies are still recognisable today as the basic themes for fire safety concerns as they affect building specifications.

2.4
Following the Great Fire of London in 1666, the Rebuilding Acts (1667 and 1670) set standards for new construction in London to be based on stone instead of timber, with detailed requirements on the thickness of walls and heights of rooms within a building. Work was undertaken to widen streets to slow the spread of fire and reduce the time it would take for emergency help to arrive.

2.5
During the 18th and 19th centuries, in part inspired by a drive to raise standards of public health and factory conditions in industrialising Britain, a series of legislative initiatives set and improved building requirements with respect to fire hazards, created local requirements for specific cities, and established building control as an essential function in regulating new builds and major refurbishments.

2.6
Three key themes are evident in the history and evolution of the framework. First, government response to disasters driving changes in standards; second, the placing of responsibilities on different actors in the system – whether local authorities, fire authorities, building owners or 'responsible' persons; third, government initiatives to consolidate regulations and powers.

Recent milestone events in building regulations and fire safety

1965 – Building Regulations 1965

1968 – Ronan Point gas explosion

1969 – Rose and Crown Hotel fire

1970 – Report of the Departmental Committee on the Fire Service, Sir Ronald Holroyd

1971 – Fire Precautions Act 1971

1973 – Summerland fire, Isle of Man

1974 – Flixborough disaster

1974 – The Health and Safety at Work etc. Act 1974

1979 – Manchester Woolworths fire

1984 – The Building Act 1984

1985 – Bradford City stadium fire

1987 – The Fire Safety and Safety of Places of Sport Act 1987

1987 – King's Cross fire

1988 – Investigation into the King's Cross Underground fire, Desmond Fennell

1988 – The Furniture and Furnishings (Fire Safety) Regulations 1988

1988 – Piper Alpha disaster

1989 – The Fire Precautions (Sub-surface Railway Stations) Regulations 1989

1992 – The Workplace (Health, Safety and Welfare) Regulations 1992

1997 – The Fire Precautions (Workplace) Regulations 1997

1999 – Potential Risk of Fire Spread in Buildings via External Cladding Systems report, Environment, Transport and Regional Affairs Committee

1 Transcribed in Henry Thomas Riley, ed. (1860) *Munimenta Gildhallae Londoniensis: Liber Albus: Memorarum*, Rolls Series, no.12, vol.2, 86–88, as discussed on http://users.trytel.com/~tristan/towns/florilegium/community/cmfabr08.html

1999 – The Fire Precautions (Workplace) (Amendment) Regulations 1999

2004 – Fire Services and Rescue Act 2004

2004 – The Housing Act 2004

2005 – Buncefield fire

2006 – The Regulatory Reform (Fire Safety) Order 2005

2007 – The Construction (Design and Management) Regulations 2007

2009 – Lakanal House fire

2017 – Grenfell Tower fire

2.7
The Holroyd report[2] of 1970 paved the way for the first major consolidation of fire legislation, creating the division of authority within the regulatory system that remains to this day. This report recommended differentiating powers relating to new and altered buildings to be enforced by building control, and those for occupied buildings to be enforced by the fire and rescue authorities. Since the Fire Services Act 1947, fire brigades have had a duty to provide advice on fire safety; in particular on fire prevention and means of escape. However, it was not until the Fire Precautions Act 1971 that safety provisions were enforced by brigades too. Designated buildings were required to apply for and hold a Fire Certificate, issued by the local fire and rescue service following a satisfactory inspection.

2.8
If the 11 fire deaths at the Rose and Crown Hotel, Saffron Walden (1969) helped to provide political impetus for the introduction of the Fire Precautions Act in 1971, then two other disasters illustrate how the regulatory system can evolve. In 1985, 56 people died in the Bradford City stadium fire, and, in 1987, 31 people died in the King's Cross fire. Reviews followed each tragedy, and the system was amended by new legislation in both cases – the Fire Safety and Safety of Places of Sport Act 1987 and the Fire Precautions (Sub-surface Railway Stations) Regulations 1989 respectively.

Case study: Summerland fire in Douglas, Isle of Man (1973)

The Summerland fire in Douglas, Isle of Man in 1973 was, at that time, the greatest loss of life on the British Isles since the Second World War. On 2 August 1973, a fire broke out at the relatively recently opened Summerland leisure complex. Around 3,000 people escaped and an estimated 50 people died.

The Summerland Fire Commission that followed concluded that there were many failings that contributed to the fire spread, including factors in the building's design and construction, defects in the means of escape and emergency lighting, the use of novel and improper materials, and lack of building control oversight. The commission also highlighted the role of miscommunication and how unclear responsibilities contributed to events:

"Mr De Lorka thought it was for Mr Harding to organise an evacuation procedure, but he never discussed it with him … Mr Harding thought it was for the heads of departments to organise their own evacuation procedure but he gave them no instructions about it. Mr Paxton, the Deputy Managing Director … thought it was for Mr Harding to organise an evacuation procedure and for Mr De Lorka to make sure he did it. Mr Dixon, the supervising Fire and Safety Officer … thought it was Mr De Lorka's duty … and no part of Mr Harding's duty."[3]

2.9
Following a series of significant reviews of fire safety legislation in the 1990s[4] and the growing complexity of the system over previous decades, the Regulatory Reform (Fire Safety) Order 2005 was introduced to clarify and change requirements for commercial buildings. Fire Certificates were abolished, with expectations placed firmly on "responsible persons" to manage the risk in their buildings by the completion of a fire risk assessment. As a result, fire and rescue services moved from a directive role in certain buildings to one of auditing.

2.10
The other major component of ensuring fire safety in occupied buildings comes through local authority powers established in the Housing Act

2 Holroyd, R. (1970) *Report of the Departmental Committee on the Fire Service*. Cmnd 4731. Her Majesty's Stationery Office.
3 Summerland Fire Commission (1974) *Report of the Summerland Fire Commission*. Government Office, Douglas, Isle of Man; as discussed in Turner, B.A., Pidgeon, N.F. (1998) *Man-Made Disasters*. Butterworth-Heinemann.
4 For example, Bickerdike Allen Partners (1990) *Fire and building regulations: a review*. Her Majesty's Stationery Office; Interdepartmental Review Team (1994) *Fire Safety Legislation and Enforcement*. The Department of Trade and Industry.

2004 and the Housing Health and Safety Rating System (HHSRS) Regulations 2005. Since the mid-19th century, local authorities have had the ability to regulate housing fitness and assess health and safety hazards. The Housing Act 1985 established a pass or fail Housing Fitness Standard test based on nine maintenance categories; however, this was seen as a blunt instrument, and so was replaced in 2005 with the HHSRS as a more powerful and objective assessment methodology. The HHSRS involves environmental health officers checking for the presence of 29 potential hazards, determining the likelihood of harm occurring if any of those hazards are present, and, if required, issuing sanctions to building owners where satisfactory remedial action is not taken.

2.11

On building regulations and control, the Public Health Act 1936 consolidated local requirements to create a national system of building control, providing a single set of standards for building work to comply with. However, the provisions were not mandatory, so local authorities across the country were able to maintain different approaches. It was not until the Building Regulations 1965 and the Building Control Act 1966 that all building work in England and Wales had to comply with a consolidated, mandatory and prescriptive set of rules.

High-rise residential buildings

2.12
Following the Second World War, high-rise blocks of flats were seen as a vital component of housing and development policy, encouraged by government subsidy provided in the Housing Subsidies Act 1956. Since the first tower block built in Harlow, Essex, at 10 storeys in 1951, best recent estimates are that around 800,000[5] people live in high-rise residential buildings and that there are around 10,000 residential buildings over 18 metres in England.[6]

2.13
The gas explosion at the 22-storey tower block Ronan Point, Newham, London, was one of the first safety-critical defining events relevant to high-rise buildings. On 16 May 1968, a gas explosion in the kitchen of the 18th-floor flat led to the collapse of an entire corner of the building causing 4 deaths and 17 injuries.

2.14
The Griffiths Review[7] was set up to consider the causes of the collapse, and determined that the building was structurally unsound, with consequences for other tower blocks of a similar type. Urgent appraisal and remedial strengthening work was carried out across the country, with many buildings condemned. The Griffiths Review concluded that Ronan Point was in fact in compliance with building regulations, remarking: "This is so manifestly an unsatisfactory state of affairs that it is necessary to enquire how it came about and to consider remedies for the future." Changes in regulations were swiftly brought about (indeed, building regulations were amended in many countries) and new British Standard structural design codes for concrete were introduced.[8] Ronan Point itself was demolished in 1986.

2.15
In 1991, a non-fatal fire in Knowsley Heights, Huyton, Merseyside, became an important example and case study for fires in high-rise buildings, due to the rapid extent of flame growth on the building's exterior cladding system. Subsequent research led to changes in the building regulations guidance, including a recommendation for 'fire stopping' measures between the cladding and the building itself.

2.16
Following the Knowsley Heights fire, as well as a fatal fire at Garnock Court flats, Irvine, Ayrshire (1999), a House of Commons committee was established to consider the particular risk of fire spread on external cladding systems.[9] The committee's recommendations led to updates of safety standards, an update to the BR 135 guidance,[10] establishment of the full-scale fire methodology BS 8414, and their direct reference in Approved Document B as a route-way for cladding systems to show compliance.

2.17
On 3 July 2009, six people died in a fire at Lakanal House, Camberwell, London. In their analysis and understanding of the fire, the Chief Fire and Rescue Adviser,[11] and the Assistant Deputy Coroner,[12] separately highlighted a range of issues, including: inconsistent fire safety advice available to occupants in some high-rise buildings, and in particular the role of the 'stay put' policy; the use of sprinklers, smoke alarms and other provisions; the role of

5 DCLG (2015) English Housing Survey, dwelling sample.
6 This figure has been derived from Ordnance Survey and EPC data. It is for buildings where at least 90% of the address points in the building are residential or where a residential address is on the sixth floor or above.
7 Griffiths, H., Pugsley, A. and Saunders, O. (1968) *Report of the inquiry into the collapse of flats at Ronan Point, Canning Town*. Her Majesty's Stationery Office.
8 Pearson, C. and Delatte, N. (2005) *Ronan Point Apartment Tower Collapse and its Effect on Building Codes*. Cleveland State University.
9 Environment, Transport and Regional Affairs Committee (1999) *Potential Risk of Fire Spread in Buildings via External Cladding Systems*. The Stationery Office.
10 Colwell, S. and Martin, B. (2003) *BR 135 – Fire performance of external thermal insulation for walls of multi-storey buildings*. 2nd edn. BRE Bookshop.
11 Knight, K. (2009) *Report to the Secretary of State by the Chief Fire and Rescue Adviser on the emerging issues arising from the fatal fire at Lakanal House, Camberwell on 3 July 2009*. Communities and Local Government Publications.
12 Letter from Assistant Deputy Coroner to RH Eric Pickles, 28 March 2013. Available at: moderngov.lambeth.gov.uk/sites/default/files/ec-letter-to-DCLG-pursuant-to-rule43-28March2013.pdf

fire risk assessments, and their relationship to high-rise buildings' common parts; and Approved Document B, including calling for its simplification.

2.18
In response to the issues raised, the Department for Communities and Local Government (DCLG) funded the Local Government Association (LGA) to develop with the sector new guidance for purpose-built blocks of flats;[13] and reviewed operational guidance and associated advice on 'stay put'. In February 2017, DCLG published a user survey for Approved Documents B and M as part of its work to improve the quality of its guidance.[14]

13 Local Government Association (2012) *Fire safety in purpose-built flats*. www.local.gov.uk/fire-safety-purpose-built-flats
14 DCLG (2017) *Usability Research – Approved Document B: Fire safety; Approved Document M: Access to and use of buildings*. www.gov.uk/government/publications/usability-research-building-regulations-approved-documents-b-and-m

Other developments around the management of risk – health and safety regulation

2.19
The Robens Report in 1972 significantly reshaped the occupational health and safety regulatory landscape.[15] It was prompted not simply by the contemporary toll in workplace deaths and injuries (around 1,000 people died each year in workplace accidents) but by a need to look critically both at the existing regulatory approach and how those involved in the wider system worked together to best effect.

2.20
Robens' conclusions had far-reaching effects. He concluded that the law was too prescriptive and piecemeal, set different standards in different industries and left some industrial sectors virtually unregulated. His report recommended creating a new framework built on a fundamental principle that whoever created a risk had a duty to manage it.

2.21
At the heart of this goal-setting approach was the principle of proportionality. The legal standard was to reduce risks 'so far as is reasonably practicable', which meant that the level of risk had to be balanced against the measures needed to control it in terms of money, time or trouble. Equally important, a dutyholder did not need to take action if it would be grossly disproportionate to the level of risk.

2.22
Health and safety legislation has also developed in the wake of serious incidents. Two significant change events were Flixborough in 1974 and Piper Alpha in 1988: 28 people died at a chemical plant explosion at Flixborough in Lincolnshire after flammable materials were released from poorly modified process plant; and 167 offshore workers died on the Piper Alpha oil production platform following a major hydrocarbon release.[16]

2.23
The regulatory response to both these incidents, and other similar events elsewhere in Europe, was to raise the bar on expectations for operators of hazardous plant and to create the concept of the 'safety case' (also referred to as a safety report). In these regimes the regulator gives permission to a dutyholder to carry out certain categories of intrinsically high-hazard work in direct contrast to the 'permissive' default setting on most other regimes where the dutyholder needs no such formal approval. This approach therefore adds an extra layer to the general framework of health and safety law. By design, it is also more resource intensive, both for dutyholders and regulators, and therefore normally used sparingly and only in circumstances where the added assurance is warranted in terms of the heightened hazard potential.

2.24
In a safety case/report regime, the dutyholder provides information to the regulator to demonstrate that they have considered what could go wrong in an installation, the worst consequences and to show that they have both preventive and reactive measures in place to manage the risks. When the regulator is content that the dutyholder has fulfilled the relevant requirement(s) they 'permit' operation. The dynamic nature of business also means that the regulator cannot do this on a one-off basis. The dutyholder has to seek a reassessment for any significant changes and the regulator also reviews safety cases/reports on a routine cycle to ensure that they remain relevant and focused.

2.25
The general pattern of legislative oversight in other industries follows a broadly similar pattern of defining specific roles and responsibilities to embed goal-setting. A parallel example arises in construction where, in order to improve standards on building sites, the current regulatory framework (The Construction (Design and Management) Regulations 2015 (CDM)) introduced a 'whole life cycle' approach from design through to construction, refurbishment and demolition. CDM is explicit in assigning unambiguous responsibilities to key people within the system to maintain the importance of both accountability and continuity.

15 Lord Robens (1972) *Safety and Health at Work – Volume 1 – Report of the Committee 1970-72*. Her Majesty's Stationery Office.
16 See Lord Cullen (1990) *The public inquiry into the Piper Alpha disaster*. Her Majesty's Stationery Office.

Fire casualties since the 1980s

2.26
This review is set in a context of falling numbers of fire casualties since the early 1980s. There is a range of factors attributed to this decline, many unrelated to building design; for example, lower smoking rates, reduced flammability of products in the home, greater public awareness of fire hazards following outreach and awareness campaigns, the introduction of safety requirements for electrical installations in dwellings, and the increased use of smoke alarms.

2.27
This long trend of falling fire incidents and casualties may mean that building and fire safety regulations have not received the priority that might otherwise have been the case. Yet incident trends tell us little about the likelihood of disasters and catastrophic events occurring.[17] This review will seek to put in place a system that provides assurance that the impact of any future disasters is minimised.

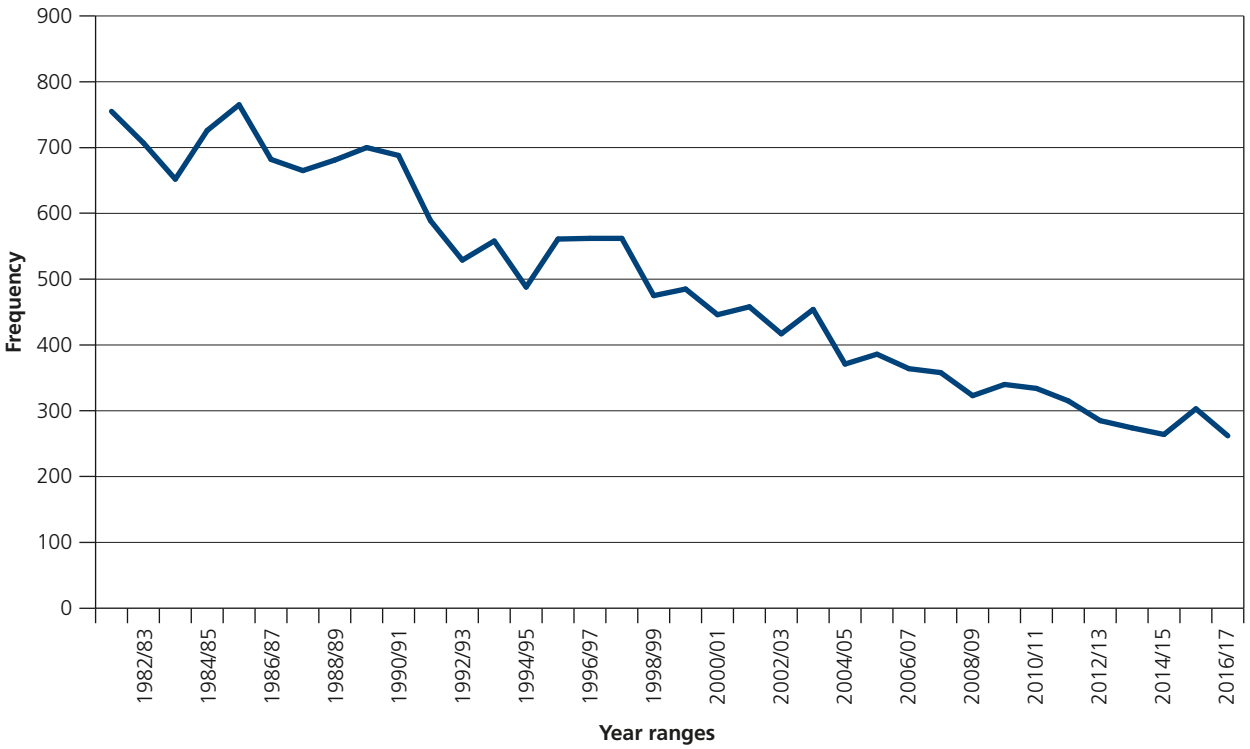

Figure 2.1: Total fire-related fatalities in England, 1981/82 to 2016/17[18]

17 As noted by, for example, Reason, J. (2015) *Organizational accidents revisited*, titled "The road to hell is paved with falling LTI [lost time injury] rates."
18 Home Office data available at: www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

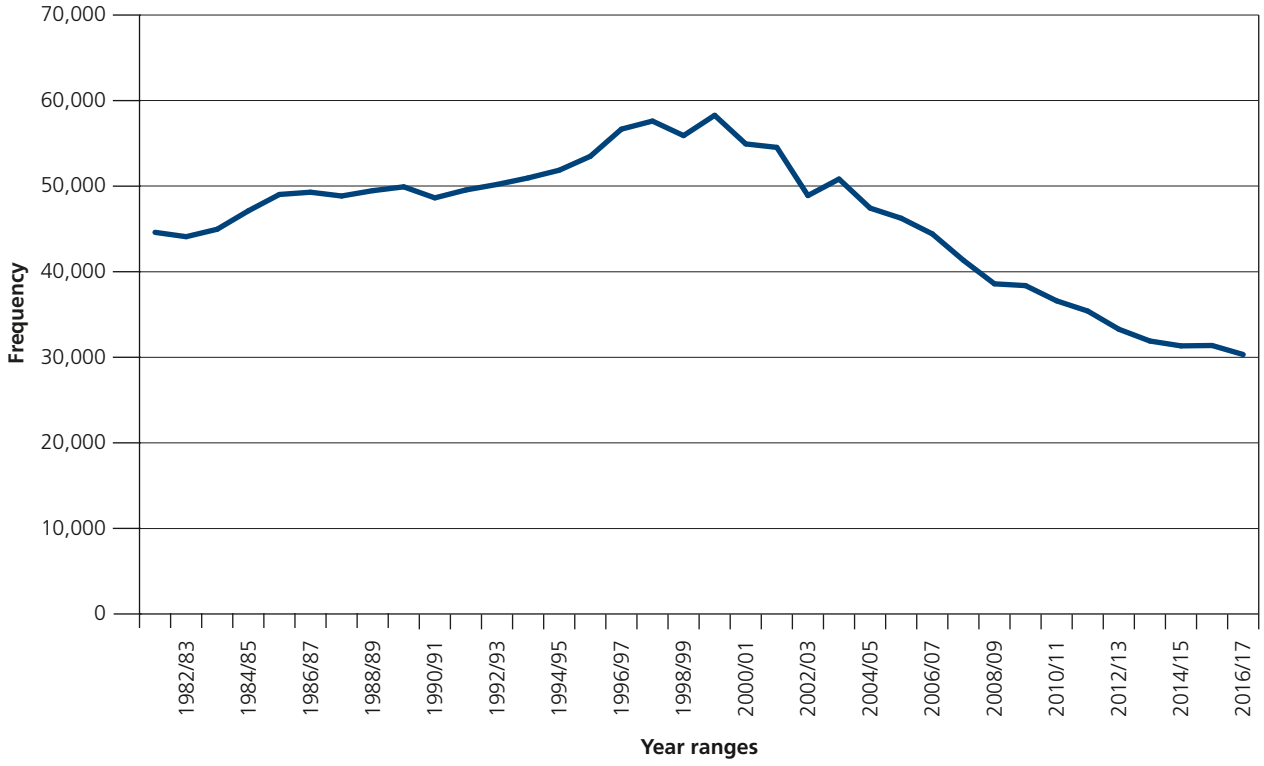

Figure 2.2: Total dwelling fires in England, 1981/82 to 2016/17[19]

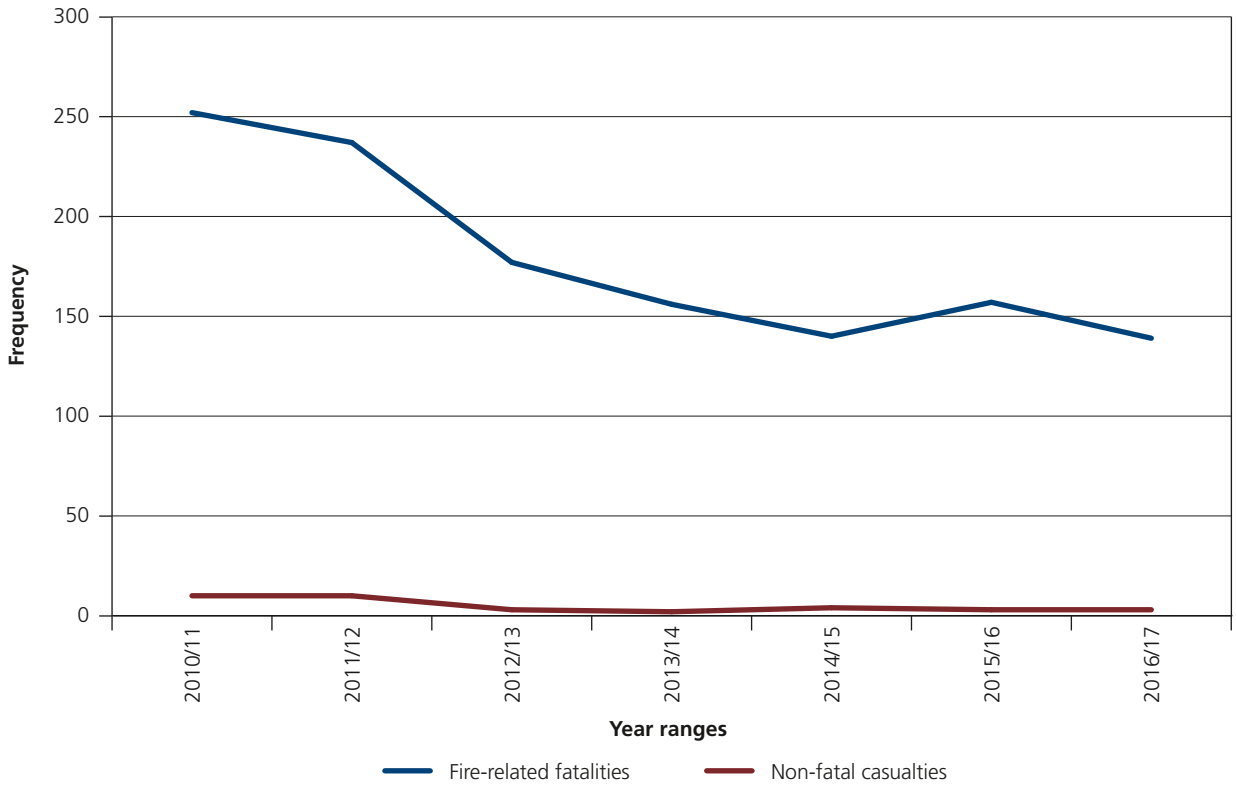

Figure 2.3: Fatalities and non-fatal casualties from fires in purpose-built high-rise flats (10+ storeys) in England, 2010/11 to 2016/17[20]

19 Home Office data available at: www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

20 Home Office data available at: www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables. Data only collected from 2009/10. Data for year ending June 2017 was published by the Home Office in November 2017, which included the casualties from the Grenfell fire.

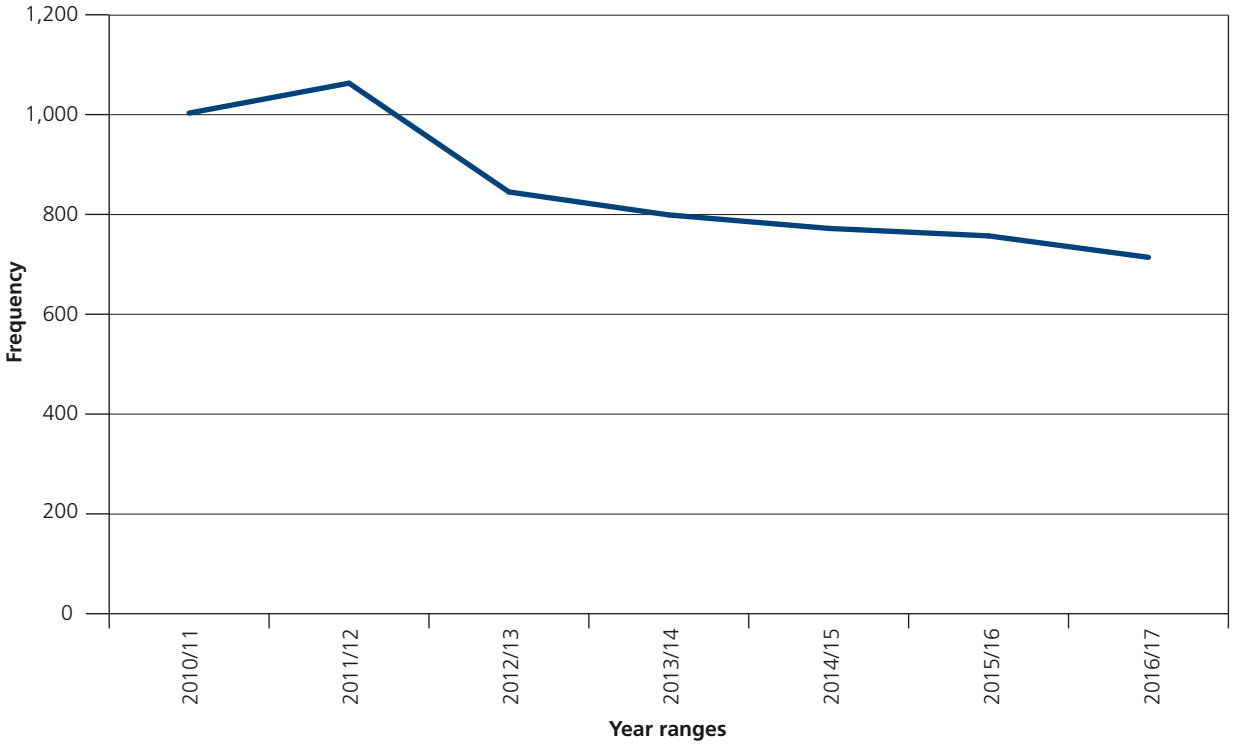

Figure 2.4: Total fires in purpose-built high-rise flats (10+ storeys) in England, 2010/11 to 2016/17[21]

21 Home Office data available at: www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

Chapter 3 The current regulatory landscape

Contents

Introduction

3.1
This chapter sets out a narrative description of the mapping work undertaken to support the Independent Review. This exercise has been an important building block in understanding the current environment within which buildings are constructed and maintained. It has also enabled the review to highlight areas where the current regulatory system appears weak, both in the way it is constructed and in the way it operates in practice.

Key findings

3.2
The overall system is highly complex with multiple requirements and accountabilities throughout the system. The mapping exercise has identified issues around the following:

- **There is a lack of clarity around key roles and responsibilities** – for example, there is: (a) a notable absence of a clear dutyholder during the building design and construction process; (b) a very stark handover of responsibility once building work is completed; and (c) a confusing overlap during occupation between the Regulatory Reform (Fire Safety) Order 2005 and the Housing Act 2004.
- **There is an imbalance between building designers/contractors and regulators** – the need for building control bodies (BCBs) to compete for business can sit uncomfortably with a proper consideration of fire safety design. In addition, there appears a significant amount of leeway for building designers/contractors to take action before their plans are properly considered without a rigorous change control process necessarily being in place.
- **There are confusing differences between the two types of building control processes** – the partial privatisation of building control services has led to some processes appearing unnecessarily different and this makes it more challenging to improve building control standards.
- **There are competence issues throughout the system** – the competency of individuals and the way of verifying their competence can be an issue for those designing and constructing a fire-safe building, those with responsibility for maintaining fire safety in an occupied building and those with regulatory oversight.
- **The enforcement/sanctions regime is not strong enough to underpin compliance** – sanction regimes exist but they are patchy, infrequently used and do not effectively drive compliance.
- **There are significant limitations in driving improvements to existing buildings** – the non-worsening principle in the Building Regulations 2010, combined with the limitations of the Fire Safety Order, mean there is little in the law to require meaningful improvements to the fire safety of existing buildings.

Methodology

3.3
The mapping work has been done by talking to relevant policy experts in the Department for Communities and Local Government (DCLG) and the Home Office and through discussions about current processes with key external stakeholders.

3.4
In Appendix D we have included an outline map of the current regulatory system. It is not intended to cover all detailed scenarios and contains our view of the system to date. It provides a crucial overview that is central to the thinking of this Interim Report. Extracts from the map are shown throughout this chapter.

Background – mapping the regulatory system

3.5
Buildings are subject to a complex **system** of requirements throughout their life cycle, covering the phases of planning, design, construction, occupation, refurbishment (and demolition).

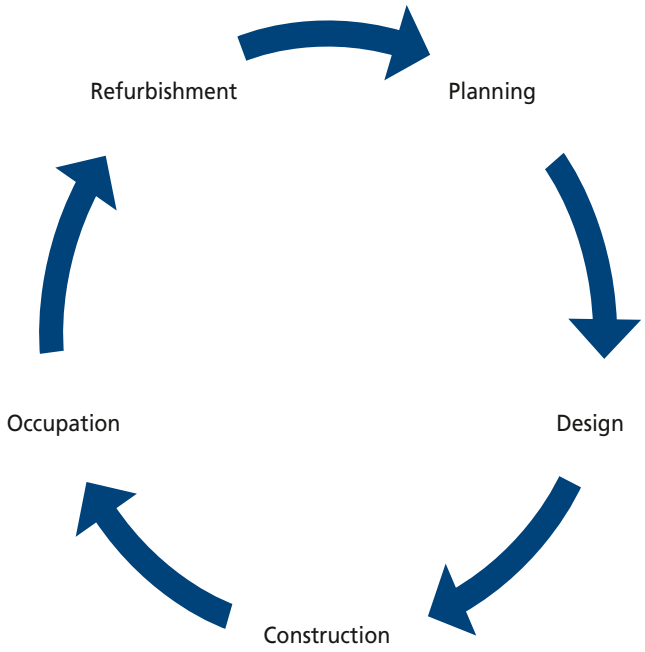

Figure 3.1: The life cycle of a building

3.6
By 'system', we mean the totality of formal and informal rules, processes, roles, powers, cultures, competencies and responsibilities applicable to the various people and organisations undertaking building work. As Chapter 1 made clear, there is a particular focus in this review on this regulatory system insofar as it applies to high-rise residential buildings through the lens of fire safety.

3.7
The complexity of the regulatory system comes partly from the sheer scale of requirements. There are several thousand pages of primary and secondary legislation, statutory and approved guidance, industry advice and competence frameworks within which specific fire safety requirements sit.

3.8
In addition, this complexity has been driven by adding further detailed requirements over time in response to specific government requirements. The requirements are multi-purposed, supporting government objectives. Fire safety is one of a number of areas covered, including structural integrity, provision of sanitation, and proper electrical installations. All of this has made it more difficult to combine the many requirements into a coherent system.

3.9
The review has focused on the following four core elements of the current regulatory system:

Stage 1 – The fire safety aspects of the regulatory framework surrounding the requirement to **secure planning permission** for the development of a new building – as primarily set out in the Town and Country Planning Act 1990.

Stage 2 – The fire safety aspects of the regulatory framework surrounding the **creation of a new building** – as primarily set out in the Building Act 1984, the Building Regulations 2010 and the Approved Documents (including construction materials and workmanship).

Stage 3 – The fire safety aspects of the regulatory framework surrounding the **handling of refurbishments**.

Stage 4 – The fire safety aspects of the regulatory framework surrounding the **occupation (and ongoing maintenance) of the common parts/ whole of a building** – as primarily set out in the Regulatory Reform (Fire Safety) Order 2005, associated fire risk assessment documents and the Housing Act 2004 and Housing Health and Safety Rating System Regulations 2005.

3.10
There are also a number of other relevant regulatory requirements such as those governing fire safety on the building site where a high rise is being constructed or refurbished (as primarily set out in the Construction (Design and Management) Regulations 2015). Other regulations that help to manage the risk of fires occurring/spreading in some premises (including the Furniture and Furnishings (Fire Safety) Regulations 1988 or the Smoke and Carbon Monoxide Alarm Regulations 2015) have not been included in this mapping exercise thus far.

3.11
The following sections of this chapter set out these four areas in turn, describing how the current rules broadly work (with a specific focus on fire safety) with some key observations about where the theory and practice differ and where this impacts on fire safety.

Stage 1 – The fire safety aspects of securing planning permission

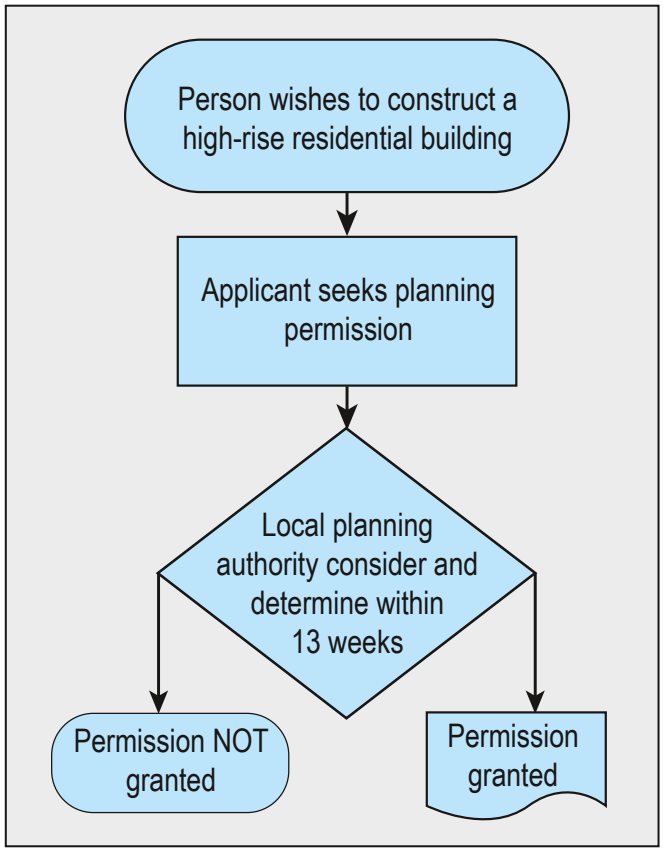

Figure 3.2: Securing planning permission for a high-rise building

3.12
An application for planning permission would be required for a new-build high-rise block of flats. The legislation underpinning the planning application process (primarily the Town and Country Planning Act 1990 and regulations) requires the client or those instructed by the client to make an application to their local planning authority (LPA). The law requires local authorities to determine planning applications in accordance with the provisions of the local development plan.[1] The LPA may consider aspects such as:

- the number, size, layout, siting and external appearance of buildings;
- the infrastructure needed to support the development, e.g. roads and water supply;
- the use of the buildings proposed; and
- the impact of the proposed development on the surrounding area, e.g. if it would create significantly greater traffic flows.

3.13
It is likely that most planning applications for new-build high-rise buildings will be classed as a 'major development', for which the decision-making period is 13 weeks. An appeal can be made against a refusal to grant planning permission.

3.14
The focus of the planning system is on the development and use of land. It is a general principle that planning should not seek to duplicate other regulatory regimes. In this context, fire safety considerations are not normally the subject of consideration at the planning application stage. An exception to this position is in relation to opportunities for emergency service vehicles to access buildings. Given the limited role of planning there is no requirement that the individuals making the application, or those considering it, have any specific fire safety-related knowledge. LPAs are required to consult certain bodies (known as statutory consultees) before granting planning permission for certain types of development. The two main regulatory authorities for the later stages in the building life cycle (BCBs and fire and rescue services) are not statutory consultees, as there is an understanding that fire safety issues will be picked up as part of the building control process.

1 Unless material considerations indicate otherwise.

Findings

We understand that all LPAs will consider vehicle access arrangements, including for emergency vehicles, where it is appropriate to do so as part of a planning application. Most LPAs will have their own local guidance on vehicular access to new developments. This is in addition to the government-issued *Manual for Streets*, which provides guidance to practitioners involved in the design, planning and approval of new residential streets and modifications to existing ones. This may throw up observations about the adequacy of vehicle access by the fire and rescue services, which the LPA can take into account. Although fire and rescue services may be consulted, the review understands that direct engagement with these services varies from LPA to LPA, which can result in some layout issues not emerging until Stage 2.

Stage 2 – The fire safety aspects around the creation of new buildings, including building control oversight

3.15
Fire safety plays an essential part of the regulatory system surrounding the design and construction of high-rise residential buildings. That system has two key aspects:

- First, legislation and guidance lay out a detailed set of performance-based requirements that the building work needs to meet on a whole range of areas including fire safety. Guidance sets out at length how those requirements can be met.
- Second, legislation creates statutory bodies known as BCBs to ensure effective oversight of those carrying out the work.

Overview of regulatory requirements

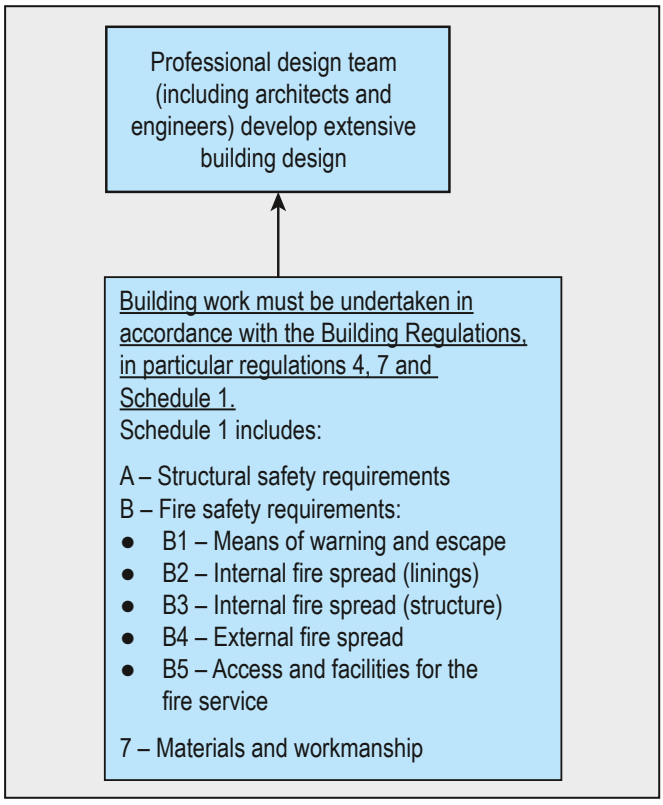

Figure 3.3: Regulatory requirements for new buildings

3.16
The Building Act 1984 is the key piece of legislation through which specific requirements relating to building standards are created. The Act says that on matters of building design, construction and demolition the government can make regulations for purposes such as:

- securing the health, safety, welfare and convenience of persons in or about buildings;
- furthering the conservation of fuel and power; and
- facilitating sustainable development.

3.17
These overarching purposes are translated into a set of functional requirements covering 15 different aspects of "building work". "Building work"[2] includes:

- the erection of a new building;
- the "material alteration" of an existing building;
- refurbishment of a building;
- work required due to a material change of use; and
- specific changes such as installing a boiler or insulation material, replacing windows or completing electrical work in dwellings.

2 Building Regulations 2010 regulation 3(1).

3.18
These 15 different sets of requirements are in Schedule 1 to the Building Regulations 2010 and cover requirements connected to many different aspects of a building's properties. Also critical is regulation 7, which covers the materials and workmanship that must underpin the building work.

The 15 sets of requirements under Schedule 1

Part A	Structure
Part B	**Fire safety**
Part C	Site preparation and resistance to contaminates and moisture
Part D	Toxic substances
Part E	Resistance to the passage of sound
Part F	Ventilation
Part G	Sanitation, hot water safety and water efficiency
Part H	Drainage and waste disposal
Part J	Combustion appliances and fuel storage systems
Part K	Protection from falling, collision and impact
Part L	Conservation of fuel and power
Part M	Access to and use of buildings
Part P	Electrical safety
Part Q	Security
Part R	Physical infrastructure for high-speed electronic communications networks

3.19
Each of these 15 areas in Schedule 1 contains a set of "performance-based requirements" (numbering around 75 in total). When building work is carried out it must meet all of the relevant requirements. Each of these requirements is intended to have equal importance.

3.20
Performance-based requirements are also known as 'goal-based' or 'substantive' or 'functional' requirements. These requirements set out the technical standards that building work must achieve once completed. This is in contrast to a 'prescriptive' system where there is a very specific list of instructions around precisely how any building must be constructed whatever purpose it is being used for and whoever will occupy it.

3.21
For example, the first performance-based requirement on fire safety is requirement **B1 – Means of warning and escape**. This says:

> The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

3.22
The use of the words "appropriate", "safely" and "effectively" are all indicators of a performance-based approach. So, under this approach, there is a requirement placed on those designing/constructing/refurbishing the building to critically evaluate the viability of their plans against the requirements in Schedule 1. Therefore, in the context of requirement B1 – Means of warning and escape, it should be the case that those completing the building work have a fundamental understanding of the relevant fire phenomena, wider fire safety issues and how any complex design proposals may impact on the ability of the building to provide an adequate means of warning or escape.

3.23
The key purpose of setting performance-based requirements is to allow greater flexibility in building design, to encourage innovation and support cost-efficiency. It also ensures that different designs and safety requirements can come into play depending on the purpose of the building; for example, a large-scale care home utilised mostly by elderly and infirm people is likely to need additional safety features in comparison with a warehouse. Having a performance-based system, which relies on sophisticated judgements, places increased reliance on the competence of those undertaking the design and construction of buildings and the skills and rigour of the regulators verifying the quality of the work that is done.

3.24

There are five performance-based requirements associated with fire safety in Schedule 1. These are set out below.

PART B FIRE SAFETY

B1 – Means of warning and escape

The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

B2 – Internal fire spread (linings)

(1) To inhibit the spread of fire within the building, the internal linings shall—

(a) adequately resist the spread of flame over their surfaces; and

(b) have, if ignited, either a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.

(2) In this paragraph 'internal linings' means the materials or products used in lining any partition, wall, ceiling or other internal structure.

B3 – Internal fire spread (structure)

(1) The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period.

(2) A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings. For the purposes of this sub-paragraph a house in a terrace and a semi-detached house are each to be treated as a separate building.

(3) Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following—

(a) sub-division of the building with fire-resisting construction;

(b) installation of suitable automatic fire suppression systems.

(4) The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

B4 – External fire spread

(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

B5 – Access and facilities for the fire service

(1) The building shall be designed and constructed so as to provide reasonable facilities to assist fire-fighters in the protection of life.

(2) Reasonable provision shall be made within the site of the building to enable fire appliances to gain access to the building.

3.25

This means that substantial building work (such as the construction of a high-rise residential building) is likely to include a range of fire protection measures which support the overall fire strategy for the building. This will include measures to support particular requirements, such as means of escape and also fire-fighting. See Appendix G for more details.

Regulatory requirements – Approved Documents and Schedule 1 compliance

3.26
Beyond the performance-based requirements set out above, the Building Act 1984 also enables government to create a suite of statutory guidance documents, known as Approved Documents.[3] These provide specific examples of how each individual Schedule 1 requirement could be met.

3.27
DCLG has overseen the writing, publishing and maintenance of 21 Approved Documents on how the requirements in Schedule 1 can be met in common building scenarios. These documents are intended to be updated when necessary. However, in practice many of the Approved Documents have not been comprehensively reviewed and updated for some time. Recent updates have also had to satisfy the government's de-regulation agenda.

3.28
The guidance set out in the Approved Documents has a recognised status in law where enforcement action is taken against a person carrying out building work (because they have not met the requirements of Schedule 1). In this case section 7 of the Building Act 1984 makes it clear that – if the person can show that they have followed the guidance in the Approved Documents – then a court should consider that, on balance, they have met the Schedule 1 requirements.

3.29
There are two volumes on fire safety (one covering houses, the other covering all other building types, including high-rise residential blocks of flats), known together as Approved Document B. Approved Document B is the most commonly downloaded Approved Document, with nearly 270,000 downloads in the year to March 2015.[4]

3.30
Approved Document B sets out general minimum standards for common building scenarios. For example, on requirement B1 – Means of warning and escape, it sets out the maximum distance of travel from the entrance door of a flat to a common staircase or stair lobby (7.5 metres if the escape is in one direction only or 30 metres if the escape can be made in more than one direction). However, it does not seek to identify solutions for every possible building situation and every possible group of building users. In other words, in prescribing one way of meeting the performance-based requirement of B1 it does not preclude other solutions that could be deemed to equally meet that requirement.

3.31
So any person using the Approved Document is presumed to understand the nature of the performance-based requirements. This is both to understand where their specific plans could simply utilise the generic approach of the Approved Document and to understand where their plans require more tailored fire-engineered solutions in order to meet the Schedule 1 Part B requirements.

Findings

Those designing or constructing buildings are often focused on simply meeting the minimum requirements set out in Approved Document B rather than focusing on the performance-based requirements. Many stakeholders observe that the Approved Document is seen as 'the regulations' or 'the requirements' per se. As a result, there is often little evidence that those designing or constructing a building have taken ownership of the principles of a safe building as opposed to using the Approved Documents as a tick box. Effectively, this turns a goal-based system with helpful pointers in these documents into a prescriptive system. It also raises significant issues around the extent to which central government can realistically oversee the updating of an extremely detailed and technical set of recommendations to guide an industry that is rapidly innovating.

Approved Document B is often confusing and contradictory to non-specialist readers.

3 Building Act 1984, section 6.

4 DCLG (2017) *Usability Research – Approved Document B: Fire safety; Approved Document M: Access to and use of buildings*. www.gov.uk/government/publications/usability-research-building-regulations-approved-documents-b-and-m

Regulatory requirements – Other routes to compliance with Schedule 1

3.32

Where those designing or constructing a building wish to adopt a less standardised and more innovative building design then they are less likely to rely on Approved Document B. Approved Document B recognises that alternative approaches may be adopted and, for example, includes guidance on a specific fire safety engineering approach. In this situation there are a range of other industry-wide British Standards documents that can be used to help to satisfy the Building Regulations requirements. These documents can be used in a more targeted way to help those providing fire safety advice to establish compliance for specific needs not discussed in Approved Document B. For example, as mentioned above, Approved Document B states the maximum travelling distance from the entrance door of a flat to a common stair/stair lobby (in the event of a fire) is either 7.5 metres or 30 metres depending on how many means of escape there are. However, this may not be possible due to particular design features in a new building. If this is the case, then these other documents can help design teams to think through how to compensate elsewhere in the fire safety design; for example, by putting in place sophisticated sprinkler systems to mitigate the risk. By taking a more holistic approach design teams can still make a case that they meet the B1 performance-based requirement.

3.33

The relevant British Standards documents on fire safety are intended to form a critical industry-led layer of knowledge and support and are highly valuable in underpinning the design work on more complex buildings. They are put together by the British Standards Institution (BSI) based on expert fire safety knowledge, agreed through committees and updated more regularly than the Approved Documents. They do not, however, have the same legal status as the Approved Documents. The key British Standards documents in respect of fire safety for a residential building are set out below.

Key alternative guidance sources

BS 9991: Fire safety in the design, management and use of residential buildings – code of practice

BS 9991 gives recommendations and guidance on the design, management and use of buildings to achieve reasonable standards of fire safety for all people in and around them. It also provides guidance on the ongoing management of fire safety within a building throughout its entire life cycle, including guidance for designers to ensure that the overall design of a building assists and enhances the management of fire safety.

This British Standard is applicable to the design of new buildings, and to alterations, extensions and changes of use of an existing building. It can be used as a tool for assessing existing buildings, although fundamental change in line with the guidelines might well be limited or not practicable. The recommendations and guidance given in this British Standard are intended to safeguard the lives of building occupants and fire-fighters. While some of the recommendations and guidance might also assist in the achievement of other fire safety objectives – such as protection of property, the environment, communities and business/service viability – additional measures might be necessary which are outside the scope of this British Standard.[5]

BS 7974: Application of fire safety engineering principles to the design of buildings – code of practice

This British Standard provides a framework for an engineering approach to the achievement of fire safety in buildings by giving recommendations and guidance on the application of scientific and engineering principles to the protection of people, property and the environment from fire. It also provides a framework for developing a rational methodology for the design of buildings.

This standard applies to the design of new buildings and the appraisal of existing buildings. The use of this standard will facilitate the practice of fire safety engineering and in particular it will:

- provide the designer with a disciplined approach to fire safety design;

5 British Standards Institution (2015) *BS 9991:2015 Fire safety in the design, management and use of residential buildings – code of practice*. https://shop.bsigroup.com/ProductDetail?pid=000000000030351309

- allow the safety levels for alternative designs to be compared;
- provide a basis for selection of appropriate fire protection systems;
- provide opportunities for innovative design; and
- provide information on the management of fire safety for a building.[6]

Findings

At best, this flexibility of approach gives designers wider scope to interpret the spirit of outcome-based regulation. In practice, some designers fail to properly utilise these British Standards documents to meet the performance-based requirements of Schedule 1 for various reasons including competence. As a result, they can end up cherry-picking requirements, using the British Standards documents to avoid meeting the minimum recommendations of Approved Document B without putting in place the compensating measures. This can mean building work ends up not complying with fire safety requirements of Schedule 1 of the Building Regulations.

Regulatory requirements – Who needs to meet the requirements of the Building Regulations?

3.34
From stakeholder discussions, there are a myriad of ways in which organisations and individuals come together to establish the requirements for, and the planning, design and construction of, a new or modified building. Building procurement always starts with a client with a set of objectives ranging in scope and detail, who will initially engage with professional designers and/or contractors to create proposals and associated budgets. Sometimes outline designs are prepared and planning permission obtained, followed by more detailed design and construction sometime later. Design and construction are separate processes with considerable overlap. Under some models of 'design and build', a client will primarily work with a contractor who will themselves employ designers, rather than the client selecting the designer directly. A large number of businesses and individuals can be involved in these key roles through lengthy supply chains. Key roles in respect of fire safety will be the person providing fire engineering input (who may not be a fully qualified fire engineer) and those installing fire safety systems such as alarm systems or sprinklers.

3.35
The requirements of the Building Act and Building Regulations impose responsibilities in a less specific way. Under the legislation the responsibility for meeting the fire safety (and other) performance-based requirements fall on "the person intending to carry out the work" and "the person carrying out the work".[7] This applies in both a new-build and a refurbishment scenario.

3.36
The "person intending to carry out the work/ carrying out the work" must then have their work certified through the building control system. The role of the BCBs is to take all reasonable steps to satisfy themselves that "the persons carrying out the work" have met all the necessary performance-based requirements. However, the primary obligation for compliance falls on those designing/ constructing the building, not on the regulator.

3.37
Some building work defined as low risk can be self-certified by an installer as compliant with Building Regulations requirements without BCB oversight as long as the individual has been assessed as competent in their field to self-certify (for example, domestic window replacement, external wall insulation or installations of boilers). This self-certification framework is operated through a system of authorised competent persons schemes. More than 3.5 million elements of building work were self-certified in this way in 2016.

6 British Standards Institution (2011) *Application of fire safety engineering principles to the design of buildings – code of practice*. https://shop.bsigroup.com/ProductDetail/?pid=000000000030028692

7 Building Regulations 2010 regulation 12 and 13.

Findings

The vagueness in the legislation around "persons intending to carry out work" and "persons carrying out work" are insufficiently focused and make it difficult to understand where accountability primarily lies for showing compliance. Having identifiable named dutyholders with a clear responsibility for ensuring and proving compliance with the requirements of Schedule 1 would appear to be a clearer way of maximising the focus on fire safety in a high-rise residential building. The specific requirements under the Construction (Design and Management) Regulations 2015 (see box below) provide an interesting counterpoint for consideration.

Professional competency is also clearly critical in providing sufficient reassurance around the fire safety of buildings. Fire engineering is critical throughout the design and building process, especially where there are deviations from Approved Document B. Fire engineering work is often carried out by other engineers who may lack the necessary skills in a way that would be unthinkable with, say, structural engineering work. The review also notes that those who install complex fire safety systems don't need to prove their competence in the way that a gas installer would.

In combination, the lack of a clear dutyholder and the competency issues combine together to underpin concerns that there is no reliable, competent oversight that work will be completed in line with the Schedule 1 requirements or the Approved Documents. This does not mean that there are no competent people working in the system; there are very many. Rather the system does not do enough to provide assurance that standards will reliably be upheld.

Work undertaken via the competent person schemes can impact negatively on fire safety – particularly around breaches of compartmentation and fire stopping materials. This can be caused by those undertaking the work simply not understanding the knock-on consequences of their work.

An example of greater regulatory clarity: The Construction (Design and Management) Regulations 2015

These regulations set out clear roles and responsibilities on businesses to ensure that health and safety risks, including fire safety, arising from construction work activity are properly controlled. It particularly identifies three clear roles in the construction process and assigns specific interlocking accountabilities to these roles to support the safe delivery of the work being undertaken.

The client – who is accountable for ensuring that there are arrangements to enable the project to be managed effectively overall, including: appointing a principal designer and principal contractor with the requisite skills, knowledge, experience and organisational capability, and ensuring that they comply with their duties; allocating sufficient time and resources; providing pre-construction information; ensuring the creation of an overall health and safety file; and notifying the Health and Safety Executive (HSE) of the building site activity and key dutyholders where the work exceeds a defined threshold.

The principal designer – who is accountable for planning, managing, monitoring and co-ordinating information about health and safety risk during design and planning, including: ensuring designers comply with their duties to identify, eliminate and control foreseeable risks; providing relevant information to other dutyholders; providing information to the principal contractor to help them plan, manage and monitor the health and safety risk in the construction phase and preparing a health and safety file.

The principal contractor – who is accountable for planning, managing, monitoring and co-ordinating information about health and safety risk during the construction phase, including: liaising with the client and principal designer; preparing the construction phase plan; organising co-operation between contractors and co-ordinating their work; and providing the principal designer with relevant information for inclusion in the health and safety file.

These regulations are enforced predominantly by the HSE. Dutyholders are apparent and the relevant enforcing authority can take enforcement action where there are failures leading to significant risk (e.g. through Prohibition Notices or Improvement Notices and prosecution).

Findings

These regulations have assisted in driving culture change and raising safety standards on building sites. They appear to be an approach that is equally relevant for underpinning compliance with the Building Regulations.

Regulatory requirements – How are the building works checked?

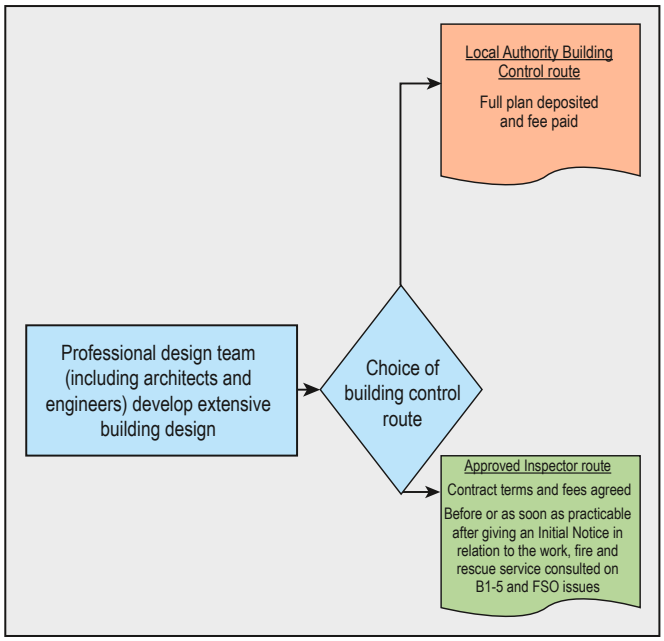

Figure 3.4: Choice of building control route

3.38
All significant new building work (from the building of a new high-rise residential building to a domestic loft conversion) requires building control oversight unless the work is very limited or can be covered by a competent person scheme.[8]

3.39
Those undertaking the building work can choose one of two BCBs – either through a Local Authority Building Control (LABC) or a private sector Approved Inspector (AI) to perform that oversight.

3.40
The Building Regulations 2010, together with the Building (Approved Inspectors etc.) Regulations 2010 and the Building (Local Authority Charges) Regulations 2010 set out many of the detailed rules that govern how building control systems operate.

3.41
Every local authority in England and Wales must provide a building control function. There are currently estimated to be around 3,000 LABC staff. In comparison AI services are provided by around 90 limited companies and 7 individuals. The latest estimates suggest that BCBs certify around 300,000 pieces of building work every year.[9] Recent estimates suggest that LABC have a market share of 65–70%.[10] There is no data on market share for building work on high-rise residential or other complex buildings only.

3.42
Partial privatisation and competition between public and private regulators was first introduced in 1985 through the creation of the role of AIs. The objective was to create a more commercial and customer-focused building control experience. When first established, the National House Building Council (NHBC) was the only AI. They had limited powers and could only provide building control services in respect of dwellings but no other types of building. Since April 2013, all AIs have been able to cover all types of building control work.

Findings

Overall standards of customer service have risen as a result of the introduction of AIs. However, the part-privatisation of this regulatory function has created a unique competitive environment and has introduced unintended consequences.

There can be a difficult trade-off between BCBs competing with one another for business with design and construction teams while ensuring rigorous and determined certification with all the requirements of the Building Regulations. This is particularly the case given tight margins on building work and the broader pressures on local authority resources. We have frequently heard that this leads to situations where BCB personnel can fail to 'win business' where they will not commit in advance to approval of more risky designs and that those who do win business can become far too embedded in supporting the building design process rather than being an impartial rigorous verifier of building safety.

8 Building Regulations 2010 regulation 3 and 9.
9 DCLG (2017) *Annual Report and Analysis of Building Control Performance Indicators – Building Control Performance Standards Advisory Group Report: 2015/16.* This report is not based on a 100% response rate so is likely to be an underestimate.
10 Lychgate Projects (2017) *The contribution and value of LABC's plan assessments.*

Similarly, there are obvious commercial considerations for any BCB (whether LABC or AI) refusing to sign off completed work where that would jeopardise their future business with the same client. We have heard repeated concerns expressed about the commercial pressures associated with rigorous enforcement of fire safety requirements.

3.43
There are no legislative requirements that set standards of competence or training for building control inspectors (or the types of jobs that they can take on). Instead, BCBs are expected to have staff that are competent to do the job.

3.44
Both the LABC[11] and AIs have tried to raise competence. The LABC partnership scheme enables local authorities to share expertise. LABC provides training for its members. Recently the LABC has also developed a set of standards and recently adopted an International Standard Organisation (ISO) standard, which aims to raise standards in Local Authority Building Control. They have also set up a range of formal qualifications with the University of Wolverhampton (launched this year), including a degree in building control surveying. However, at present there is no oversight of the quality of work of LABCs as there is in Scotland. The Construction Industry Council Approved Inspectors Register (CICAIR) assesses and registers all AIs to allow them to perform building control functions and audits their performance periodically. Re-approval is required on a five-yearly basis.[12]

Key facts on building control bodies[13]

BCBs (whether LABC or AI) are overwhelmingly small and medium-sized operations, with 62% having 15 employees or fewer.

In 2015/16, the average building control fee charged per application was £750 in the private sector and £432 in the public sector.

In 2015/16, domestic alterations, extensions and improvements made up 78% of building control applications and this represents 63% of fees charged.

The 2015/16 report highlighted another slight decrease in the skill level of BCB workforces. On average, 51% of staff were fully qualified with corporate membership of relevant professional bodies, down from 59% in 2012/13. In 2015/16, 18% of staff were reported to have experience of fire engineering/fire risk assessment and 10% experience of high-rise buildings.

The age profile of BCBs suggests that they may face significant problems replacing experienced staff as their workforce approaches state pension age: 26% of BCBs workforce are aged over 55.

Findings

For a performance-based regulatory system to work well and maximise the safety of high-rise residential and other complex buildings there needs to be sufficiently competent individuals undertaking the design and construction, and highly competent regulators with the right focus and powers to ensure compliance.

While both BCB routes are working on raising workforce skills, we have heard repeated concerns that they are clearly doing so against the backdrop of tight margins, an ageing workforce and limited experience of the most complex building types.

11 In this paragraph LABC should be taken to mean the not-for-profit membership organisation that represents all Local Authority Building Control teams in England and Wales.
12 An Approved Inspector can only act as a building control body if approved under the procedures specified in the Building Act and the Building (Approved Inspectors etc.) Regulations. CICAIR has been designated by the Secretary of State to act as the Approved Body on his behalf. CICAIR requires a Code of Conduct to be followed. Failure to meet the Code can lead to an Approved Inspector being removed from the register in which case they will not be able to operate.
13 Key data comes from DCLG (2017) *Annual Report and Analysis of Building Control Performance Indicators – Building Control Performance Standards Advisory Group Report: 2015/16*. These figures are not based on a 100% count of BCBs so should be taken as indicative.

Regulatory requirements – How are the building works checked in the Local Authority Building Control route?

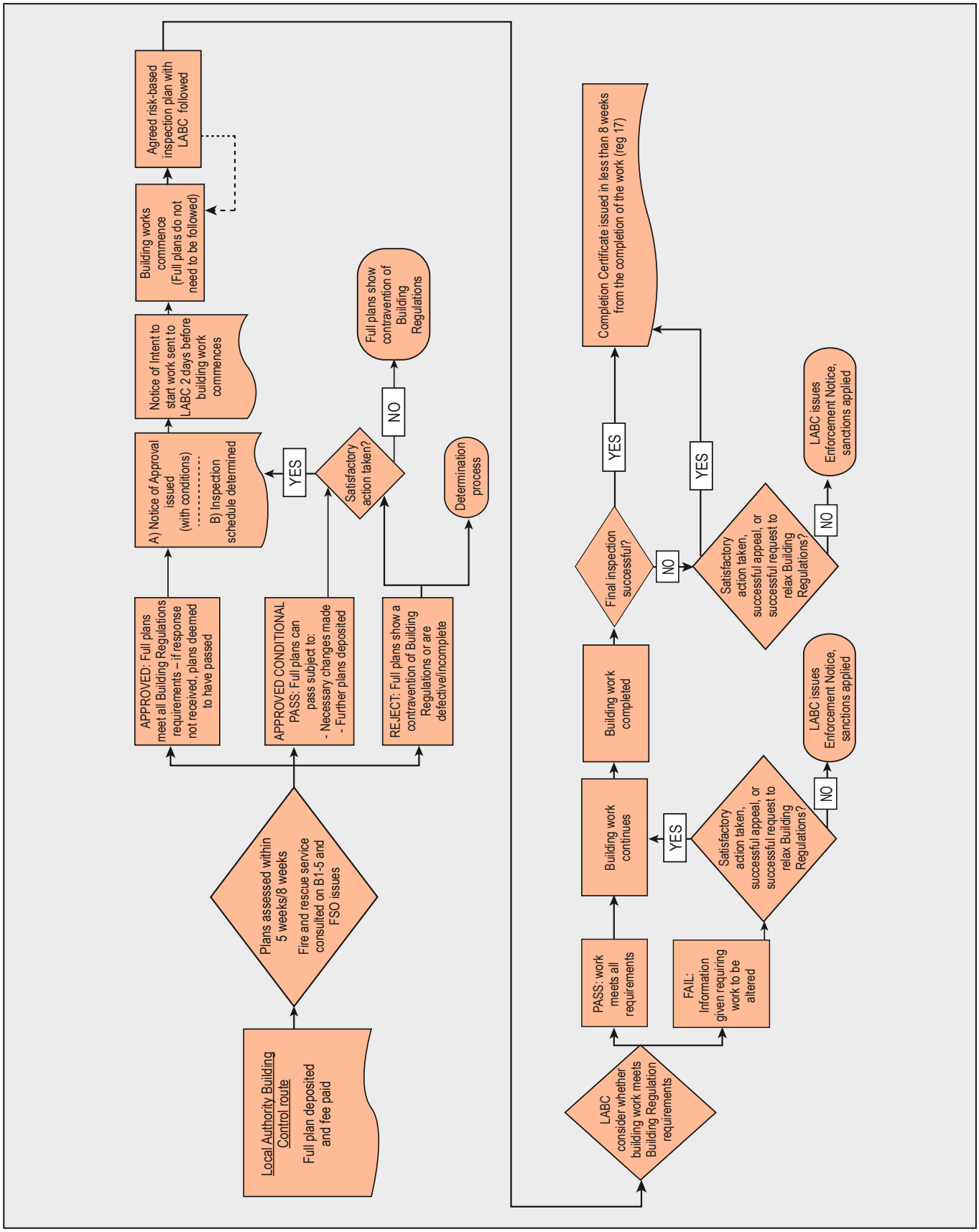

Figure 3.5: The Local Authority Building Control route

3.45
Where the person intending to carry out building work chooses the LABC route then all expected costs must generally be paid at the outset.[14] The arrangements under which local authorities set their fees are controlled through regulations (which refer to certain factors which are allowed to be taken into account in calculating charges).[15] All assessment, inspection and certification work is charged for, but the cost of any formal enforcement activity needs to be met from general local authority resources.

3.46
Where the LABC is chosen and a high-rise residential block of flats is to be built then **full plans** for the building work have to be submitted to the LABC.[16] Full plans are required where the Fire Safety Order 2005 will apply, that is, where the building, once occupied, will have shared areas ("common parts") as well as individual flats.

3.47
The full plans application should contain all the drawings and design specifications to prove that the proposed work will comply with all of the performance-based requirements set out in the Building Regulations. Typically, this would include all floor plans, elevations and sectional drawings, detailed specifications and associated specialist packages in respect of individual elements such as groundworks, structural details and mechanical and electrical works. It could also include structural fire engineer calculations.

3.48
The LABC must consider these plans against the Building Regulations requirements and respond within five weeks (or eight weeks if agreed)[17] and determine whether the full plans submitted will either be:

- approved (i.e. they meet the Building Regulations performance-based requirements);
- approved with conditions (i.e. they pass as long as certain changes are made/more information is provided); or
- rejected (i.e. they clearly fail the performance-based requirements).

3.49
Where the construction work relates to a building where the Fire Safety Order 2005 applies, there is a statutory duty on the LABC to consult with the local fire and rescue service as part of this process.[18] The statutory consultation normally takes place when the LABC is reasonably satisfied that compliance with the Building Regulations has been demonstrated (but before a formal notice to that effect is given).

3.50
The fire and rescue service is invited to comment (typically within 15 working days) on the fire safety aspects of the full plans and the extent to which they satisfy requirements B1-5 and the quality of the fire precautions that will be necessary once the building is in use. This is to maximise likely compliance with the provisions of the Fire Safety Order 2005 once the building is occupied, and to minimise the risk that there will be fire and rescue service requirements for immediate remedial work on occupation of the building.

3.51
Where there are more complex schemes, or where significant departures from Approved Document B are proposed, early advice from the fire and rescue service may also be requested by the LABC outside of the statutory consultation. In some cases, this can even be before the full plans are formally submitted. This initial/preliminary design stage advice is also referred to as 'pre-consultation'.

3.52
The statutory consultation process is intended to allow both the LABC and the fire and rescue service to reach mutually compatible views on whether the proposals are satisfactory. In addition to making comments relating to the fire precautions, the fire and rescue service may also offer observations in relation to the Building Regulations, particularly in respect of requirement B5 – Access and facilities for the fire service.

14 Building (Local Authority Charges) Regulations 2010, regulation 8.
15 Building (Local Authority Charges) Regulations 2010, regulation 7.
16 Building Regulations 2010, regulation 12(3).
17 If these deadlines pass without a decision being made then the full plans are automatically deemed to "be approved" (Building Act 1984, section 16(11).
18 Building Act 1984, section 15.

3.53
The LABC should have due regard to the observations raised by the fire and rescue service. Where there is a difference of opinion that cannot be resolved through discussion, the LABC may decide to approve the scheme regardless of any comments or observations and without the requirement for any further consultation (though any written comments from the fire and rescue service should be passed on).

Findings

Fire and rescue service views are not automatically endorsed and fire and rescue services do not have the power to require LABCs to reject applications whatever their level of expertise or the level of concern raised.

Some competence and capacity concerns have also been raised about fire and rescue services. Many fire and rescue services (particularly in high-density urban areas) have dedicated officers who are highly skilled and experienced in fire safety engineering. However, this is not the case everywhere. In addition, we have heard that overall numbers are under real pressure. This is likely to be made worse due to the age profile of fire and rescue service staff, with high proportions nearing retirement.

3.54
If content, the LABC will then issue a Notice of Approval for the full plans.[19] In addition, the LABC will set out the schedule of stages of building work that need to be notified (i.e. where the LABC anticipates inspections will be undertaken on the building site on a risk-assessed basis).[20]

3.55
Following approval, those intending to carry out building work effectively have permission to start building work.[21] Two days before building work is due to begin, the person intending to carry out the work will need to issue a Notice of Intent to the LABC.[22]

Findings

The full plan approval stage is intended to be the fundamental starting point and the blueprint for all the work that is subsequently agreed. In practice:

- building work on the basis of those plans appears frequently to commence well before the full plans are approved;[23] and
- the agreed full plans do not have to be followed in practice and frequently are not followed as a result of business processes such as value engineering.[24] While there will always be some changes to plans, there are no statutory obligations to notify LABC of even potentially significant changes in plans or materials used on plans.

Both these factors appear indicative of a regulatory regime that is not being given due regard and which relies too much on the LABC to spot risks rather than for those constructing the building to remain fully accountable for the risks they may create and to manage them. This increases the risk that buildings end up falling short of the performance-based requirements.

3.56
Once construction has begun, engagement continues between those responsible for the building work and the LABC. The 'Building Control Performance Standards' document sets out best practice underpinning this engagement, covering matters such as communication, site inspection frequency and handling of complaints.

3.57
During this phase, the LABC will check that the building work complies with the requirements of the Building Regulations. Where there is any doubt about this, compliance actions will be taken by the LABC to ensure that changes are made.

3.58
The LABC will aim to keep an overview of work, both in terms of its compliance with specific performance-based requirements and also to look at the totality of the building being constructed. This total view is important because solutions for

19 Building Act 1984, section 16(6).
20 Building Regulations 2010, regulation 16.
21 The local authority can, where it wishes, cancel the full plans approval if building work is not started on site within three years. It can also cancel an Approved Inspector's Initial Notice for the same reason.
22 Building Regulations 2010, regulation 16(1).
23 LABCs can, in law, reject full plans and require work to be regularised.
24 Value engineering is a systematic and organised approach to providing the necessary functions in a building project at the lowest cost. Value engineering promotes the substitution of materials and methods with less expensive alternatives, without sacrificing functionality.

fire safety, structural safety, energy conservation etc. can sometimes overlap with each other (especially where there are multiple inputs from unconnected specialists). Generally, this engagement process is intended to be co-operative with LABCs striving to identify practical and efficient remedies. Research from 2012 based on both LABCs and AI records suggests that this informal compliance activity is broadly effective, with very large numbers of informal enforcement activities each year.[25]

3.59
Site visits are important, for example, to check ground conditions, installer teams and on-site quality. There is a large element of risk assessment in this, where the experience, construction skills, competence and management capabilities of the on-site team are taken into account. The 'Building Control Performance Standards' document[26] has recently changed the best practice approach to on-site inspections, from a minimum of once every 28 days to whatever is deemed to be the right level for the particular piece of building work. Throughout this process, there is no clear legal obligation on those undertaking the building work to inform the LABC of any significant changes to the approach towards building work, changes to detailed plans previously submitted or changes to materials used.

3.60
At the end of the building work, the LABC will undertake a final completion inspection as a precursor to occupation.[27] Based on this final inspection, all relevant plans and their prior engagement, the LABC will decide whether to issue a Completion Certificate. This can be issued where, "after taking all reasonable steps," the LABC is satisfied that the building work complies with the Building Regulations requirements. No further consultation with fire and rescue services is required by law at this stage.

3.61
The certificate is intended to be evidence, but not conclusive evidence, that the Building Regulations requirements[28] have been complied with. Compliance can only ultimately be determined by a court.[29]

Findings

There is no formal **legal** requirement to inform LABCs of potentially significant changes to building work. This is problematic, particularly when combined with the competency issues raised previously and lack of clarity on who, in practice, needs to show compliance with the Building Regulations in the first place. More generally, the fact that building plans can change significantly means design changes that negatively impact on safety can be made without formal re-consultation (including with fire and rescue services).

On some projects, building work is completed and occupation commences before a Completion Certificate is issued. This is further evidence of a regulatory system not being shown sufficient regard in its attempts to make building work safe.

In contrast, we also understand that the issuing of a Completion Certificate by an LABC is often seen as 'proof' that those working on a building have built it to the required standards of Schedule 1. This misinterprets the role of BCBs (who, to the best of their ability, certify that work is to a required standard) and shifts responsibility for compliance away from those actually undertaking the building work.

3.62
Where a Completion Certificate cannot be issued due to failings under the Building Regulations, and satisfactory remedial action is not taken by those undertaking the building work, then sanctions and enforcement activity can be undertaken by the local authority. However, it is not possible for an LABC to take enforcement action against any building work by its own local authority. Where there is a breach of the Building Regulations under section 35, a person is liable on summary conviction by a Magistrates Court to an unlimited fine and a further fine not exceeding £50 for each day the default continues after conviction.[30] Under section 36 a person can be required to remove or alter offending work. There are time limits for bringing a prosecution under section 35, which is two years from the date of the completion of building work (and within six months of having sufficient evidence

25 Compliance Actions Survey 2012.
26 DCLG (2017) *Building Control Performance Standards*. www.gov.uk/government/uploads/system/uploads/attachment_data/file/585965/Building_Control_Performance_Standards_2017_Final.pdf
27 Building Regulations 2010, regulation 17A. Occupation can begin before building work is completed. However, developers are required to notify LABCs if the building is to be occupied before completion and a Completion Certificate in respect of fire safety should, in law, be issued.
28 Building Regulations 2010, regulation 17.
29 Building Act 1984, schedule 1, paragraph 4.
30 Building Act 1984, section 35.

to justify a prosecution).[31] A section 36 notice must be served within one year of the date of building work being completed.[32]

Findings

There is considerable informal enforcement activity by LABCs and AIs which appears effective in most cases. However, formal enforcement and sanctions activity is very limited – undermining the consequences associated with non-compliance.

The level of financial deterrent usually applied under section 35 is unlikely to prove an impediment to large or medium-sized developers. There is, therefore, little to drive compliant behaviour where an individual or organisation is unwilling to meet their legal responsibilities under the Building Regulations. It is also not clear whether the fairly tight time limits on bringing prosecutions under the Building Act are sensible, given that some fundamental problems may only come to light a number of years after the building has been completed.

3.63
Immediately prior to occupation, and as part of the Completion Certificate process, the relevant fire safety information relating to the building must be handed over to the "responsible person" who will take responsibility for the occupied building and will be responsible for ensuring the management and minimisation of fire risks under the Fire Safety Order.[33] This fire safety information is intended to provide critical information about the building design and the assumed fire strategy once the building is occupied.[34]

3.64
In normal circumstances, the issuing of a Completion Certificate, the handover of fire safety information and the commencement of occupation will be the point at which the regulatory framework set out in the Building Regulations (with LABC-led oversight) ceases to apply and the Fire Safety Order (with fire and rescue service oversight) starts. It is therefore a fundamental cross-over point in the regulatory system.

Findings

The handover of fire safety information is of fundamental importance to ensure control of the building regulation process and to provide assurance for safety over the life of the building. If carried out well, this is a key element of a functioning system.

However, the review understands that there are very significant weaknesses in this handover process. The transfer of fire safety information frequently fails to occur in practice because of the absence of a responsible person, or because the responsible person is unaware of their responsibility or because of the poor documentation during the design and build process. We also understand that this failure is virtually never subject to enforcement activity. In addition, the transfer of such information has only been a requirement since 2006. Building work completed prior to this date had no statutory requirement to transfer such information on completion.

31 Building Act 1984, section 35A.
32 Building Act 1984, section 36(4).
33 Building Regulations 2010, regulation 38.
34 Appendix G of Approved Document B has clear instructions on what fire safety information should include – for example – information on how the building will be evacuated, access and facilities to assist fire services, whether design variations are enabled or supported by fire-engineered solutions.

Regulatory requirements – How are the building works checked in the Approved Inspector building control route?

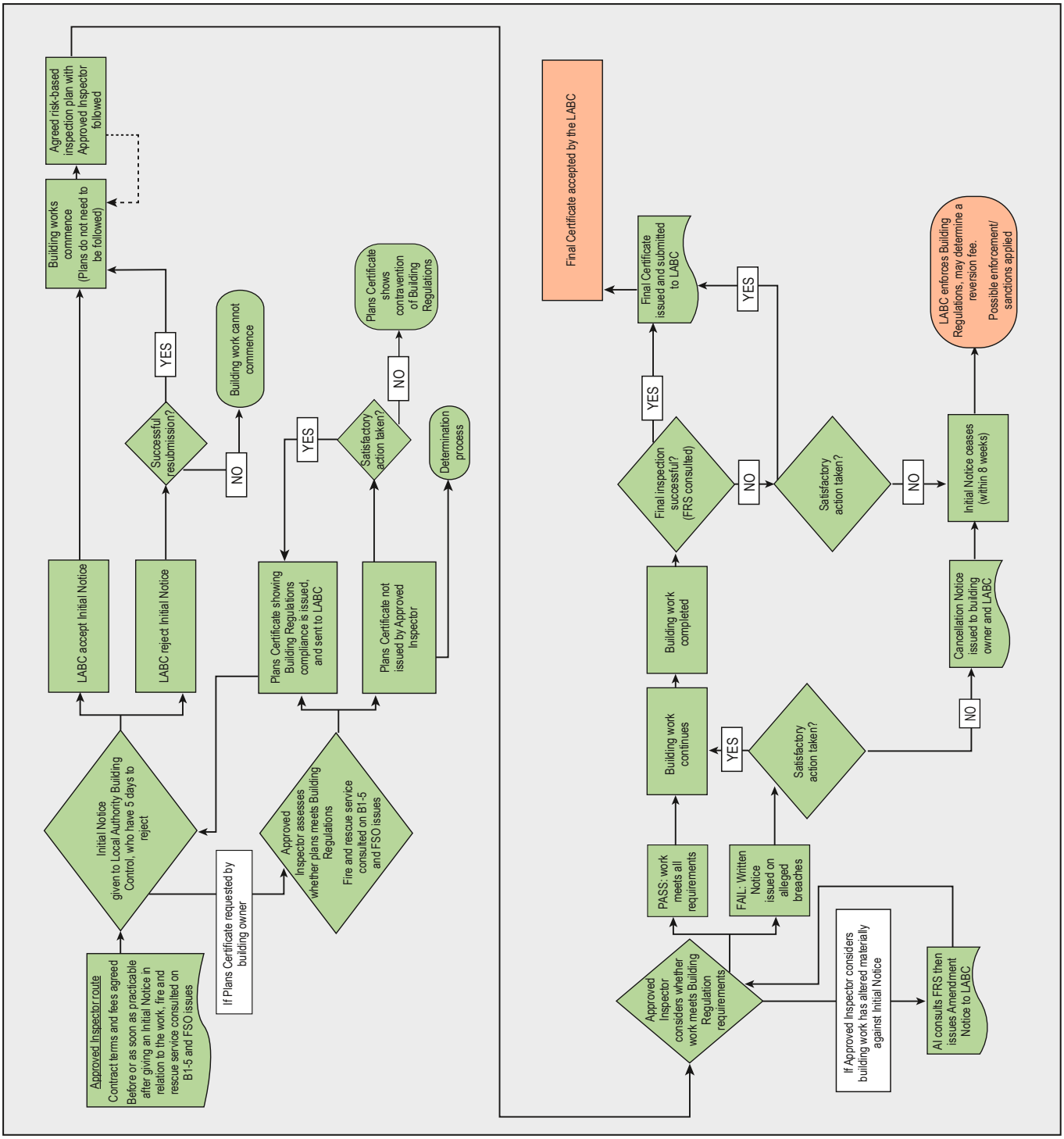

Figure 3.6: The Approved Inspector building control route

3.65
Unlike LABCs, an AI can choose whether to take on a job, and is able to charge whatever they wish for carrying out building control functions.

3.66
Where a client has engaged with an AI and agreed fees for using their building control services, the AI must inform the LABC that it is undertaking oversight of the building control process by submitting an Initial Notice.[35] The LABC has five days to decide if they are content with the notice

35 Building Act 1984, section 47(1).

(this confirmation process is generally considered a formality).[36] Confirmation by the LABC means that they cannot intervene in the building control process[37] unless the AI withdraws from the project (at which point it would revert to the LABC).

3.67
At the same time as issuing the Initial Notice (or thereafter), the person carrying out the work has the ability to also apply for a formal Plans Certificate.[38] This is broadly equivalent to the full plan requirement on the LABC side and provides an additional level of formal assurance for the builder or client. Where completed, it must also be given to the LABC for information.

Findings

Only a small proportion of Initial Notices are followed by a formal Plans Certificate (CICAIR data indicates in the region of 10%). While we have been told that detailed plans are shared through the building process the lack of a statutory Plans Certificate process undermines the scope for an early detailed approval stage to be the fundamental starting point for the building project and the primary testing point of the likely safety of the building as construction is undertaken.

3.68
The AI is also required to consult the fire and rescue service in the same way as the LABC on giving an Initial Notice, as part of any Plans Certificate process and at the end of the building work.[39]

Findings

There are frequent concerns about the timing of consultations by AIs with fire and rescue services (often late in the building process when it is very challenging to reverse works already well under way). In addition, many fire and rescue services report that there is usually only one period of consultation in practice.

As part of the mapping work, we have also heard numerous concerns about the degree and quality of detailed plans available for consideration and the degree of embedded working that fire and rescue services see between AIs and the design/construction team undertaking the building work. This raises questions of whether the AI is often too close to the design team.[40]

3.69
In a similar way to the LABC route, the AI will engage in a risk-based inspection plan as construction develops. AIs are required, under their code of conduct, to abide by the 'Building Control Performance Standards'[41] to ensure continued registration by CICAIR. For LABC staff, these standards are considered best practice.

3.70
At any point, the AI can issue a written letter or communication challenging breaches in the building work and seeking remedial action within an agreed period. In addition, where the person carrying out the work makes any significant change to the work, as described in the Initial Notice, the AI must give an Amendment Notice to the LABC describing the change.[42] The AI should, by law, consult the fire and rescue service on any Amendment Notice.

3.71
At the end of the process, where the AI is satisfied that the work is completed, it will undertake a further consultation with the fire and rescue service and issue a final certificate and send it to the local authority. If the AI does not believe the works comply with the Building Regulations, they cannot issue the certificate. If disagreement arises between the client and the AI which cannot be resolved, they may cancel the Initial Notice and responsibility for certifying compliance with the Building Regulations will then revert to the LABC.

3.72
This reversion back to the LABC is necessary because, where an AI is the BCB, section 48 and 51(3) of the Building Act prohibits a local authority from taking enforcement for a breach of the Building Regulations where an Initial Notice is still in

36 Building Act 1984, section 47(2).
37 Building Act 1984, section 48(1).
38 Building Act 1984, section 50.
39 Building (Approved Inspectors etc.) Regulations 2010, regulation 12.
40 Notwithstanding the fact that, under regulation 9 of the Approved Inspector Regulations, an AI must have no professional or financial interest in the work they supervise unless it is minor work. This is backed up by the CICAIR Code of Conduct.
41 DCLG (2017) *Building Control Performance Standards*. www.gov.uk/government/publications/building-control-performance-standards
42 Building Act 1984, section 51A.

force or a final certificate has been given. However, AIs have no powers to bring a prosecution. Therefore, if an AI is unsuccessful in getting compliance they can cancel the Initial Notice and the work then reverts back to the LABC for it to use its enforcement powers.[43]

Regulatory requirements – How are the building works checked? A comparison between the two BCB routes

3.73

It is clear that, while the overall remit that LABCs and AIs need to fulfil is the same, there are some similarities and a number of differences in requirements. Some of these are connected to the fact that, for example, formal enforcement action is a matter of public policy, undertaken only by public authorities.

Same processes for LABCs and AIs	• Work needs to be notified to a BCB. • BCBs need to check plans. • BCBs need to consult with fire and rescue service. • BCBs do some inspections on site. • BCBs issue sign-off certificates at the end of building work.
Different processes for LABCs and AIs	• The route for calculating local authority fees are set out in legislation and are normally required to be paid upfront. AIs can apply a more flexible and individual approach towards fees and their payment. • Local authority staff do not require professional indemnity insurance. AIs do. • Local authority staff do not have the ability to reject taking on clients and work. AIs do. • Local authorities must, in law, be provided with full plans of proposed building works (where those works will be covered by the Fire Safety Order). AIs do not, in law, need to ask for detailed plans of building work at any stage – even for the most complex buildings. • Local authorities must, in law, consult the fire and rescue service at the outset. AIs must also do so, in law, at completion of work before giving a final certificate. • If an AI is unsuccessful in getting compliance, they can cancel the Initial Notice and the work then reverts back to the local authority for enforcement action. • Formal enforcement can only be carried out by local authorities, not AIs.

Findings

The differences in processes between the two systems add to the complexity of and inconsistency in the regulatory environment and mean that there is no level playing field.

There are advantages and disadvantages of both systems but having parallel processes (frequently enshrined in primary legislation) makes it more difficult for government to raise standards in a consistent way.

The parallel routes also mean that the public record design and regulatory decision-making is inconsistent.

43 Building Act 1984, section 52(1).

Regulatory requirements – How construction products and workmanship are deemed to comply with the Building Regulations

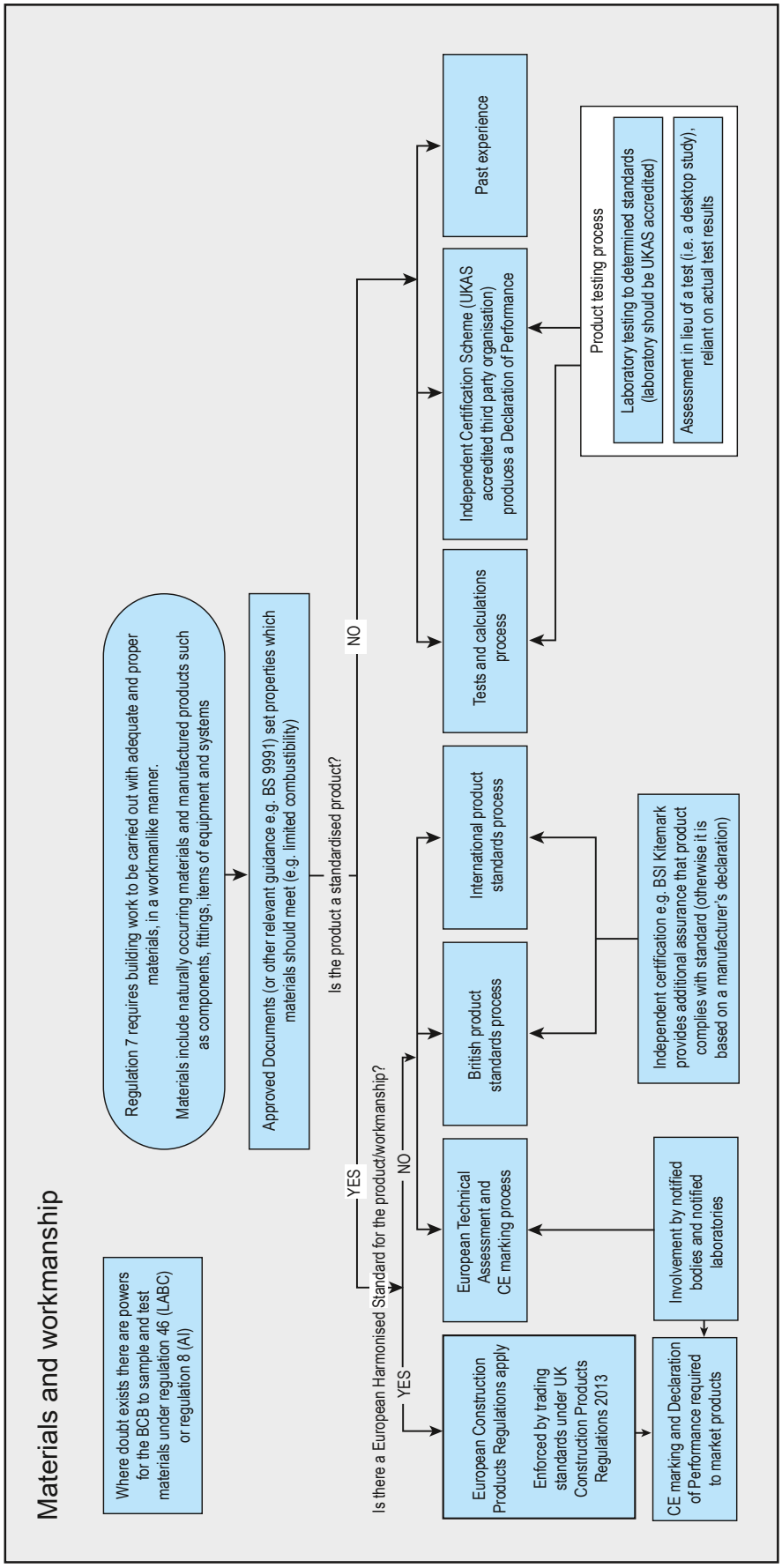

Figure 3.7: How construction materials meet the Building Regulations

3.74
Products used for the construction or refurbishment of a building have a critical impact on its safety. Incorrect installation of proper materials can also compromise safety. Regulation 7 (Materials and Workmanship) of the Building Regulations 2010 sets the general legal framework, and BCBs assess all building work for compliance.

3.75
Regulation 7 applies to all products used in building work. We have illustrated the process using a case study on concrete below.

Regulation 7: Materials and workmanship

Building work shall be carried out—

(a) with adequate and proper materials which—

(i) are appropriate for the circumstances in which they are used,

(ii) are adequately mixed or prepared, and

(iii) are applied, used or fixed so as adequately to perform the functions for which they are designed; and

(b) in a workmanlike manner.

3.76
Approved Document 7[44] (the Approved Document relevant to Regulation 7) defines materials to include:

- manufactured products such as components, fittings, items of equipment and systems;
- naturally occurring materials such as stone, timber and thatch; and
- backfilling for excavations in connection with building work.

3.77
Materials and workmanship need to be no more than necessary to satisfy the relevant Parts of the Building Regulations. The decision whether a product, a kit or a system and its application complies with the Building Regulations is for the BCB to make, using the guidance in Approved Document 7. However, it must be stressed that the responsibility for complying with the Building Regulations lies with the person doing the work.

Routes to compliance: products

3.78
Approved Document 7 advises on the following routes which BCBs should consider appropriate to establishing a certain standard.

Route 1: Standardised products

3.79
Harmonised European standards: Many materials are covered by the Construction Products Regulation (305/2011/EU-CPR), and are known as harmonised European products. They must have CE marking, which will reference the product standard. The product must also have a Declaration of Performance, which gives details of its performance in accordance with the measures stated in the standard. It is essential that the declared performance is suitable for the intended use.

3.80
Each harmonisation standard will set out conformity assessment and verification procedures. This is graded according to the performance criticality of the product. For many products, conformity assessments may require testing by a "notified body". A notified body is an organisation designated by an EU country to assess the conformity of certain products before being placed on the market. Generally, products that are more critical to building safety have more assessment by the notified body, with less safety-critical products having only a manufacturers' declaration.

3.81
Other products: If a material is not covered by a harmonised European standard, a non-harmonised European standard (e.g. EN 1329-1 for PVCu soil stacks), a British Standard (e.g. BS 4213 for cold water cisterns), or other international standard may be used to show compliance. Such specifications, including those prepared by ISO, or a national technical specification of a country other than the UK, may be used to demonstrate that a product not covered by a harmonised European standard meets the performance requirements of the Building Regulations. Manufacturers self-certify that their product conforms with the standard but third-party certification schemes, such as the BSI kitemark, are available to provide increased assurance of compliance.

44 HM Government (2013) *The Building Regulations 2010: Regulation 7: Materials and Workmanship*. www.gov.im/media/1346196/approved-document-7.pdf

Route 2: Non-standardised products – independent certification schemes

3.82
Certain products that are not covered by a harmonised European standard can use CE marking by obtaining a European Technical Assessment. This may involve testing by a technical assessment body.

3.83
There are many independent product certification schemes in the UK, for example, the British Board of Agrément (BBA), and elsewhere that may provide information on the performance of a product. Such schemes certify that a material complies with the requirements of a recognised standard and indicates its suitability for its intended purpose and use.

3.84
Certification bodies base their judgements on laboratory testing, or assessments and calculations in lieu of a specific test (often called desktop studies) – both valid routes to establish product properties. If a certification body is content with the performance of the product, they will produce a certificate, which can be used to demonstrate its suitability for certain uses, which must be checked against the requirements of the intended use.

3.85
Accreditation of a certification body by a national accreditation body belonging to the European co-operation for Accreditation (EA) provides a means of demonstrating that the certification body's certification scheme can be relied on. In the UK, most independent certification bodies are accredited by the United Kingdom Accreditation Service (UKAS) against the appropriate quality assessment standard for the work they are undertaking.

Route 3: Tests and calculations

3.86
Where there is no relevant standard, tests, calculations or other means may be used to demonstrate that the material can perform the function for which it is intended. UKAS or an equivalent national accreditation body belonging to the EA may accredit the testing laboratories; this accreditation provides a means of showing that tests can be relied on.

3.87
The Approved Documents outline many standard tests, for example under British Standards, that are routes to compliance. In some cases, assessments (often called desktop studies) carried out in lieu of test results, but based on real test results, can be undertaken to show that one tested product has similar properties to an untested product.

Route 4: Past experience

3.88
Past experience, such as use in an existing building, may show that the material can perform the function for which it is intended.

Conformity testing

3.89
Under regulation 46 of the Building Regulations, local authorities have the power to take samples as necessary to establish whether materials to be used in building work comply with the provisions of the regulations.

3.90
Regulation 46 does not apply to any work specified in an Initial Notice or to any work for which a final certificate has been given by an AI and accepted by the local authority. However, there is an equivalent power for an approved inspector to make tests and take samples in regulation 8(1) of the Building (Approved Inspectors etc.) Regulations 2010.

Materials susceptible to changes in their properties

3.91
There are special provisions for "short-lived materials". For "materials susceptible to changes in their properties" certain environmental conditions can affect the performance of the materials over time. Such materials will meet the requirements of the regulations if the residual properties, including the structural properties, meet both of the following conditions:

a. Residual properties can be estimated at the time of their incorporation in the work.
b. Residual properties are shown to be adequate for the building to perform the function for which it is intended, for the expected life of the building.

Findings

There are several areas of concern with this system, as highlighted by the majority of our call for evidence entries. Contributors believe products are marketed with specification data presented in ways which can easily be misinterpreted. Indeed, individual elements are often used as part of compound systems that are not fully tested as systems. Further, assessments in lieu of tests, or desktop studies, are widely used to assess equivalence of products and systems, but this is not properly managed or controlled both in terms of the circumstances in which they can be used and the qualifications and experience of those undertaking them. Such assessments, and the details of those who produce them, are not made public, even to building control.

Routes to compliance: workmanship

3.92

The routes to demonstrating compliance in workmanship are similar to those for products:

- **Harmonised EU standards** may refer to the intended use of the product.
- **British Standards**, and other international standards, set standards on workmanship on building sites (such as BS 8000). Management systems can be covered by a quality management scheme (such as one that complies with the relevant recommendations of BS EN ISO 9000).
- **Independent certification schemes** can specify how workmanship will deliver a declared level of performance. The person carrying out the work should show that the workmanship will provide the appropriate level of protection and performance.
- **Competent person self-certification schemes** that register installers of materials can provide a means of ensuring that work has been carried out by knowledgeable contractors to appropriate standards.
- **Past experience**, such as use in an existing building, may show that workmanship is appropriate for the function for which it is intended.
- Finally, **tests** can be used to show that workmanship is appropriate. Regulation 45 of the Building Regulations, regulation 8 of the Approved Inspectors Regulations and section 33 of the Building Act 1984 give a BCB the power to carry out tests as they consider necessary to establish whether building work complies with the requirements of regulation 7.

Findings

The integrity and efficacy of product and system classifications are highly dependent on correct installation by competent and knowledgeable persons. The standards of workmanship for the installation of some safety-critical products (e.g. cladding) is not made explicit in the Approved Documents.

Case Study: Concrete

Materials

Concrete should comply with BS EN 197-1 and aggregates with BS EN 12620, both of which are harmonised European product standards so should have CE marking and a Declaration of Performance. Similarly, many common admixtures are also covered by harmonised European product standards.

Workmanship

Workmanship should comply with BS 8000-2, which is a British Standard. This standard covers matters such as handling and storage of materials, precautions against adverse weather, mixing, transporting, placing, curing and protection.

Stage 3 – The fire safety aspects around refurbishments and change of use, including building control oversight

3.93
The description of Stage 2 set out above applies to the construction of new buildings. Once a high-rise residential building is occupied and is being maintained, then Stage 4 below sets out the different regulatory system that applies through the Fire Safety Order and the Housing Act 2004.

3.94
However, when that building is refurbished, or where its use is changed, the Building Regulations (including building control arrangements) are re-engaged.[45] In general, once a decision is made that the Building Regulations are re-engaged, the same requirements set out above, including the building control process, apply. However, there are two sets of complex decision-making processes needed in a refurbishment scenario. This reflects the difficulties that occur when needing to make changes and apply modern understanding of building and fire safety to a building that may be 50 or 100 years old.

Decision 1 – Is this "building work"?

3.95
The Building Regulations set out a number of categories of building work which must meet the requirements in the regulations. The three types of work most likely to be within scope for refurbishments are:

- work that constitutes a material alteration;
- renovation of thermal element (exterior walls, roof and ground floor); and
- provision of a fixed building service (such as replacement windows and doors).

3.96
Under regulation 3 of the Building Regulations, a "material alteration" is only such if the proposed building work would potentially make a building less safe structurally, more at risk from fire, or less accessible for disabled people than required by the Building Regulations in force at the time the work was originally carried out.

3.97
Where the refurbishment fits within any of the categories of building work above, then Building Regulations requirements will apply and the BCBs and the building control oversight described above come back into play. Where the work is not building work, then there will be no BCB oversight.

Decision 2 – Is the non-worsening provision invoked?

3.98
The person doing the refurbishment work must then, alongside the BCB, make an assessment about the extent to which those parts of the building being refurbished will impact more generally on whole building. Very specifically, the ability of the existing building to meet the performance-based standards in Schedule 1 must be reconsidered. In many cases, an old tower block building from the 1960s will fall short of the expected modern minimum standards for meeting, say, requirement B1 (Means of warning and escape from fire). However, there is no requirement to generally improve the fire safety provisions in parts of the building not subject to building work, merely a requirement that the work should not make the building less compliant. This is called the "non-worsening provision".[46]

45 Planning permission may also be required for making external alterations to buildings.
46 Building Regulations 2010, regulation 4(3).

3.99
If the alterations reduce the building's effectiveness in meeting any specific Schedule 1 requirements compared with before those adjustments were made, further changes will be required as part of the building work – but only to take the building back up to the same sub-optimal level that it was before and not to the latest minimum acceptable standards. This non-worsening rule applies to every aspect of building requirements, except for some energy-efficiency provisions.

Findings

While there is a rationale for non-worsening (and more generally for not imposing the latest modern building standards on old buildings, which may quickly make continued occupation, or any refurbishment activity uneconomical), it results in many buildings not having up-to-date arrangements for fire safety and no statutory assumption of continuous improvement over the life of a building. This seriously limits the scope of the law to improve fire safety in pre-existing buildings.

Stage 4 – The fire safety aspects of the regulatory framework surrounding the occupation of a building

3.100
Once a building starts to be occupied then the assumption (based on building control sign-off) is that the building meets the fire safety requirements of the Building Regulations (that are in place at the time of construction) and, as such, is safe to be occupied.[47]

3.101
Once building work is completed and occupation begins, a different regulatory regime applies. These regimes are designed to ensure that premises are proactively managed and maintained to keep those working or living there, and others in the building, safe from the risk of a fire. In residential buildings, this includes ensuring that any hazards to the health and safety of residents, anywhere in, on or around the building, are assessed and removed.

3.102
For high-rise residential buildings, there are two key legal frameworks, each with different scope, requirements and enforcing authorities:

- The **Regulatory Reform (Fire Safety) Order 2005** – enforced by the fire and rescue service; and
- The Housing Act 2004 and, in particular, **the Housing Health and Safety Rating System (England) Regulations 2005** – enforced by local authority Environmental Health Officers (EHOs).

Quick overview of the two key regulatory frameworks

3.103
The Fire Safety Order requires a **"responsible person"** in every relevant premises to carry out, and regularly review, a fire risk assessment for that premise. In residential premises, the fire risk assessment must consider whether the fire safety measures in place in the **common parts** of the building to which the Fire Safety Order applies are suitable and sufficient to minimise the life risk to those lawfully on, or in the vicinity of the premises and, where necessary, to implement and maintain improved fire safety measures that reduce the risk from fire to as low as reasonably practicable.

3.104
This system is fundamentally based on self-regulation (by the responsible person), in conjunction with any **competent person** they choose to employ. In the majority of premises to which the Fire Safety Order applies, including the common parts of high-rise blocks of flats, the local fire and rescue service will be the enforcing authority. It will audit or inspect premises for compliance with the Fire Safety Order's provisions on the basis of its locally determined risk-based inspection programme.

3.105
In contrast, the Housing Health and Safety Rating System 2005 (HHSRS), formed through the Housing Act, is a largely reactive system that assesses likely harm to tenants over 29 identified hazards, including one for fire risk. The HHSRS provides local authorities (through EHOs) with a range of powers to investigate and, where necessary, require landlords mostly private sector landlords) to improve standards and remove hazards. EHOs cannot take enforcement action against local authorities. The HHSRS looks at both the individual dwelling itself and the common parts of the building.

47 In older buildings, the assumption is that the building has been maintained sufficiently to ensure that the fire safety features required at the time of construction remain to the same overall level and it is therefore as safe from fire now as it was then.

Definition of "common parts" under the Fire Safety Order

The Fire Safety Order is primarily designed for non-domestic premises and, as such, applies only to the "common parts" of a residential building; for example, common staircases, corridors and the external doors to each flat.

"Common parts" are outlined in article 2 of the Regulatory Reform (Fire Safety) Order 2005 (Fire Safety Order) in relation to domestic premises, that is, parts of the building "used in common" by the occupants of more than one dwelling. Under the Fire Safety Order, common parts do not include any aspects of fire safety within flats or on the outside of a building, such as cladding.

Unlike the Fire Safety Order, the HHSRS applies to all parts of residential buildings, including both individual flats and all the common parts of high-rise buildings.

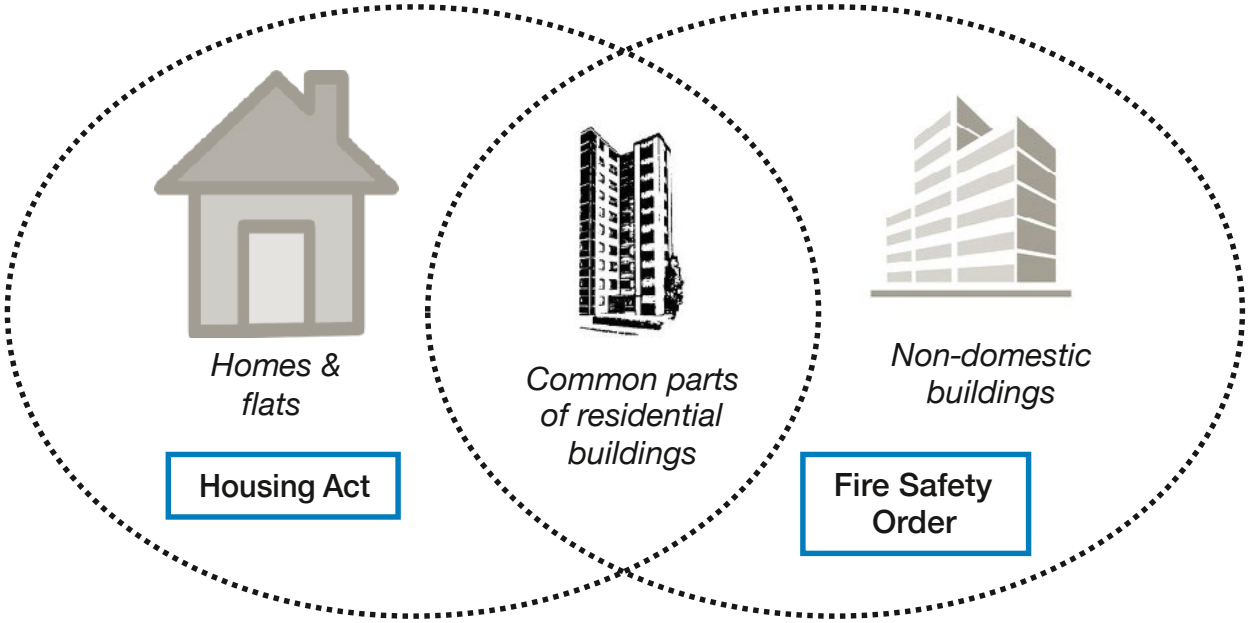

Figure 3.8: The interaction of the Housing Act and Fire Safety Order

Findings

There are two overlapping regulatory frameworks connected to ensuring fire safety in an occupied building. Although protocols[48] do exist to oversee joint working, the legislative overlap and mismatch across these two frameworks make it significantly more challenging for government to ensure that there is a sufficient holistic focus on the fire safety of all occupied buildings.

Specifically, the safety of the common parts from fire can sometimes rely on fire safety measures within the flats, into which there is no power of entry by the fire and rescue service or power to make requirements under the Fire Safety Order. However, there is such a power under the Housing Act. But a coherent fire safety regime is dependent on an understanding of what is happening both within flats and within the common parts.

There is also no recognition in the current system of differing levels of competence required for high-risk or complex buildings.

48 See in particular www.cieh.org/library/knowledge/housing/fire%20protocol%20final.pdf

The regulatory framework around the Fire Safety Order

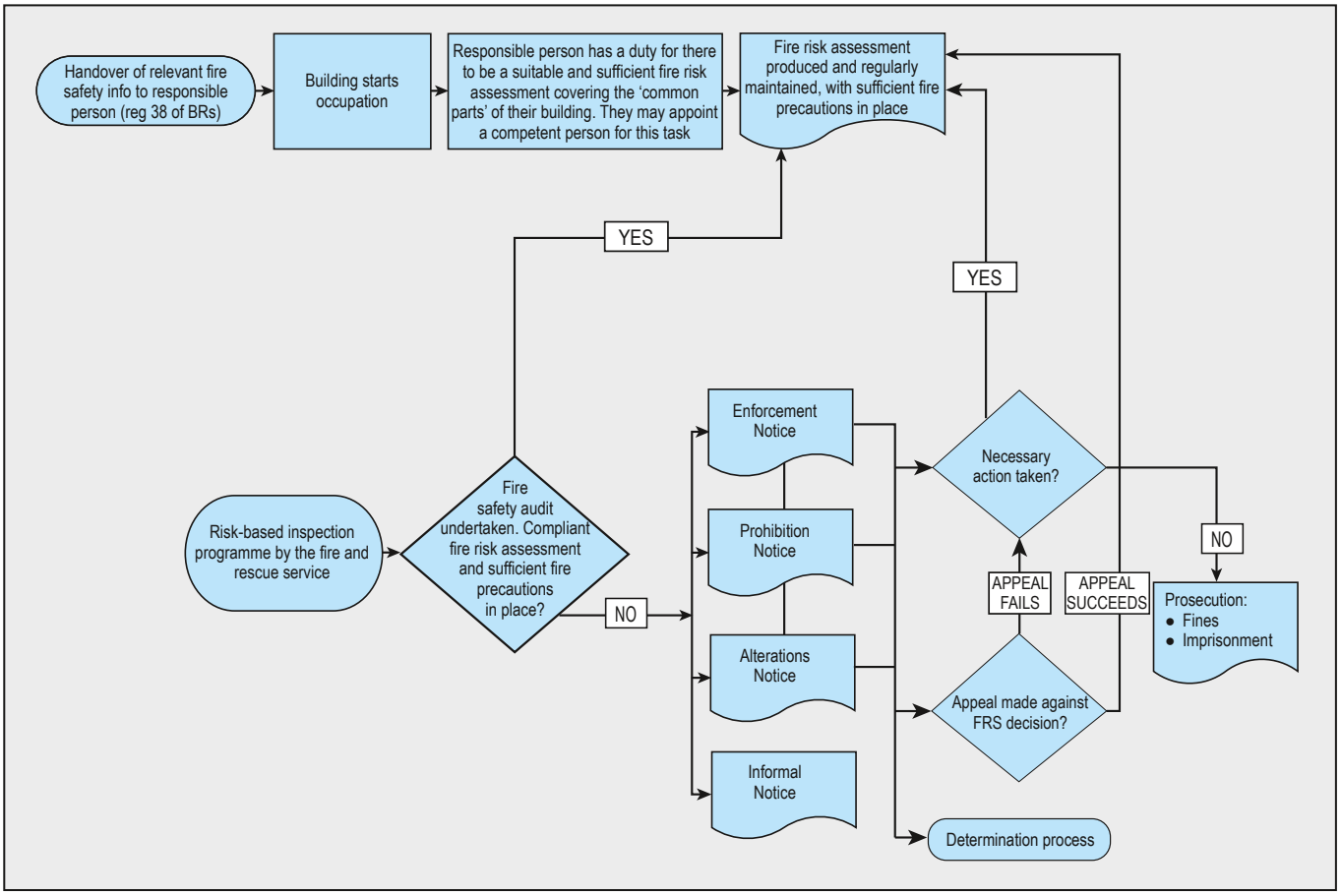

Figure 3.9: The regulatory framework around the Fire Safety Order

The role of the responsible person

3.106
A "responsible person" is required, under the Regulatory Reform (Fire Safety) Order 2005, article 9, to carry out, and regularly review, a fire risk assessment for the building. In the case of residential buildings, the responsible person is usually the building owner, landlord or managing agent. In many cases it will be a body corporate, rather than a named individual.

3.107
The responsible person must ensure that general fire precautions are in place to ensure the safety of residents and also any employees regularly on site. This duty is very similar to that imposed by the general duties of the Health and Safety at Work etc. Act 1974.

3.108
The Fire Safety Order is not prescriptive. The responsible person can decide the fire precautions that are to be put in place, based on the findings of their risk assessment. This will vary according to the specific circumstances of the building and the individuals who reside in it (or commonly work in it).

3.109
The "fire safety information" that should be handed over by those undertaking the building work to the responsible person as part of the transfer of responsibility (see paragraphs 3.63 to 3.64 above) will be of critical importance in determining and maintaining an adequate fire risk assessment.

The role of the competent person

3.110
A responsible person must carry out a fire risk assessment. If they need help in assessing fire risks, the responsible person may appoint a person with expertise in assessing and controlling fire safety risks to assist (for example, a contractor or a fire risk assessor). The person employed to assist with the fire risk assessment can be referred to as a **competent person**. The responsible person retains responsibility for ensuring that the fire risk assessment is suitable and sufficient.[49]

49 Regulatory Reform (Fire Safety) Order 2005, article 18.

3.111
In 2013, the fire sector developed a set of criteria to enable responsible persons to demonstrate whether they had the competencies required to undertake a suitable and sufficient fire risk assessment (and to receive certification from company/UKAS accreditation schemes for doing so). It also produced guidance to help responsible persons choose a suitable and competent contractor or fire risk assessor to assist where necessary.[50]

3.112
A responsible person must also, except in limited circumstances, appoint a competent person to assist him in practically undertaking the fire safety measures identified as necessary in the fire risk assessment. A competent person in this context is defined under the Fire Safety Order as someone who has sufficient training and experience to enable them to properly assist in the undertaking of preventative and protective measures. The level of necessary competence will vary according to the nature and complexity of the premises. The principle is that the appointed person has the appropriate level of competence for the role they undertake.

Findings

There are no minimum requirements for the competent person and no statutory accreditation or registration processes (although some voluntary schemes e.g. Warrington Certification Scheme do exist). While this makes sense for many small, low-risk premises, it is a particular issue for more complex high-rise residential buildings where there are likely to be more sophisticated fire safety strategies and more complex issues around evacuation in the event of a fire. Responsible persons frequently do little to verify competence.

Fire risk assessment

3.113
The key responsibility of the responsible person under the Fire Safety Order (whether undertaken by themselves or a competent person on their behalf) is to carry out a fire risk assessment and put in place fire prevention and mitigation measures that adequately reduce the life safety risk to those on or in the vicinity of the premises to as low as reasonably practicable.

3.114
The fire safety measures covering the common parts of residential buildings that must be adequate for compliance with the Fire Safety Order comprise the following:

- measures to reduce the risk of fire and the risk of spread of fire;
- the means of escape from fire;
- the measures necessary to assist people in the use of the escape routes, such as emergency escape lighting, fire exit signs and measures for smoke control;
- where necessary, fire extinguishing appliances;
- any fire alarm system necessary to ensure the safety of occupants;
- an emergency plan;
- maintenance of all of the above measures; and
- maintenance of measures required by legislation for use by fire-fighters.

3.115
The fire risk assessment must be regularly reviewed. For example, when refurbishment of a building occurs, the responsible person must ensure that their fire risk assessment is reviewed to mitigate the additional risks the alteration process may impose on the building and its residents.

3.116
When the Fire Safety Order was introduced, the government produced a suite of premises-specific guidance documents designed to help those responsible for compliance with the Order (particularly in small or low-risk premises) to understand their responsibilities and identify and implement appropriate fire precautions.[51] These guidance documents have not been updated since that point.

3.117
The government subsequently encouraged specific sectors to develop their own fire safety guidance and to make this available. In 2008, LACORS (Local Authorities Coordinators of Regulatory Services – then part of the Local Government Association) produced 'Housing – Fire Safety guidance' (aimed primarily at those responsible for fire safety in houses of multiple occupation and converted flats). More recently, DCLG funded the Local Government Association to work with the housing and fire sectors to produce 'Fire Safety in Purpose-built Blocks of Flats', which was published in 2011.

50 Fire Risk Assessment Competency Council (2014) *A Guide to Choosing a Competent Fire Risk Assessor*. www.london-fire.gov.uk/Documents/guidance-choosing-a-competent-fire-risk-assessor.pdf
51 For example: www.gov.uk/government/publications/fire-safety-risk-assessment-sleeping-accommodation

Findings

The Fire Safety Order has created some clarity around the role of the responsible person and their need to understand and manage the fire risks in their building. Nevertheless, feedback from the fire and rescue service inspections on high-rise buildings following the Grenfell Tower fire indicates that this system is not fully embedded. In a significant proportion of buildings visited, fire and rescue services had to issue notices covering areas such as poor compartmentation, and lack of effective fire-fighting equipment.

Inspections, sanctions and enforcement around fire risk assessments

3.118
Fire and rescue services are the enforcing authorities in the majority of premises to which the Fire Safety Order applies. Exceptions are as set out in article 25 of the Fire Safety Order.[52] The National Framework for Fire and Rescue in England requires each fire and rescue service to have a locally determined, risk-based inspection programme and management strategy in place to ensure compliance with the Fire Safety Order within their area.

3.119
Fire and rescue services deliver their statutory duty to enforce the provisions of the Fire Safety Order by visiting premises and reviewing the adequacy of the fire risk assessment (to ensure that the fire precautions in place are adequate and appropriate to mitigate the risk to life to as low as reasonably practicable). In most cases, this will involve the inspection of records and fire safety measures.

3.120
There is no target for the number of fire safety audits that fire and rescue services must carry out each year. It is the responsibility of each fire and rescue service to allocate and manage its resources across prevention, protection and operational response to address and mitigate effectively the risks facing their communities. This includes considering how best to resource and deliver their statutory duty to enforce the provisions of the Fire Safety Order. Many fire and rescue services rely on an algorithm to identify the buildings to be visited. This algorithm is based on national and local fire data supplemented by known risks in an area and any complaints or concerns raised.

3.121
The decision as to whether a particular building complies with the provisions of the Fire Safety Order is a matter of professional judgement for the fire and rescue service fire safety officer. Fire and rescue services have a range of powers to ensure that improvements to fire safety measures are made where the building is judged to fall short of Fire Safety Order requirements. If the measures in place are judged to be minor infractions that do not represent a significant risk, then the fire and rescue service can issue an informal (i.e. non-statutory) notice recommending that improvements be made. In cases where the failure to comply may expose employees and/or relevant persons to significant risk, fire and rescue services can issue three types of statutory notice:[53]

- **Alterations Notice** – if the premises have high safety risks or will have high safety risks if the use of the premises changes.
- **Enforcement Notice** – if the fire and rescue service finds a serious risk that is not being managed. The notice will say what improvements are needed, and by when.
- **Prohibition Notice** – if the fire and rescue service thinks the fire risk is so great that use of the premises needs to be immediately prohibited or restricted.

3.122
Where statutory notices are not complied with then those responsible can be taken to court. Minor penalties can lead to fines of up to £5,000. Major penalties can lead to potentially unlimited fines and up to two years in prison in most serious, life-threatening cases.

52 The Regulatory Reform (Fire Safety) Order 2005, article 25, www.legislation.gov.uk/uksi/2005/1541/article/25/made (or article 6 The Regulatory Reform (Fire Safety) Order 2005, www.legislation.gov.uk/uksi/2005/1541/article/6/made).
53 Part 3 of the Regulatory Reform (Fire Safety) Order 2005, and articles 29, 30 and 31 set out the different types of formal action (Alterations Notice, Enforcement Notice and Prohibition Notice), The Regulatory Reform (Fire Safety) Order 2005, article 25, www.legislation.gov.uk/uksi/2005/1541/part/3/made

Findings

Prior to the Grenfell Tower fire, some (but not all) fire and rescue services assessed high-rise residential accommodation as not being higher-risk premises and therefore not a high priority for fire and rescue service audits and inspections. However, as risks change, the priorities for inspection also change. Therefore, as a result of the Grenfell Tower fire, the risk-based inspection programme has been updated to include a greater focus on high-rise buildings.

Fire and rescue services must combine two roles – advising responsible persons on how to fulfil their responsibilities under the Fire Safety Order, and also enforcing action against them where necessary. It is clear that fire and rescue services have found the contrasting advice and enforcement roles difficult to combine in practice.

We have heard that there are pressures on fire and rescue services – connected to declining numbers and an ageing workforce. This would impact on the ability of some fire and rescue services to fulfil their statutory duties and undertake their inspection responsibilities effectively.

The regulatory framework around the Housing Act 2004

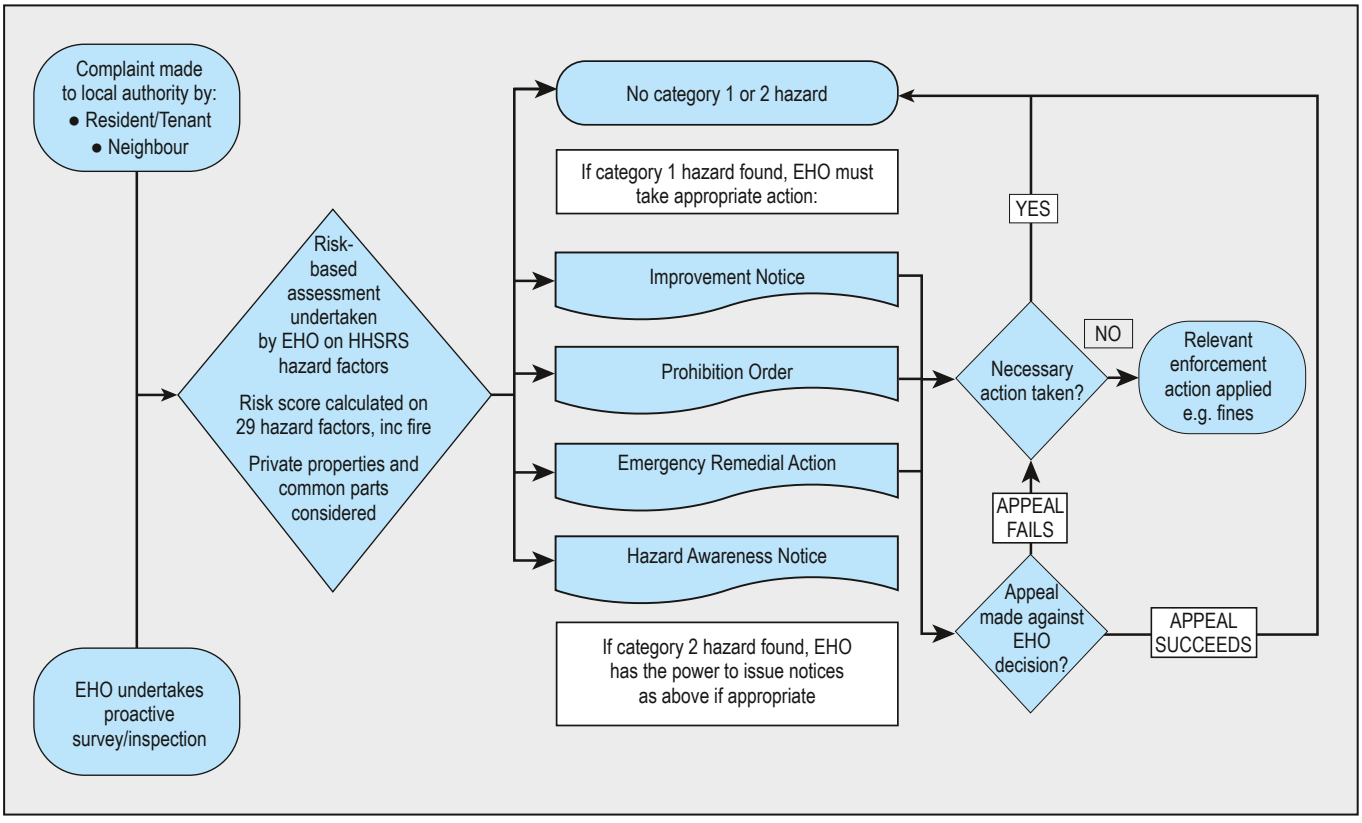

Figure 3.10: The regulatory framework around the Housing Act 2004

3.123
Local authority EHOs[54] have powers under the Housing Act to inspect any residential property in their area and require building owners to make improvements or remove hazards where necessary. A standard methodology – the HHSRS – is used to identify potential hazards and assess the potential for harm that may result from exposure to the hazard.

3.124
The HHSRS applies to all tenures but it is most frequently used in the private rented sector. It is a reactive system which is normally triggered by a complaint from a private sector tenant about the condition of the property. An inspection can also be, or may take place because the local authority has become aware of relevant issues which suggest that a property needs to be inspected. If necessary, local authorities have powers of entry which permit them to enter a property without the landlord's permission.[55]

3.125
If an investigation is necessary under the HHSRS, an EHO will look at evidence of hazards across all 29 possible hazard factors.

HHSRS 29 hazard factors

Physiological requirements:

1. Damp and mould growth
2. Excess cold
3. Excess heat
4. Asbestos and manufactured mineral fibre
5. Biocides
6. Carbon monoxide and flue combustion products
7. Lead
8. Radiation
9. Uncombusted fuel gas
10. Volatile organic compounds

Psychological requirements:

11. Crowding and space
12. Entry by intruders
13. Lighting
14. Noise **Protection against infections:**
15. Domestic hygiene, pests and refuse
16. Food safety
17. Personal hygiene, sanitation and drainage
18. Water supply

Protection against accidents:

19. Falls associated with baths, etc.
20. Falls on level surfaces
21. Falls on stairs or steps
22. Falls between levels
23. Electrical hazards
24. **Fire**
25. Hot surfaces
26. Collision and entrapment
27. Explosions
28. Ergonomics – position and use of amenities
29. Structural collapse and falling elements

3.126
One of these hazard factors is the risk of fire. While it allows, in principle, for any fire risk to be assessed and then enforcement action to be taken, it is not primarily focused on building design or, for example, adequate fire prevention systems or means of escape, but more specific fire risks within a property (e.g. position of an open fire).

3.127
When an assessment is made it will be the job of the EHO to calculate whether there are any **category 1 hazards:** where a property contains potentially serious risks to the health and safety of the occupants. In such cases, the local authority must take appropriate action requiring the landlord/building owner to reduce or remove the risk. Where there is a **category 2 hazard**: less serious risk, local authorities may take action but are not obliged to do so.

54 EHOs work to make sure that people's living and working surroundings are safe and hygienic, across a range of issues such food safety, environmental protection and pollution control, noise control, health and safety at work, public health and housing standards.
55 Housing Act 2004, section 239.

Sanctions and enforcement under the Housing Act

3.128
There are a number of enforcement approaches an EHO can take against (almost always) a private sector landlord (EHOs are not empowered to take action against a local authority property):

- **Improvement Notice:** requires improvements in building conditions within a set period of time.
- **Prohibition Notice:** requires landlords to stop renting their property until necessary changes are made.
- **Emergency Remedial Action:** in extreme circumstances where building work is undertaken by the local authority and then the costs are recouped.
- **Demolition/Slum Clearance Order:** in extreme circumstances the local authority can also determine the building must be demolished.
- **Hazard Awareness Notices:** where warning signs must be put up. They have no sanction attached and do not require action to be taken, but are very rarely used for category 1 hazards.

3.129
Failure to comply with an Improvement Notice is a criminal offence for which local authorities can impose a financial penalty of up to £30,000 or prosecute in the courts, which have the power to impose an unlimited fine. A local authority can also seek a Rent Repayment Order covering up to 12 months' rent. Ignoring a Prohibition Notice is also a criminal offence and the courts have the power to impose an unlimited fine.

Findings

The overlap and mismatch across these two regulatory frameworks make it significantly more challenging for government to ensure that there is a sufficient holistic focus on the fire safety of all occupied buildings.

The HHSRS has advantages given that it can look in both individual flats and common parts. However, it is a primarily reactive system covering a large number of housing hazards, meaning that local authorities are not necessarily using the powers to proactively manage fire risks. The prioritisation of the 29 different factors is highly subjective. In addition, expertise on fire safety issues and the breadth of a complex fire management strategy is likely to be better understood, on average, within a fire and rescue service rather than an EHO team.

There is no recognition in the current system of differing levels of competence required for increasing complexity of buildings and situations to be assessed.

Conclusion

3.130
The mapping work has shown that the overall regulatory system focusing on fire safety is highly complex with multiple requirements and diluted or unclear accountabilities throughout the system. The review will continue to refine the mapping and evidence base and use it to design a more effective and simpler system.

Chapter 4 Gathering stakeholder evidence

Contents

Introduction

Background

4.1
Alongside the mapping work covered in Chapter 3, the review has used a number of techniques to gather and analyse a large volume of quantitative and qualitative data from a wide range sources to inform its work.

4.2
One such technique was a call for evidence issued on 12 September 2017 with a closing date of 13 October 2017. In parallel, Dame Judith held a series of bilateral meetings with the construction industry, with fire safety organisations and relevant experts. Roundtable meetings were held with industry, with housing, landlord and tenant organisations, and in Manchester and London with residents of high-rise residential buildings.

4.3
This chapter sets out the feedback, input and findings of this range of engagement with stakeholders. It sets out in broad terms the responses received through the call for evidence, as well as feedback received through bilateral meetings and the roundtable events. It outlines also where this feedback has contributed to the review's emerging findings.

Key findings

4.4
The call for evidence received a sizeable response with comprehensive feedback and evidence. This highlighted widespread dissatisfaction with the current system and numerous recommendations for improvement, many of which overlap with issues thrown up by the mapping work. Many of these issues and concerns raised were similarly reflected in discussions with industry, including regulatory system experts and fire safety organisations.

4.5
The main points that have emerged from the call for evidence and discussion with industry and residents are:

- **The guidance could be clearer and more user friendly** – feedback showed a widespread misunderstanding of the role of guidance within the system and the scope for misinterpretation.
- **Roles and responsibilities are not clear** – there is a lack of definition and a lack of accountability for carrying out activity.
- **The handovers between different regulatory regimes are poorly defined and poorly executed.**
- **Competence is an issue** – there are no clear methods for assuring and demonstrating the competence of people working within the system.
- **Enforcement is poor** – partly because the process of enforcement is burdensome and costly for local authorities. Punitive measures could better hold to account those who fail to comply with regulations.
- **Products are an issue** – current testing and use of desktop studies are not sufficiently rigorous, and marketing does not reflect the complexity of the current testing.
- **Residents' voices are not heard** – there are inadequate channels for residents to have a voice on fire safety with their landlords or managing agents.
- **Communication is insufficient** – on fire safety in high-rise residential buildings, it falls short of what is needed to help residents feel safe.
- **Complexity of tenures can have a negative impact** – the complexity of tenures and the lack of a national representative tenants' organisation hinder a constructive relationship between building owners/landlords/managing agents and their tenants or leaseholders.
- **Residents' role** – residents want to play a greater part in contributing to how fire safety works in their own buildings.

Methodology

Call for evidence

4.6
The call for evidence was a series of 10 questions that, taken together, addressed the totality of the regulatory system for building regulations and fire safety. As with other chapters of this report, the term 'regulatory system' was interpreted to include "the current framework of building, housing and fire safety legislation and associated guidance which create a framework through which fire safety is embedded, assessed and assured through the full life cycle of a building".[1]

4.7
The particular focus of the review is the regulatory system insofar as it applies to high-rise residential buildings. However, respondents to the call for evidence were asked not to limit their responses to that type of building should they wish to make broader points. Respondents were asked to comment upon which parts of the system work well and which do not, as well as to make recommendations for improvements.

Bilateral meetings and roundtables

4.8
To conduct a series of bilateral and roundtable meetings, the review identified key stakeholders in the following groups: the building industry, fire safety organisations, technical experts, local authorities, housing organisations, landlord and tenant umbrella organisations, and residents themselves. With industry and fire safety practitioners and experts, the review sought to draw upon their expertise in the current building regulations and fire safety systems to identify strengths, key issues and concerns. By consulting a wide and diverse range of stakeholders, including through discussions with housing, landlord and tenant organisations, as well as residents, the aim was to obtain rich and robust data on what happens in practice on the ground and evidence that would inform the review's findings.

1 The call for evidence for the Independent Review of Building Regulations and Fire Safety is available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/644139/The_call_for_evidence_for_the_independent_Review_of_Building_Regulations_and_Fire_Safety.pdf

Headline statistics from the call for evidence

- There was a good response to the review's request for feedback, including through the call for evidence; there were more than 250 responses in total.
- Respondents made a combined total of more than 1,000 recommendations.
- Areas in which most recommendations were received included the clarity of legislation and guidance, and roles and responsibilities (indicating that respondents considered them to be areas in which positive change might be achieved).
- We received a relatively high level of responses from some organisation types, such as professional bodies.
- Response rates for other organisation types and for jurisdictions other than England were lower; where appropriate, other measures have been/ will be used to obtain evidence.
- As well as considering respondents' answers to specific questions, the review carried out a thematic analysis of responses, contributing to emerging findings and interim recommendations.

Evidence and emerging findings

4.9
This section sets out quantitative and qualitative evidence received through the call for evidence, as well as feedback from bilateral meetings and roundtables. These are grouped under main themes, in line with our call for evidence questions, but also incorporate other relevant feedback. The 10 questions posed in the call for evidence are at Appendix E. Where extracts are quoted from responses to the call for evidence, these are intended as examples of important points but should not be seen as demonstrating consensus among respondents.

4.10
Although there was no unanimity among respondents to the call for evidence and those consulted through bilateral meetings and roundtables, **there was broad consensus that the current regulatory system is unfit for purpose, particularly with regard to high-rise residential buildings**. While in some areas the system worked well and there were examples of good practice, **a clear need for reform was identified throughout the system**.

Q1. The overarching legal requirements

4.11
The majority of responses to the call for evidence and wider feedback indicated that regulation and guidance are not clear.

4.12
Many call for evidence respondents and others consulted explained that participants in the system generally find the legislation and guidance unclear. This included confusion between the two, with some referring to the Approved Documents as 'the regulations'.

4.13
At the roundtables, some believed that Approved Document B was generally a good document in that it sets parameters and performance indicators for implementing the regulations. However, there was concern that it was not user friendly and could be arranged in a more integrated way. Others confirmed that it could be that some elements were contradictory, that terminology throughout was inconsistent and that it could be interpreted in different ways.

4.14
Some respondents highlighted that building in England can commence without some of the checks present in other jurisdictions, and that thereafter it can diverge from the original plans without any proper change control process and documentation.

4.15
There was widely held concern that implementing the rules was increasingly seen as a tick-box exercise, with building owners and industry focused on doing the minimum required to meet the rules rather than doing what was needed to ensure a building was safe in the immediate and long term.

Quantitative analysis[2]

- Approximately 50% of respondents indicated that legislation and guidance are unclear.
- Less than 10% of respondents indicated that legislation and guidance are clear.[3]

2 Throughout, figures are expressed as an approximate percentage of those respondents who addressed the particular question (not all respondents answered every question), where they have done so in such a way that a clear 'yes/no/mixed' indication could be gleaned (in other cases, although the question has been addressed, the responses were more narrative, such that they were not amenable to summarising in that way).
3 The remainder have been initially assessed as 'mixed' (a similar approach has been taken where figures are quoted throughout this chapter).

Sample qualitative evidence

"It is also felt that over time the Building Regulations have become increasingly technical and complex, and personal experience suggests that even those involved in the design process appear to be struggling with the increasing complexity of regulatory requirements."
Barrow-in-Furness Borough Council Development Services Group

"For some, there is a lack of understanding about how all the strands of legislation and guidance fit together, and about the distinction between legal requirements and extensive guidance. It seems clear that some readers believe that the Approved Documents are the requirements … There is a general sense that the Approved Documents do not provide sufficient clarity. Approved Document B is generally considered complex, difficult to follow, and in places contradictory. Difficulties in understanding, and even navigating, the documents lead to differences in interpretation."
Construction Industry Council

Q2. Roles

4.16
The majority of the responses to the call for evidence and feedback from stakeholders indicated that that roles, responsibilities and accountabilities are unclear.

4.17
Many respondents to the call for evidence and others consulted explained that roles are undefined and unclear in the current system. There was widespread agreement that all parties needed to be clear about their roles and be accountable for their delivery.

4.18
Residents voiced frustration at the lack of clarity over who was responsible for fire safety in existing buildings, with many reporting a lack of engagement from their landlords or managing agents. Several noted that this may owe as much to the complexity of the regulatory framework and its lack of clarity about where accountability sits as to building owners or others deliberately not taking responsibility.

4.19
Many, including but not limited to fire safety organisations, felt that the role of fire safety engineers had been diluted, with limited consultation at the start of a project and an inability to speak with authority during design and construction. Residents regretted the loss of a defined and authoritative role for the fire and rescue services, and called for the latter to play a greater role in ensuring continued fire safety in existing buildings, with regular inspections and an ability to enforce its findings. A better defined and more authoritative role would ensure greater consistency in fire safety implementation across all multi-occupancy residential buildings.

4.20
There were mixed views on the role of Local Authority Building Control (LABC) and the extent to which it could act in both an implementation and enforcement role without a conflict of interest. There was a range of views also on the impact of privatisation of inspections and concerns that increased competition from Approved Inspectors drove down prices but did not necessarily result in better quality decisions.

Quantitative analysis

- Approximately 60% of respondents indicated that roles, responsibilities and accountabilities are unclear.
- Less than 10% of respondents indicated that they are clear.

Sample qualitative evidence

"There is evidently a lack of effective guidance on the roles and responsibilities of individuals at key stages of the building process. There are elements of legislation that attempt to define responsible individuals, but even these do not provide clear answers. The lack of clarity is demonstrated by the primary duty of the Building Act, which applies to 'the person carrying out the work'. This is fundamental to compliance with Building Regulations, but who is that?"
Construction Industry Council

"The identification and responsibilities of a responsible person under the RRO [Regulatory Reform (Fire Safety) Order 2005] are often not well understood. In many cases there are multiple people and organisations dealing with the building and none of them accepting responsibility for being the 'responsible person'."
Fire Industry Association

"The lead designer (architect or engineer) is commonly no longer responsible for oversight of the design and the specification of materials and products from inception to completion of the project, with design responsibility often transferred to the contractor, numerous sub-contractor designed elements, and no single point of design responsibility. The frequent absence of the role of the clerk of works or site architect and the loss of independent oversight of construction and workmanship on behalf of the client means that the client often has little real control over construction quality and frequently is over-reliant on the building control process alone to ensure compliance with the Building Regulations."
Royal Institute of British Architects

Q3. Responsibilities

4.21
Overall, responses to the call for evidence and what the review heard more widely indicated that, within the existing regime, overarching responsibility is unclear.

4.22
Many respondents reported that responsibilities are unclear to many participants in the system during phases such as design, build and occupation and at the handovers between them, including when responsibility passes to the 'responsible person' on occupation.

4.23
Feedback was received also about the extent to which ensuring compliance with the Building Regulations should rest with building control and/or those carrying out building work.

4.24
Others addressed the overlap of responsibilities such as consultation between building control and fire and rescue services; in particular, whether this occurs sufficiently early for the fire and rescue service's views to be properly taken into account.

4.25
Some acknowledged that industry, as well as building owners and landlords, needed to take their share of responsibility for ensuring that buildings were safe in the long term.

Quantitative analysis

- Around 65% of respondents indicated that overarching responsibility is unclear.
- Just under 10% of respondents indicated that it is clear.

Sample qualitative evidence

"The construction process involves many professionals who deliver various pieces of information at various stages of construction. Within the UK, this is generally delivered without a designated person who has responsibility for compliance with the Building Regulations. This can lead to fragmentation in the flow of information which can lead to areas of non-compliance, which may be exacerbated without the interventions of a BCB. The Construction Design and Management (CDM) regulations are a model that offers parallels, with a named professional (such as the Architect) at the start of the scheme given the responsibility of 'Appointed Person'."
National House Building Council

Q4. Competencies of key players

4.26
Broadly speaking, the majority of responses to the call and much of what was heard from others consulted indicated that those responsible for demonstrating and assessing compliance within the existing regime are not appropriately trained, accredited or adequately resourced.

4.27
Many respondents to the call for evidence and others expressed concern about the competence of principal actors within the process, in particular builders, inspectors and fire engineers, in what is necessarily a technical area, and one in which an inadvertent error could prove disastrous for fire safety.

4.28
The competence of building and fire safety professionals and how they are certified and accredited were seen as critical to proper implementation of the regulations and could in turn promote a change in culture and behaviours. There were examples of good practice, with Approved Inspectors requiring a specified level of expertise and overseen by an independent body, and work undertaken by the LABC[4] on new qualifications. But, more generally, systems for ensuring that individuals had the right level of expertise and were formally registered and accredited with professional bodies were seen as inadequate and as carrying serious risks in situations where inadvertent errors could have a disastrous impact.

4.29
Residents in particular were dissatisfied by the level of competence demonstrated by those responsible for fire safety in their buildings, whether this was the landlord or managing agent, or those conducting fire risk assessments. The quality of fire risk assessments was often inadequate, with some conducted off site or through only cursory inspection of communal areas.

Quantitative analysis

- Approximately 55% of respondents indicated that those responsible for demonstrating and assessing compliance within the existing regime are not appropriately trained, accredited and adequately resourced.
- Less than 5% of respondents indicated that they are appropriately trained, etc.

Sample qualitative evidence

"The level of competency within the fire industry is widely varied … In relation to fire engineering, the IFE offers Chartered Engineer status, but in practice, the majority of people who advertise themselves as 'fire engineers' or 'fire experts' do not have that status. Many other fire engineers rely on other qualifications, such as Chartered status through other (non-fire organisations) or fire brigade experience. So while they may (or may not) be competent, they have no third-party check of their competence as a fire engineer."
International Fire Consultants Ltd

"Increased privatisation of the building control process has led to a reduction in building control capability and capacity, particularly in local authorities, which has been raised as a significant concern. Some contributors have advocated increasing local authority responsibility for building control, which would require increased training and capacity. It is important that building control bodies have the right competence and capability to assess compliance, including the fire safety, of complex buildings, and that this competency is clearly defined. These requirements for competency and training should be consistent across building control; currently, local authorities are not subject to formal qualification and training requirements, unlike Approved Inspectors under the Construction Industry Council Approved Inspectors Register."
Royal Academy of Engineering

Q5. Enforcement and sanctions

4.30
The majority of responses to the call for evidence and input from wider stakeholders indicated that the current checking and inspection regime is not adequately backed up through enforcement and sanctions.

4.31
Industry stakeholders said that those responsible for fire safety needed to take their responsibilities seriously, retain sufficient oversight and ensure adherence to regulations. Enforcement was patchy and inconsistent.

4.32
Many respondents to the call for evidence cited the differing responsibilities and authorities of Approved Inspectors and LABC, and the limited extent to which prosecution through the courts was seen as an effective option, with fines for non-compliance seen as less financially burdensome than compliance. Some suggested that withholding Completion Certificates would be an important tool for building control bodies in ensuring compliance, preventing occupation of a building before formal sign-off.

4 The not-for-profit membership organisation that represents all local authority building control teams in England and Wales.

4.33
Ownership throughout a building's life cycle from occupation through any refurbishments and change of use is seen as critical to ensuring fire safety in current housing stock. Formal documentation needs to be in place, reflecting changes to a building's structure or use throughout its life cycle, so that owners, landlord and fire and rescue services are able to judge where fire safety systems might have been compromised. There was concern that inspections and reviews are insufficiently frequent or timed inappropriately, resulting in potential breaches not being discovered; namely, when defective work might be obscured by subsequent work.

4.34
The principle of 'non-worsening' was discussed in some detail, with many wanting to see efforts to better reflect modern-day safety requirements when material changes were made but recognising the difficulties. Many questioned the feasibility of improved retrospective implementation on existing housing stock, although some flagged that retrospection could be legislated for, citing examples in other industries particularly where health and safety issues were an important feature.

Quantitative analysis

- Approximately 65% of respondents indicated that the current checking and inspection regime is not adequately backed up through enforcement and sanctions.
- Less than 5% of respondents indicated that it is adequately backed up.

Sample qualitative evidence

"Enforcement of the building regulations has been disincentivised by the introduction of competition between the public and private sectors … since competition was first introduced, there has been a tendency for developers, contractors and householders to move away from local authority building control and appoint a private sector building control body in contract law. The private sector has no enforcement powers and the contract gives the client a significant degree of control over the level and type of work undertaken by the building control body."
London District Surveyors Association

"The response from contractors would often be to cover up areas quickly in order to avoid the risk of Building Control identifying problems that would then need rectifying."
Fire Industry Association

"Where enforcement powers are particularly deficient are, in our view, around enforcement of the Building Act 1984. The Act only allows the local authority to bring a case against a defendant who has undertaken unauthorised works within two years of completion, and the case must be taken against the person who carried out the works. Alternatively, or in addition, within a year of works being completed, the local authority could serve an enforcement notice demanding that the building owner undertakes works to address the infringement; with the threat that the council could undertake the work itself and subsequently recover costs. In reality, it is difficult for local authorities to prove, particularly without the co-operation of building owners or the relevant Approved Inspector (if applicable), exactly when the works were completed and who by."
London Councils

Q6. Tenants' and residents' voice and raising concerns in the current system

4.35
Overall, feedback from roundtables with residents and in the call for evidence indicated a mixed view of the effectiveness of the current means for residents to raise concerns about fire safety.

4.36
There was overwhelming agreement among residents and organisations representing tenants and leaseholders that options were limited, with many not knowing how to express concerns about fire safety in their buildings and to whom, or what to do if their landlord or managing agent failed to respond. There were good examples where landlords listened, and of the empowering role that tenant and residential associations could play in informing and supporting residents on fire safety. However, many felt that the complexity of tenures, the lack of a national representative tenants' organisation and inadequate enforcement where there were failings made it difficult to ensure

a genuinely constructive relationship between building owners/landlords/managing agents and their tenants or leaseholders.

4.37
Many residents were frustrated by the intermittent nature of information made available on fire safety in their buildings, including access to fire safety assessments when they were conducted. Managing agents were singled out as tending to ignore or dismiss requests for information and for giving insufficient or incorrect advice. There were calls for greater residents' participation in matters affecting their own buildings, including fire safety, although there was recognition that the mix of tenures meant that not all residents would see this as something in which they wished to be involved.

4.38
Many wanted to know what 'good' looked like and who was responsible for ensuring this. Residents gave several examples of instances where fire risk assessments had been either perfunctory or not completed on a regular basis, resulting in a detrimental cumulative impact on fire safety. There was a call for punitive measures aimed at holding to account those who failed to enforce required measures.

Quantitative analysis

- Less than 10% of respondents indicated that the current means for residents to raise concerns are adequate.

Sample qualitative evidence

"The opportunities that Registered Provider landlords offer for tenants to engage with them usually range from patchy to even worse. A small number of social housing landlords have good methods of engagement with their tenants – but very few offer extensive engagement opportunities, and even fewer have the skills to be able to use the voices they do hear from tenants in a positive and constructive fashion that enables a two-way dialogue. The worst landlords rely almost exclusively on digital means of communication with tenants – i.e. the only means that tenants have to communicate with their landlord may be by email or through a digital platform on the landlord's website, meaning (a) that whether and how the landlord responds is entirely in the gift of the landlord and (b) that there are no means for tenants to engage with the landlord collectively with other tenants …
"Happily, there are still a small number of good landlords who do work closely with their tenants. In such tenancies, tenants are enabled to shape, challenge and scrutinise how the landlord manages homes. This is particularly important in that with such landlords, tenants are potentially empowered to identify and challenge in relation to areas such as tenant safety. They are the eyes and ears of the landlord – making sure that issues that need addressing are brought to light quickly and acted upon."
A Voice for Tenants group

Q7. Quality assurance and testing of materials

4.39
Overall, respondents to the call for evidence and those consulted more widely indicated that the way building components are safety checked, certified and marketed in relation to building regulations requires change.

4.40
A large proportion of industry and fire safety experts cited confusion over product testing, labelling and certification as a significant contributory factor to fire safety systems being compromised. On testing, many expressed concern that test conditions do not necessarily reflect real-world conditions and that a failure to replicate defective installation when conducting tests can have a misleading effect on test results. There was also concern that products are marketed in a way that allows product data to be misinterpreted.

4.41
Desktop studies are considered by many to be the only cost-effective solution in some circumstances. However, many respondents were critical of the over-reliance upon desktop studies, given the limitations in their ability to accurately extrapolate performance in a fire (particularly where the performance of complete systems is extrapolated from performance testing of their component parts in isolation).

4.42
Call for evidence respondents raised concerns about the prevalence of product substitution as part of a process of 'value engineering', without any adequate control or oversight to ensure the replacement products performed as well as those

envisaged by the designer and approved by building control at the full plans stage. Some referred to the increasingly uncommon role of a clerk of works as a quality control function on site.

Quantitative analysis

- Around 75% of respondents indicated that the way building components are safety checked, certified and marketed in relation to building regulations requires change.
- Less than 15% of respondents indicated that change is not required.

Sample qualitative evidence

"Fire safety marketing information and test reports are accepted at times when there is insufficient scrutiny or a lack of expertise in relation to how they are applied and may impact on other materials or product components within a system. Many products are tested totally in isolation and do not account for the interaction with other elements. For a fire door to function, all of the components (seals, glazing, ironmongery) must be compatible. Many lack a formal process to check that products are as originally specified, or even whether the products that are delivered to site are as specification."
British Woodworking Federation

"A register of products delivered and used in the construction process would provide a paper trail, would assist the control of materials and clearly identify if variations have been made to the previously approved specifications."
Retired building control manager

"Of particular concern is the testing of materials. Under the current system a desktop report from an accredited testing body is sufficient where no fire test data is available for a particular system. These reports are a matter of opinion and cannot be verified by building control. This use of desktop studies as a substitute for a fire test should be stopped." *London Councils*

Q8. Differentiation within the current regulatory system

4.43

A significant proportion of those who responded to the call for evidence and those consulted by the review saw advantages in creating a greater degree of differentiation in the regulatory system between high-rise multi-occupancy residential buildings and other less complex types of residential/non-residential buildings, but there was no overarching consensus on this point.

4.44

Many considered that the current system could be improved through the introduction of a system that differentiates on the basis of the risks associated with a proposed building. But a significant number of call for evidence respondents did not consider building height to be a sufficient basis upon which to make that differentiation.

Quantitative analysis

- Around 45% of respondents saw advantages in creating a greater degree of differentiation in the regulatory system between high-rise multi-occupancy residential buildings and other less complex types of residential/non-residential buildings.
- Approximately 20% felt there were disadvantages in creating a greater degree of differentiation on that basis.

Sample qualitative evidence

"In terms of differentiating residential high rises, advantages could be stricter, more robust fire safety for high-rise residential buildings, which could help prevent multiple fatalities and serious injury/illness, including post-traumatic stress. It could also mean that more was invested in fire prevention in such buildings. However, disadvantages could be wrongly implying that non-residential high rises were not a fire risk … all high rises should be covered by effective fire safety regulation and enforcement."
Institution of Occupational Safety and Health

"A greater degree of differentiation in the regulatory system could have the advantage of making differentiated safety requirements more visible and hence clearer to those with responsibilities under the regulations. It could also facilitate the mandating of stricter review or enforcement processes in relation to high-risk buildings, which may be valuable … there are arguments for differentiation based on the number of storeys, such as under three storeys, as is the current definition of low-rise buildings, or under ten storeys, where fire rescue services have more straightforward access to buildings both to remove residents and fight fire. However, there are many risk factors that can affect fire safety in addition to height, including area, function, access, building complexity, and so on. Therefore, it may be more appropriate to differentiate buildings based on a thorough risk assessment of design, rather than on the number of storeys alone."
Royal Academy of Engineering

Q9. International comparisons

4.45
Overall, within the call for evidence, responses indicated there is a considerable amount of good practice in the area of fire safety, outside England. In many cases, specific examples were provided.

4.46
In the review's more detailed research on international systems, a more balanced approach emerged, with clear areas of good practice but limited evidence of where particular approaches had made a genuine difference to fire safety. More detailed information on this research is in Chapter 5.

4.47
In the call for evidence responses and the opinions expressed at roundtable events, the use of sprinklers outside England was raised. In particular, the mandatory installation of sprinklers in new residential buildings in Wales, and their use in Australia. A significant number were in favour of fitting sprinklers in all new builds, and a smaller number supported the retro-fitting of sprinkler systems in some categories of existing buildings. However, it was also recognised that this could not be seen as a panacea, that there are practical challenges to their use in existing buildings and a need to consult with residents. Some stakeholders also raised the weaknesses of sprinkler systems; for example, their limited effectiveness at preventing external fire spread and the need for competent installation and effective maintenance.

Quantitative analysis
- Around 35% of respondents signposted and provided specific examples of good practice from other jurisdictions.
- Examples covered a broad range of countries, including New Zealand, Singapore, Australia, Scotland and Germany.

Q10. Other sectors

4.48
The views of the majority of those who responded to the call for evidence show that there is a considerable amount of good practice in the area of fire safety in other industries and sectors. Specific examples were provided in many cases.

4.49
Respondents highlighted useful parallels with other industries, including aviation and offshore oil and gas extraction, namely after the Piper Alpha disaster. They also cited the greater clarity and effectiveness of UK health and safety legislation in relation to construction, and in particular the Construction (Design and Management) Regulations 2015 which clearly define roles, assign responsibilities to them and do not allow these to be delegated away. The Gas Safe (CORGI) certification scheme was quoted as an example of good practice in requiring a registered installer to undertake installation and testing.

Quantitative analysis
- Around 25% of respondents signposted and provided specific examples of good practice from other industries and sectors.
- Examples covered a range of sectors including oil and gas, air and maritime, and offshore industries.

Sample qualitative evidence

"The railway industry requires that all combustible materials used on a passenger vehicle must meet fire safety criteria. A key lesson is that the railway vehicle manufacturer takes responsibility for the whole project, from concept design, to construction, and to approval by the authorising body … With respect to the [Fire Safety Order], it would be worth examining the NI CQC which only permits registered Fire Risk Assessors to carry out an FRA on a care home."
Institution of Fire Engineers

"As an example, in terms of [health and safety] legislation, asbestos is controlled effectively and efficiently by the HSE. This is regulated in terms of training, competence, qualification and certification. Only qualified companies/ individuals can carry out work, and all relevant construction staff are trained based upon their potential impact or exposure. The same principles can be applied/replicated to fire safety quite easily."
Engineered Panels in Construction Limited

Culture and behaviours

4.50
An area of concern not addressed specifically through the call for evidence questions but which was a recurring theme throughout responses and feedback received more widely, was the current culture of the building industry, with claims that this impacted negatively on fire safety. Some suggested that a failure to take responsibility for safety and a reliance on building control to identify any faults were seen as opportunities to absolve those carrying out building work. It was noted also that construction is an industry in which sub-contracting is common, and that this may lead to a lack of clarity about acceptance of multiple layers of responsibility.

4.51
Many residents similarly recognised that much of what needed to change required a change in culture and behaviours, both on the part of owners and landlords, and residents themselves. The latter needed to understand the risks involved in certain practices, such as removing fire doors inside their flats and leaving obstacles in communal areas. Active residential associations could help with this but relied upon volunteers rather than the owner or managing agent being proactive in providing advice and information. Residents needed to feel they could speak out, both to their neighbours who might be putting fire safety integrity at risk, as well as to landlords and managing agents. A change in the urgency with which critical safety measures are addressed was also important to ensuring greater trust in the system.

Chapter 5 International systems for building regulation and fire safety

Contents

Introduction

5.1
The review is drawing upon international experience of building and fire safety regulatory systems and frameworks covering other industries where exceptional events can lead to the risk of large-scale fatalities. Our aim is to compare the system in England with those used elsewhere so as to identify best practice, learn from others' experiences and lessons, and examine whether and how we might seek to reflect best practice elsewhere in our own frameworks and implementation.

Key findings

5.2
Our research into regulatory systems in other countries has enabled the review to present the following initial findings:

a. The formal use of gateways or approval points at the design approval stage and at points during construction and handover appears to indicate better compliance in line with local building regulations and standards. However, there are claims that this can lead to project delays if approval systems are under-resourced.
b. Most countries we researched have a risk-based approach, defining buildings according to their function and/or level of risk. More complex buildings are required to comply with more stringent processes and standards. They may be subject also to more frequent and in-depth on-site inspections, and require additional approvals during construction.
c. Other countries define explicitly the competence required of those working on a build, often specifying the levels of expertise needed to meet the complexity of particular projects. Similarly, licensing and accreditation requirements often vary in line with the complexity of the building.
d. Examples in some countries indicated a correlation between compliance and enforcement; namely, that where there were more rigorous enforcement and sanction regimes there was greater compliance with regulations. More evidential data would be needed to make this finding more robust.
e. The countries examined included those with predominantly prescriptive or performance-based systems, single or multiple regulations, and either a centralised or devolved approach. Our research to date has not enabled us to draw links between the use of one or more of these alternatives and evidence that they work more effectively than others.
f. From the countries we have researched to date, few appear to have tackled successfully the issue of ensuring that existing housing stock meets modern-day fire safety standards. A number have work in progress to improve existing stock in a phased manner, but there are limited examples of good practice in this area.

Approach and methodology

5.3
In this first phase of the review, our focus has been on researching and mapping the core elements of building and fire safety systems in other countries.

5.4
In our preliminary research, we looked at a relatively wide range of countries where we might expect particular similarities to or differences from our approaches, owing either to a country's history or political set-up, or where culture and behaviours may be very similar to or different from our own. This initial work enabled us to select specific countries based on four criteria, where one or more applied:

- of a comparable size to the UK – either in land area or population;
- with a comparable number of multi-occupancy high-rise residential buildings;
- recent experience of large-scale fires in high-rise residential buildings; and
- experience of recent reviews of building and fire safety systems.

5.5
The countries we selected, whose building and fire safety regulatory systems we have researched in some detail, are:

- outside Europe – Australia, New Zealand, Singapore, Canada, United Arab Emirates (UAE), China, USA, Malaysia;
- within Europe – France, Germany, The Netherlands; and
- within the UK – Scotland, Northern Ireland, Wales.

5.6
We conducted this research by:

- working with the Royal Academy of Engineering to gather information on current frameworks and implementation through global expert contacts;
- using the review's call for evidence to gather information on systems and best practice in other countries;
- engaging in direct bilateral contact with governments and in-country fire safety experts;
- conducting desk research, including accessing readily available papers by academics and expert organisations; and
- participating at the first meeting of the EU's Fire Information Exchange Platform in Brussels.

Emerging findings

5.7
Our research has drawn out a number of common themes across building and fire safety regulatory frameworks and implementation.

Regulatory frameworks

Single or multiple regulations

5.8
Some countries have a combined single regulation covering all aspects of building systems (e.g. environmental, construction, fire safety), which could support a holistic or 'whole system' approach to new construction and refurbishments. Other countries (as is the case in England and Wales) have distinct areas of regulation, which interrelate so as to provide overall direction or guidance for construction and the full life cycle of a building.

5.9
There appear to be similar levels of complexity in regulatory frameworks, irrespective of a country's use of a single or multi-faceted mechanism. Whether or not a single regulatory mechanism is used does not appear to impact on the extent to which it is implemented effectively. We found examples of both single and multiple mechanisms demonstrating effective practice, as well as areas of vulnerability. Single mechanisms were generally deemed to provide greater clarity on intent and purpose and to be easier to navigate, with positive expert feedback on the systems in The Netherlands and Australia. However, we found no substantive evidence that implementation was more consistent. In contrast, single regulatory frameworks were seen as slower to adapt to technological advances, while countries with multiple mechanisms in force, such as the USA and Canada, appeared better able to amend individual elements as new priorities or changes required this.

Case studies

The **UAE** has multiple regulations governing different aspects of construction and fire safety, with no single overarching document. There is also a clear differentiation between building and fire safety regulations, with different regulatory bodies. Concerns relate to a lack of clarity, inconsistencies and confusion over which codes and standards apply in which circumstances.[1]

In **Australia**, the primary regulation governing buildings is the National Construction Code. This incorporates all areas of building regulation including energy efficiency, access, plumbing and fire safety into a single code.[2] The code is overseen by the Australian Building Codes Board and is a model code, implemented with or without modification by states and territories.

Performance-based or primarily prescriptive

5.10
The majority of countries researched have a mix of prescriptive and performance-based routes for regulation, although some have a stronger reliance on more prescriptive systems. Here we use the term 'performance-based' to refer to any functional, objective-based or performance-based system, recognising that all systems clarify the intent of regulation with policy-level goals and functional objectives but do not necessarily define detailed performance objectives aimed at providing a basis for evaluation.

5.11
In those countries where there exists a more prescriptive system, this may be where local culture and behaviours, including the wider approach to regulation, favour a more rules-based approach to government regulation. Alternatively, more prescriptive measures may have been introduced where events such as large-scale fires or other disasters demonstrated that current systems were not being implemented fully, whether owing

1 Information provided by Fellows of the Royal Academy of Engineering and colleagues with experience of the building industry and fire safety in the UAE.
2 Information provided by the Australian Academy of Technology and Engineering and the Institution of Fire Engineers, Australia.

to the complexity of regulations, a general lack of understanding of responsibilities or concern about the level of competence of practitioners.

5.12
The 1980s and 1990s saw a marked shift in many countries, particularly in Europe but also beyond, towards more goals-based regulatory systems, often as part of wider political and social moves towards decentralisation and de-regularisation and aimed at encouraging innovation. More recently, a number of countries have introduced new prescriptive regulatory measures in a way that may, at first, appear to back-track on this earlier trend. However, this appears to be more of a direct response to large-scale fires and/or aimed at addressing areas where regulations or guidance have been found to have gaps or inconsistencies. We have heard that more prescriptive approaches have been established also in rapidly developing countries where the pace of change in the industry is rapid.

Case studies

The **US** regulatory system is primarily prescriptive with detailed provisions and guidance; a very high proportion of buildings are constructed and maintained based on the National Fire Protection Association's (NFPA) model codes and locally adapted codes. There are performance-based criteria also, with goals, objectives and necessary considerations set out in the NFPA codes. But these are used rarely; compliance with clear prescriptive criteria is generally seen as preferable to possibly lengthy approval processes for designs that fall outside these.[3]

Scotland has a performance-based regulatory system, reliant on building owners and approved certifiers ensuring that their design and construction meet defined end requirements.[4]

The **UAE** uses a prescriptive system, largely drawing on the USA's NFPA codes. Where these prescriptive requirements are not achievable, the UAE authority having jurisdiction will consider performance-based designs as an alternative.

Centralised or devolved promulgation

5.13
The countries researched include those which promulgate regulations at the national, regional or local level. Where central government retains the dominant role, we have seen examples of coherent and consistent implementation and enforcement. This tends to work particularly well in countries of smaller landmass or population size where a consistent approach across the country is practicable, such as in Scotland and Singapore. Where regional or local government leads delivery and enforcement, the regulatory system appears better able to adapt to regional diversity; for example, where differing climates or seismic risk may require very different building solutions, such as in the USA, Australia or Canada. In those countries where a more devolved system operates, central oversight is usually provided by the development and promulgation of a national model code, which can then be modified to suit local conditions, as is the case in Australia and the USA.

Case studies

In the **USA**, states and local jurisdictions establish an appropriate safety requirement on the basis of model codes developed independently by the NFPA. They adopt these codes or introduce more stringent codes (they cannot fall below this model code standard), and these become legally binding in the state or city concerned. State or municipal agencies are responsible for enforcement, with no defined federal state role. Those working on a new building have a good understanding of local regulations, including where these differ from the national model code.

Singapore has a centralised system with building regulations set and enforced by the Building and Construction Authority within the Ministry of National Development, while the Fire Code is enforced by the Civil Defence Force. The system is reported to be particularly effective in enforcement and in allowing residents to report failures or their concerns about fire safety.[5]

In **Canada**, provinces and territories interpret and implement national codes locally. Some use the codes as they are set centrally, while others modify them to suit the local context.[6]

3 Information provided by the NFPA.
4 Meacham, B.J. (ed.) (2010) *Performance-Based Building Regulatory Systems, Principles and Engagement – A Report of the Inter-Jurisdictional Regulatory Collaboration Committee*, www.wpi.edu/sites/default/files/docs/Departments-Programs/Fire-Protection/IRCC_Final_PDF.pdf
5 Information provided by officials and organisations with experience of the building industry and fire safety in Singapore.
6 Information provided by individuals working in Codes Canada, the Building and Development Branch of the Province of Ontario's Ministry of Municipal Affairs, and the Ontario Building Officials Association.

Differentiation of buildings

5.14

Most countries categorise buildings based on function, height, size and the level of risk. Different categories of buildings usually have differing requirements for fire safety, including for more complex or high-risk buildings such as high-rise residential buildings, schools and hospitals. Those working on buildings of a higher risk category are usually required to have a higher level of expertise, qualifications and accreditation, as is the case in China and the USA. Some countries also have different review or enforcement processes for buildings categorised as higher risk, carrying out more frequent and/or in-depth fire safety checks to reflect the complexity of the building.

Case studies

US national fire codes differentiate between buildings based primarily on function (e.g. group occupancy) and risk (most often structural design and the impact of any failure). Some model codes apply to all buildings, with others applying as appropriate according to eventual use and the level of risk. For example, healthcare buildings have a higher requirement and dependence on 'defend in place' principles (similar to England's 'stay put' policy).[7]

In **Canada**, there are multiple levels of building categorisation based on function, floor area, material construction and whether the building is fitted with sprinklers. For buildings over 18 metres high, the code contains additional safety requirements including controlled smoke movement, sprinklers, lifts for fire-fighter access, central alarms and voice-controlled systems.

In **Germany**, the codes differentiate buildings on the basis of height and use. Categories 1, 2 and 3 encompass buildings up to a height of 7 metres (from the ground to the floor of the top storey), while categories 4 and 5 cover buildings up to 13 metres and up to 22 metres tall. All buildings with a height above 22 metres are formally defined as high-rise buildings, and for these, as well as buildings with certain functions such as hospitals, schools or shopping malls, additional requirements apply.[8]

Regulatory reviews

5.15

A number of countries have a formal schedule of regular reviews in place, usually in three- to five-year cycles, but this tends not to be the norm. Instead, many reviews are instigated after a large-scale fire or other disaster, for example following devastating fires in China and the UAE, or for reasons not always related specifically to fire safety, such as where technological advances in energy efficiency may require changes to other regulations. Where reviews conducted as a result of a large-scale fire result in changes to the fire safety regulatory system, these are frequently introduced through prescriptive measures either as a temporary or permanent 'fix', until a more overarching review is held.

Case studies

In **Scotland**, where no pre-determined schedule of reviews exists, reviews take place on an ad hoc basis in response to new developments or innovations, as well as in response to large-scale incidents.[9]

Canada publishes any proposed changes to codes annually and publishes updated and reviewed codes in five-year cycles.

In **Australia**, the national code was previously reviewed annually but this has recently been reduced to a review every three years. Codes were first merged into the single National Construction Code in 2011 and a review was last held in 2016. A task force set up in Victoria in July 2017 to assess fire safety in buildings with cladding across the state is in progress. This review will keep up to date with its findings as its work continues.

Retrospection

5.16

Very few of the countries researched have a clear regulatory mechanism for ensuring that significant changes to existing buildings require fire safety measures to be brought in line with requirements for new buildings. It is more usual for those responsible to be required to ensure that any material modification or change in use results in 'no worsening' of the fire safety system and its expected effectiveness in the building.

7 APEC and USAID (2013) APEC Building Codes, Regulations and Standards: Minimum, Mandatory and Green, www.cec.org/islandora-gb/islandora/object/islandora:1213/datastream/OBJ-EN/view

8 German Federal Institute for Materials Research and Testing and the German Fire Protection Association

9 Scottish Government (2017) *Building Standards: Performance Framework Verification*, www.gov.scot/Topics/Built-Environment/Building/Building-standards/verification/verpf17

There are exceptions, namely in the USA and Hong Kong, where there is clear guidance on the threshold at which any changes to existing buildings must meet new fire safety standards, and in New Zealand. But we have found only limited evidence of this taking place routinely or consistently, and a number of countries are looking actively at this particular fire safety issue.

Case studies

In **New Zealand**, the Building Act 2004 requires that buildings must be brought to comply 'as nearly as is reasonably practicable' with the provisions of the Building Code where:

- a change of use of a building is intended, which involves the incorporation in the building of one or more household units where household units did not exist before, then the building in its new use must comply in all respects; or
- alterations to, or a change of use of, existing buildings are intended, then the means of escape from fire and access and facilities for people with disabilities must comply.

This requirement demonstrates a move to improve fire safety cumulatively in existing stock, particularly in that considered to be high risk. This is not a new legal concept, with similar requirements seen in other legal mechanisms for evaluating safety systems in New Zealand. However, implementation is not always consistent.[10]

In **Canada**, there are instances when the National Building Code is used to enforce the retrospective application of new rules to existing buildings, but this is not an expectation or requirement. The National Building Code could be interpreted to require the installation of fire alarms or sprinklers in an existing building where the authority having jurisdiction determines that there is an inherent threat to occupant safety, and issues an order to eliminate the unsafe condition. This will have been after a careful consideration of the level of safety needed and balancing the cost of implementing a requirement with the relative importance of that requirement to the overall code objectives.

Roles, responsibilities and accountability

5.17
Building regulations generally define roles and responsibilities throughout a building's construction and life cycle. The dutyholders vary, with accountability lying either with the building owner (e.g. in the USA), or transferring between the building owner, the design professional, the construction contractor or other individual involved at appropriate points during design and construction. In some countries, responsibility and accountability are clearly detailed for every stage of a building's life cycle, as is the case in Singapore, while in other countries the handover of responsibility at a particular point is not always explicit.

5.18
A lack of clarity around roles and accountability tends to impact on the extent to which enforcement is seen as effective. Feedback from a number of countries confirmed difficulties in responding to non-compliance. This tended to be the result of those responsible not being aware that they were liable rather than a blatant disregard for the rules.

Case studies

In **Germany,** the building owner has primary responsibility throughout and must submit all documentation for approval. But other individuals have responsibility for their areas of work; during construction the owner nominates to the building authorities a contact person responsible for construction. On completion, responsibility transfers back to the owner.

In **Scotland**, overall responsibility for ensuring that buildings are designed, built, maintained and operated in a compliant manner sits with the building owner. Individuals playing a particular role are responsible for applying for the relevant warrant or permit at particular points but liability remains with the building owner.[11]

In the **UAE**, the national code requires the designation of a person, the 'Program Manager', who is responsible for the design and completion of the fire prevention programme. Usually, an accredited independent third party (fire consultant) is used to prepare fire safety strategies, training programmes, safety checklists and fire systems to be implemented

10 www.building.govt.nz/managing-buildings/change-of-use-and-alterations-existing/
11 Scottish Government (2017), *Investigation of Compliance Levels with the Building (Scotland) Regulations 2004 (including Schedule 3).*

during construction or modification. The Program Manager is responsible for ensuring that the plan is prepared by the consultant, and implemented during construction.

Competence and accreditation

5.19

Generally, the required level of competence of individuals involved in a building's design, construction and inspection is explicit in building regulations or guidance. The majority of countries we researched require a certain level of competence, indicated by certification either through centrally administered examinations or existing professional qualifications, and in many cases accreditation to recognised professional bodies. In countries such as Germany, the USA and China, the level of certification and accreditation required is higher for work on more complex or higher risk buildings.

Case studies

In the **USA**, all individuals working on design and construction are required to have relevant qualifications, and different categories of certification and accreditation are required for different engineering specialisms. Accreditation requirements are determined at state level. A state-registered engineer is required to sign off building designs in their area of specialism only, and there are harsh fines (including loss of accreditation) for any individual who conducts this role improperly. State-level accreditation is not automatically transferable to other states; for example, California requires those working on building construction to be accredited within California given the very specific seismic risks in that state.

In **Dubai** in the **UAE**, fire safety professionals are licensed by the Civil Defence Force on the basis of written and oral examinations. Building codes also require companies to have a trade licence, which defines the category of work they may conduct, and for each category of work named qualified staff must be approved by the Dubai Municipality. A consultant with a trade licence to design low-rise buildings cannot be used to design a high-rise building. This results in credible companies requiring a mix of professionals so that they can bid for work across a wide range of construction projects.

In **China**, all building designs must be completed and signed off by a chartered engineer, either of first or second class depending upon the complexity of the build and level of risk involved. Similarly, all design companies are defined as first or second class, and must have a requisite number of first-class engineers to be able to operate on more complex builds. All designs must also undergo a peer review by a qualified individual registered with the government or go before an expert review panel if the design deviates from the national codes.[12]

Compliance and enforcement

5.20

Enforcement processes in the majority of countries researched include a review of the design and the issue of a permit before the start of construction, as well as at certain points throughout construction and at handover for final use. In some countries, a phased approach may be allowed so that review and approval of more complex designs may not necessarily hold up initial straightforward work, such as the construction of footings. Common practice across the countries researched includes a final review on completion of construction, and approval to allow the building to come into use.

5.21

In most countries, the most common 'sanction' (or regulatory response) to non-compliance detected during construction or on completion is the requirement for it to be rectified before approval. Sanctions to address non-compliance are evident in the building regulations in all countries researched, but information provided in this initial phase has been limited on the extent to which these are used and in what circumstances different sanctions apply (e.g. fines or a custodial sentence). There is limited evidence at this point also of the effectiveness of such sanctions, not only in addressing non-compliance of new or existing buildings, but also in deterring others from operating in a similar way.

12 Information provided by multinational organisations with experience of working in the buildings industry in China.

5.22
A common concern across many of the countries researched is the extent to which any deviation from a design or use of materials, after approval and construction begins, requires a further review and new formal approval.

Case studies

In **Canada**, sanctions are determined by individual provinces. Orders can be issued to require changes to ensure compliance. In Ontario, for example, sanctions include fines of up to CAD50,000 for individuals and CAD100,000 for corporates, with up to one year's imprisonment also possible.

In **Scotland**, failure to comply with the Building (Scotland) Act 2003 can include fines, prevention of or restriction to the use of the building, and/or civil or criminal court proceedings.[13]

In the **UAE**, a building permit is required before work can begin. Non-compliance can result in substantial fines, which are applied frequently, or a custodial sentence, as well as the loss of a trade licence for the responsible individual and/or company.

Privatisation of inspector, review and enforcer roles

5.23
Enforcement processes in most countries are currently conducted by local authorities or bodies appointed by government. Increasingly, countries both in Europe and beyond are shifting towards privatisation of building reviews and control, although local authorities generally retain an enforcement role in some form. At the completion of work, third-party or peer reviews are increasingly common practice, including by private bodies, with clear processes for this in China and the UAE.

5.24
In our initial research, we have been unable to establish the extent to which increased privatisation and competition for regulatory inspections and reviews are resulting in a higher or lower level of standards, particularly where local authorities retain an enforcement role. Much of the feedback received indicates concerns that increased privatisation reduces the independence of the review process and leads to a decreasing capacity and expertise in local authorities. There are notable concerns also that third-party inspections are open to abuse given the potential conflict of interests, with growing levels of mutual dependence between developers and contracted inspectors.

Case studies

The system in **Singapore** relies heavily on the private sector to design plans and independent third parties to review designs.

In **The Netherlands**, local authorities are responsible for the approval of designs allowing the issue of building permits, inspections at any point during construction and completion approvals. A draft law currently before Parliament sets out new processes on quality assurance that would increase the privatisation of building control.[14] There are concerns among some that this may reduce the independence of building control.

13 Building (Scotland) Act 2003, www.legislation.gov.uk/asp/2003/8/contents
14 Information provided by the Department of the Built Environment, Eindhoven University of Technology, Fellows of the Netherlands Academy of Technology and Innovation and their networks in the Netherlands Normalisation Institute (NEN) and the Delft University of Technology.

Next steps

5.25
In the next phase of work, we will probe earlier responses from the countries surveyed, particularly in the areas set out above. We will commission more detailed information, including quantitative data on fire incidences, casualties and any trends, to help us identify where particular systems and/or changes to systems have resulted in genuine improvements to fire safety in high-rise residential buildings.

5.26
We will also commission research into the regulatory systems of other UK industries relying on a high level of safety, including where large-scale disasters may have led to a comprehensive review of the regulatory environment. The oil and gas industry (including its response to the Piper Alpha disaster), the rail industry, bridge construction and food standards may all offer examples of good practice and lessons on which we can draw.

5.27
Where we have indicated a number of areas in the regulatory system in England that require further investigation and analysis, we will use examples of what has worked well in other countries to support policy development in these areas.

Appendices

Contents

Appendix A: Biography of Dame Judith Hackitt DBE FREng

Dame Judith was Chair of the Health and Safety Executive from October 2007 to March 2016. She previously served as a Health and Safety Commissioner between 2002 and 2005. She was made a Dame in the 2016 New Year Honours for services to health and safety and engineering, and in particular for being a role model for young women. She was awarded a CBE in 2006.

In April 2016, she was appointed as Chair of EEF, The Manufacturers' Organisation.

Dame Judith is a chemical engineer and graduated from Imperial College in 1975. She worked in the chemicals manufacturing industry for 23 years before joining the Chemical Industries Association (CIA) in 1998. She became Director General of CIA (from 2002 to 2005) and then worked in Brussels for the European Chemical Industry Council (CEFIC).

She was elected Fellow of the Royal Academy of Engineering in July 2010 and currently chairs its External Affairs Committee. Dame Judith is a Fellow of the Institution of Chemical Engineers (IChemE) and a member of council. She was President of IChemE from May 2013 to May 2014.

Dame Judith is also Chair of Semta (the Science, Engineering and Manufacturing Technologies Alliance), and a non-executive director of the High Value Manufacturing Catapult.

Appendix B: Key terms

Adequate/appropriate/ reasonable provision	Tests to judge the degree of compliance necessary with a requirement in the Building Regulations 2010. The Approved Documents set out what would be adequate/appropriate/ reasonable in different circumstances.
Amendment Notice	A notice given by an Approved Inspector under section 51A of the Building Act 1984 to notify changes to the description of the building work to be carried out as specified in the Initial Notice.
Approved Document	A guidance document approved under section 6 of the Building Act 1984 to provide practical guidance on ways to comply with the requirements in the building regulations.
Approved Document B	Statutory guidance on ways to comply with the fire safety requirements in Part B of Schedule 1 to the Building Regulations 2010.
Approved Inspector (AI)	Bodies approved under section 49 of the Building Act 1984 to carry out building control functions as an alternative to Local Authority Building Control. Almost all are private sector bodies.
Building control	A statutory process of assessing plans for building work and building work on site to decide whether the plans and work comply with the requirements in the building regulations.
Building control body (BCB)	A local authority or an Approved Inspector.
Building Information Modelling (BIM)	A process of designing, constructing or operating a building or infrastructure asset using electronic object-oriented information or a discrete set of electronic object-oriented information used for design, construction and operation of a built asset.
Building work	Work on buildings within the scope of the Building Regulations 2010 as defined in regulation 3.
Competent person scheme	A scheme authorised under the Building Act 1984 by which registered installers have the right to self-certify the compliance of the work they do without the involvement of a building control body.
Competent person (Fire Safety Order)	Under the Regulatory Reform (Fire Safety Order) 2005, a competent person is defined as someone with sufficient training and experience or knowledge and other qualities to properly assist in the undertaking of preventative and protective measures (i.e. the measures identified in a fire risk assessment as the general fire precautions which must be taken to comply with the requirements of the Order).
Completion Certificate	A certificate given by a local authority under regulation 17 or 17A of the Building Regulations 2010 when the authority has taken all reasonable steps to assess the compliance of building work. A Completion Certificate is evidence, but not conclusive evidence, of compliance.
Design and build	A project where the main contractor is mainly responsible for both the design and build stages of a building project.
Desktop study	An assessment carried out in lieu of a physical test. The term is particularly associated with cladding systems.
Final Certificate	A certificate given by an Approved Inspector under section 51 of the Building Act 1984 stating that, having taken such steps as are reasonable within the limits of professional skill and care, the Approved Inspector's opinion is that the work complies with the requirements in the building regulations. A Final Certificate is evidence, but not conclusive evidence, of compliance.
Fire engineer	A person with the ability to apply scientific and engineering principles, rules and expert judgement, based on an understanding of the phenomena and effects of fire and of the reaction and behaviour of people to fire, to protect people, property and the environment from the destructive effects of fire.

Fire risk assessment	A systematic and structured examination of the likelihood of fire and the consequences to those who may be affected by a fire. Under the Regulatory Reform (Fire Safety Order) 2005, a fire risk assessment must evaluate the risk from fire to employees and other relevant persons (persons lawfully on the premises and/or persons in the immediate vicinity who are at risk from fire on the premises) for the purpose of identifying the general fire precautions that are needed to comply with the provisions of the Order.
Full plans application	An application made to a local authority under section 16 of the Building Act 1984 for the approval of the plans for building work. A full plans application must be made whenever the building is or would be subject to the Fire Safety Order 2005.
Initial Notice	A notice given by an Approved Inspector under section 47 of the Building Act 1984 to say that the Approved Inspector will be the building control body, rather than a local authority, for the building work described in the Initial Notice.
Material alteration	Under regulation 3 of the Building Regulations 2010, an alteration made to a building is material if the work would result in a building not complying with a requirement where it previously did or, where it did not comply with a requirement, was no less compliant than before the work was carried out.
Non-worsening of compliance	Under regulation 4(3) of the Building Regulations 2010, a requirement that the building as a whole after the work was carried out fully complied with all relevant requirements or, where it did not previously comply, is no less compliant than before the work was carried out.
Plans Certificate	A certificate given at the request of the person carrying out the work by an Approved Inspector under section 50 of the Building Act 1984 stating that, in the Approved Inspector's opinion, the work set out in the plans would comply with the requirements of the building regulations.
Responsible person	Under the Regulatory Reform (Fire Safety) Order 2005, a responsible person is generally an employer or, in premises which are not a workplace, the owner or other person who has control of the premises in connection with carrying on of a trade, business or other undertaking (whether for profit or not).
Section 36 notice	A notice served by a local authority under section 36 of the Building Act requiring a building owner to bring non-compliant work up to the required standard or to remove the non-compliant work.

Appendix C: Acknowledgements

Thank you to all the individuals and organisations who have engaged with the review to date. The organisations are listed below.

3C Shared Services Building Control
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Adexsi UK Ltd
Advanced Smoke Group
Affinity Sutton
Alarmscom
All-Party Parliamentary Group on Fire Safety and Rescue
All-Party Parliamentary Group on Leasehold and Commonhold Reform
ARCH Tenants Group
Architectural and Specialist Door Manufacturers' Association
Arup
Ascent Fire Safety
Association for Specialist Fire Protection
Association of British Insurers
Association of Residential Managing Agents
Association of Retained Council Housing
Atelier Ten
Atkins
Australian Academy of Technology and Engineering
Australian Institution of Fire Engineers
AXA
Balfour Beatty
Barrow-in-Furness Borough Council
Basildon Borough Council
Bassetlaw District Council
Belimo Automation UK Ltd
Berneslai Homes
Bespoke Building Control Ltd
Bevan Architects
Bolton at Home
British Automatic Fire Sprinkler Association
British Board of Agrément
British Electrotechnical and Allied Manufacturers Association
British Plastic Federation
British Property Federation
British Research Establishment
British Rigid Urethane Foam Manufacturers' Association
British Safety Council
British Standards Institution
Buckinghamshire Fire and Rescue Service
Build UK
Building and Development Branch in the Province of Ontario's Ministry of Municipal Affairs
Building Engineering Services Association
Building Regulations Advisory Committee
Building Services Research and Information Association
Buro Happold
Business Sprinkler Alliance
Butler & Young
Cadent Gas Ltd
Calderdale Council
Carlion
Catalyst Housing
Centre for the Protection of National Infrastructure
Centre for Window and Cladding Technology
Centre Scientifique et Technique du Batiment
Certsure LLP
Chartered Institute for Environmental Health
Chartered Institute of Architectural Technologists
Chartered Institute of Environmental Health
Chartered Institution of Building Services Engineers and the Society of Façade Engineering
Chartered Trading Standards Institute Greater London

Chelmsford City Council
Cheshire Fire and Rescue
CICAIR
Citizens Advice Bureau
Clarion Housing Group
Coltraco Ultrasonics Ltd
Confederation of Co-operative Housing
Construction Industry Council
Construction Leadership Council
Construction Products Association
Council for Aluminium in Building
Crawley Homes
Croydon Council
Defence Infrastructure Organisation
Delft University of Technology
Department for Business, Energy & Industrial Strategy
Department for Education
Department of Finance, Northern Ireland
Department of Health
Department of the Built Environment, Eindhoven University of Technology
Design Fire Consultants
Devon and Somerset Fire and Rescue Service
Door and Hardware Federation
Ealing Council
East Sussex Fire and Rescue Service
Eastwood and Partners Consulting Engineers
Electrical Safety First
Engineered Panels in Construction Ltd
Essenden Design Ltd
European Fire Sprinkler Network
Exova Warringtonfire
Federation of Master Builders
Federation of Private Residents' Associations
Federation of Tenants and Residents Associations
Fellows of the Canadian Academy of Engineering
Fellows of The Netherlands Academy of Technology
Finishes and Interior Sector
Fire Brigades Union
Fire Cubed LLP
Fire Doors Complete Ltd
Fire Industry Association
Fire Ingenuity LLP
Fire Protection Association
Fire Protection Ltd
Fire Sector Federation
Fläkt Woods Ltd
Flamerisk Safety Solution Ltd
Fortis Living
FS Consulting
Genesis Housing
Gentoo Group
German Federal Institute for Materials Research and Testing
Glass and Glazing Federation
Greater Manchester Combined Authority
Greenfields Community Housing
Greenwich University
Grenfell Fire Forum
Grenfell Tower Inquiry
Grundfos
Guild of Architectural Ironmongers
Hackney Council
Hampshire Fire and Rescue Service
Harlow Council Building Control
Hazards Forum
Heatrae Sadia
Hertfordshire Fire and Rescue Service
Historic England
Home Builders Federation
Housing Ombudsman
HSH (Hyde Group)
HSS Engineers Bhd
Humberside Fire and Rescue Service
Hyndburn Borough Council
Independent Expert Advisory Panel
Institute of Residential Property Management
Institution of Civil Engineers
Institution of Fire Engineers
Institution of Occupational Safety and Health
International Fire Consultants
JACOBS
JGA Fire Engineering Consultants
Kent Fire and Rescue Service
Killa Design
Kingspan Insulation Ltd
Knauf Insulation UK
Laing O'Rourke
Lakanal House Group
Lambeth Council
Lancashire Fire and Rescue Service
Lareine Engineering
Lichfield District Council

Local Authority Building Control
Local Building Standards Scotland
Local Government Association
London & Quadrant
London Borough of Camden
London Borough of Havering
London Borough of Lambeth
London Borough of Newham
London Borough of Tower Hamlets
London Borough of Westminster
London Councils
London District Surveyors
London Fire Brigade
London Housing Association
Manchester City Council
McAlpine
MD Warranty Support Services Ltd
Meinhardt (UK) Ltd
Merseyside Fire and Rescue Service
Metropolitan Housing
Midland Heart
Milton Keynes Council
Mineral Wool Insulation Manufacturers Association
Ministerial Building Safety Group
National Association of Rooflight Manufacturers
National Federation of ALMOs
National Federation of Tenant Management Organisations
National Fire Chiefs Council
National Fire Protection Association
National Fire Sprinkler Network
National House Building Council
National Housing Federation
National Landlords Association
National Tenant Organisations
National Trust
Network Homes Ltd
Newcastle City Council
NIG Commercial
Nordic Fire Safety
North Wales Fire and Rescue Service
Northamptonshire Fire and Rescue Service
Notting Hill Housing
Nuclear Industry Fire Safety Co-ordinating Committee
Ontario Building Officials Association
Optivo Housing
Oxford City Council
PA Housing
Parliamentary Office of Science and Technology
Passive Fire Protection Forum
Peabody Housing
Peaks and Plains Housing Trust
Places for People
Plymouth City Council
Plymouth Community Homes
Portsmouth City Council
Powys County Council
Probyn Miers
PRP Architects
Residential Landlords Association
Retained Firefighters' Union
ROCKWOOL Group
Royal Academy of British Architects
Royal Academy of Engineering
Royal Berkshire Fire and Rescue Service
Royal Institute of Chartered Surveyors
Salford City Council
Salix Housing
Scottish Fire and Rescue Service
Scottish Government
Scottish Review Panel of Building Standards (Fire Safety)
SE Controls
Sefton Council
Shelter
Shropshire Fire and Rescue Service
Singapore Building & Construction Authority
Smoke Control Association
Solihull Building Control
South Wales Fire and Rescue Service
South Yorkshire Fire and Rescue Service
Southern Housing
Southwark Council
Staffordshire Fire and Rescue Service
Strategic Housing
Structural Safety
Surrey, East Sussex, West Sussex Fire and Rescue Services
Swansea Council
TAROE Trust
Technical University of Ostrava, Faculty of Safety Engineering
Tenax

The Concrete Centre
The Hyde Group
TNL Consulting Ltd
Together Housing
Tower Blocks Network
Trenton Fire Ltd
TROX UK Ltd
UK Phenolic Foam Association
Unipol Student Homes
University of Aberdeen
University of Cambridge
University of Edinburgh
University of Warwick
Vale of Aylesbury Housing Trust
VK Architects & Engineers
Waltham Forest Housing Association Ltd
Wandsworth Council
Welsh Government
West Midlands Fire Service
West Yorkshire Fire and Rescue Service
Westminster City Council
WFP Fire & Security
Winchester City Council
Wintech
WM Housing Groups
Wythenshawe Community Housing Group
Zurich Insurance

Mapping the building and fire safety regulatory system – high-rise residential buildings

Building life cycle

Design phase | Refurbishment design phase

Planning phase | Site preparation phase | Construction phase | Refurbishment work phase

Occupation phase

Legislation

Building Act 1984 **Building Regulations 2010** **Building (Approved Inspectors, etc.) Regulations 2010**
Approved Document B (fire safety) volume 2: buildings other than dwellinghouses, 2013, DCLG Building Control Performance Standards, 2017, DCLG Building Regulations and Fire Safety Procedural Guidance, 2015, DCLG

Enforcement powers apply for up to 2 years following completion of work

Heath and Safety at Work, etc. Act 1974 **Contruction (Design and Management) Regulations 2015** Fire safety in construction, 2010, HSE

Regulatory Reform (Fire Safety) Order 2005
Fire safety in purpose-built flats, 2011, LGA; Fire safety risk assessment: sleeping accommodation, 2006, Home Office

Town and Country Planning Act 1990

Housing Act 2004 **Housing Health and Safety Rating System (England) Regulations 2005**
HHSRS Operating Guidance, 2006; DCLG: HHSRS Enforcement Guidance, 2006, DCLG

Primary processes

Person wishes to construct a high-rise residential building

Applicant seeks planning permission #

Local planning authority consider and determine within 13 weeks

Permission NOT granted

Permission granted

Professional design team (including architects and engineers) develop extensive building design

Choice of building control route

Building work must be undertaken in accordance with the Building Regulations, in particular regulations 4, 7 and Schedule 1.
Schedule 1 includes:

A – Structural safety requirements
B – Fire safety requirements:
- B1 – Means of warning and escape
- B2 – Internal fire spread (linings)
- B3 – Internal fire spread (structure)
- B4 – External fire spread
- B5 – Access and facilities for the fire service

7 – Materials and workmanship

Local Authority Building Control route
Full plan deposited and fee paid

Plans assessed within 5 weeks/8 weeks
Fire and rescue service consulted on B1-5 and FSO issues

APPROVED: Full plans meet all Building Regulations requirements – if response not received, plans deemed to have passed

APPROVED CONDITIONAL PASS: Full plans can pass subject to:
- Necessary changes made
- Further plans deposited

REJECT: Full plans show a contravention of Building Regulations or are defective/incomplete

A) Notice of Approval issued (with conditions)
B) Inspection schedule determined

Satisfactory action taken? YES / NO

Determination process

Full plans show contravention of Building Regulations

Notice of Intent to start work sent to LABC 2 days before building work commences

Building works commence (Full plans do not need to be followed)

Agreed risk-based inspection plan with LABC followed

LABC consider whether building work meets Building Regulation requirements

PASS: work meets all requirements

FAIL: Information given requiring work to be altered

Satisfactory action taken, successful appeal, or successful request to relax Building Regulations? YES / NO

LABC issues Enforcement Notice, sanctions applied

Building work continues

Building work completed

Final inspection successful? YES / NO

Satisfactory action taken, successful appeal, or successful request to relax Building Regulations? YES / NO

LABC issues Enforcement Notice, sanctions applied

Completion Certificate issued in less than 8 weeks from the completion of the work (reg 17)

Handover of relevant fire safety info to responsible person (reg 38 of BRs)

Final Certificate accepted by the LABC

Approved Inspector route
Contract terms and fees agreed
Before or as soon as practicable after giving an Initial Notice in relation to the work, fire and rescue service consulted on B1-5 and FSO issues

Initial Notice given to Local Authority Building Control, who have 5 days to reject

If Plans Certificate requested by building owner

Approved Inspector assesses whether plans meets Building Regulations
Fire and rescue service consulted on B1-5 and FSO issues

LABC accept Initial Notice

LABC reject Initial Notice

Successful resubmission? YES / NO

Building work cannot commence

Plans Certificate showing Building Regulations compliance is issued, and sent to LABC

Plans Certificate not issued by Approved Inspector

Satisfactory action taken? YES / NO

Plans Certificate shows contravention of Building Regulations

Determination process

Building works commence (Plans do not need to be followed)

Agreed risk-based inspection plan with Approved Inspector followed

Approved Inspector considers whether work meets Building Regulation requirements

If Approved Inspector considers building work has altered materially against Initial Notice

AI consults FRS then issues Amendment Notice to LABC

PASS: work meets all requirements

FAIL: Written Notice issued on alleged breaches

Satisfactory action taken? YES / NO

Cancellation Notice issued to building owner and LABC

Building work continues

Building work completed

Final inspection successful? (FRS consulted) YES / NO

Satisfactory action taken? YES / NO

Initial Notice ceases (within 8 weeks)

Final Certificate issued and submitted to LABC

LABC enforces Building Regulations, may determine a reversion fee.
Possible enforcement/ sanctions applied

If the building is to be refurbished:

Is the refurbishment defined as building work under the Building Act? YES / NO

Process repeats:
- If planning permission required, go to: #
- If planning permission NOT required, go to:

Work is undertaken without building control oversight

Building starts occupation

Responsible person has a duty for there to be a suitable and sufficient fire risk assessment covering the 'common parts' of their building. They may appoint a competent person for this task

Fire risk assessment produced and regularly maintained, with sufficient fire precautions in place

Risk-based inspection programme by the fire and rescue service

Fire safety audit undertaken. Compliant fire risk assessment and sufficient fire precautions in place? YES / NO

Enforcement Notice

Prohibition Notice

Alterations Notice

Informal Notice

Necessary action taken? YES / NO

APPEAL FAILS

APPEAL SUCCEEDS

Prosecution:
- Fines
- Imprisonment

Appeal made against FRS decision?

Determination process

Materials and workmanship

Where doubt exists there are powers for the BCB to sample and test materials under regulation 46 (LABC) or regulation 8 (AI)

Regulation 7 requires building work to be carried out with adequate and proper materials, in a workmanlike manner.
Materials include naturally occurring materials and manufactured products such as components, fittings, items of equipment and systems

Approved Documents (or other relevant guidance e.g. BS 9991) set properties which materials should meet (e.g. limited combustibility)

Is the product a standardised product? YES / NO

Is there a European Harmonised Standard for the product/workmanship? YES / NO

European Construction Products Regulations apply
Enforced by trading standards under UK Construction Products Regulations 2013

CE marking and Declaration of Performance required to market products

Involvement by notified bodies and notified laboratories

European Technical Assessment and CE marking process

British product standards process

Independent certification e.g. BSI Kitemark provides additional assurance that product complies with standard (otherwise it is based on a manufacturer's declaration)

International product standards process

Tests and calculations process

Independent Certification Scheme (UKAS accredited third party organisation) produces a Declaration of Performance

Past experience

Product testing process
- Laboratory testing to determined standards (laboratory should be UKAS accredited)
- Assessment in lieu of a test (i.e. a desktop study), reliant on actual test results

Competent person installation

Installation by a competent person (e.g. for electrical or gas works)

Competent person issues certificate of compliance

Building control body is authorised to accept certificate of compliance as part of the Completion Certificate/Final Certificate process

The Housing Health and Safety Rating System

Complaint made to local authority by:
- Resident/Tenant
- Neighbour

EHO undertakes proactive survey/inspection

Risk-based assessment undertaken by EHO on HHSRS hazard factors
Risk score calculated on 29 hazard factors, inc fire
Private properties and common parts considered

No category 1 or 2 hazard

If category 1 hazard found, EHO must take appropriate action:
- Improvement Notice
- Prohibition Order
- Emergency Remedial Action
- Hazard Awareness Notice

If category 2 hazard found, EHO has the power to issue notices as above if appropriate

Necessary action taken? YES / NO

Relevant enforcement action applied e.g. fines

APPEAL FAILS

Appeal made against EHO decision?

APPEAL SUCCEEDS

Construction (Design and Management) Regulations

Client must:
- Commit to managing project including fire risk
- Compile health and safety file
- Appoint a suitable Principal Designer and Principal Contractor
- Allocate sufficient time and resources
- Provide pre-construction information

Client notifies project to HSE and key dutyholders where work exceeds a defined threshold

Principal Designer is accountable for:
- Planning, managing, monitoring and co-ordinating information about fire risk during design and planning phase
- Ensure designers comply with their duties to identify and eliminate risk
- Commit to ensuring pre-construction design manages fire risk
- Commit to working closely with client and Principal Contractor

Principal Contractor is accountable for:
- Planning, managing, monitoring and co-ordinating information about fire risk during construction phase including liaising with the client and Principle Designer
- Organise and co-ordinating co-operation between contractors
- Commit to minimising risk of fire
- Provide information for inclusion in the health and safety file

HSE inspects premises and assesses potential material breaches:
- Process fire risks
- General fire precautions

No breaches identified

If a breach is identified, single enforcement actions under CDM/FSO include:
- Prohibition Notice
- Improved Notice
- Prosecution
- Fine for Inspection

LEGEND

- Building owner
- Resident/Tenant
- People carrying/intending to carry out building work
- Local planning authority
- Local Authority Building Control (LABC)
- Approved Inspector
- Fire and rescue service
- Competent person (Building Act)
- Responsible person (FSO)
- Competent person (FSO)
- Local authority Environmental Health Officer

Process Indicates any process

Terminating process Indicates the beginning or end of a process flow

Decision required Indicates a decision point between two or more processes

Document issued Indicates data that can be read by people, such as certificates issued

Appendix E: Call for evidence

The full call for evidence document can be found at:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/644139/The_call_for_evidence_for_the_independent_Review_of_Building_Regulations_and_Fire_Safety.pdf

Reproduced below are the 10 questions contained in the call for evidence.

The overarching legal requirements

Q1 To what extent are the current building, housing and fire safety legislation and associated guidance clear and understood by those who need to follow them? In particular:

- What parts are clear and well understood by those who need to follow them?; and, if appropriate
- Where specifically do you think there are gaps, inconsistencies and/or overlaps (including between different parts of the legislation and guidance)? What changes would be necessary to address these and what are the benefits of doing so?

Roles and responsibilities

Q2 Are the roles, responsibilities and accountabilities of different individuals (in relation to adhering to fire safety requirements or assessing compliance) at each key stage of the building process clear, effective and timely? In particular:

- Where are responsibilities clear, effective and timely and well understood by those who need to adhere to them/assess them?; and, if appropriate
- Where specifically do you think the regime is not effective?
- What changes would be necessary to address these and what are the benefits of doing so?

Q3 Does the current system place a clear over-arching responsibility on named parties for maintaining/ensuring fire safety requirements are met in a high-rise multi-occupancy building? Where could this be made clearer? What would be the benefits of doing so?

Competencies of key players

Q4 What evidence is there that those with responsibility for:

- Demonstrating compliance (with building regulations, housing and fire safety requirements) at various stages in the life cycle of a building;
- Assessing compliance with those requirements;

are appropriately trained and accredited and are adequately resourced to perform their role effectively (including whether there are enough qualified professionals in each key area)? If gaps exist how can they be addressed and what would be the benefits of doing so?

Enforcement and sanctions

Q5 Is the current checking and inspection regime adequately backed up through enforcement and sanctions? In particular:

- Where does the regime already adequately drive compliance or ensure remedial action is always taken in a timely manner where needed?
- Where does the system fail to do so? Are changes required to address this and what would be the benefits of doing so?

Tenants' and residents' voice and raising concerns in the current system

Q6 Is there an effective means for tenants and other residents to raise concerns about the fire safety of their buildings and to receive feedback? Where might changes be required to ensure tenants'/residents' voices on fire safety can be heard in the future?

Quality assurance and testing of materials

Q7 Does the way building components are safety checked, certified and marketed in relation to building regulations requirements need to change? In particular:

- Where is the system sufficiently robust and reliable in maximising fire safety?; and, if appropriate
- Where specifically do you think there are weaknesses/gaps? What changes would be necessary to address these and what would be the benefits of doing so?

Differentiation within the current regulatory system

Q8 What would be the advantages/disadvantages of creating a greater degree of differentiation in the regulatory system between high-rise multi-occupancy residential buildings and other less complex types of residential/non-residential buildings? Where specifically do you think further differentiation might assist in ensuring adequate fire safety and what would be the benefits of such changes?

International comparisons and other sectors

Q9 What examples exist from outside England of good practice in regulatory systems that aim to ensure fire safety in similar buildings? What aspects should be specifically considered and why?

Q10 What examples of good practice from regulatory regimes in other industries/sectors that are dependent on high quality safety environments are there that we could learn from? What key lessons are there for enhancing fire safety?

Appendix F: Key legislation and publications used

Legislation

Housing Act 2004

Regulatory Reform (Fire Safety) Order 2005

Building Act 1984

Building Regulations 2010

Building (Approved Inspector, etc.) Regulations 2010

Housing Health and Safety Rating System (England) Regulations 2005

Health and Safety at Work etc. Act 1974

Construction (Design and Management) Regulations 2015

Furniture and Furnishings (Fire Safety) Regulations 1988

Smoke and Carbon Monoxide Alarm (England) Regulations 2015

Town and Country Planning Act 1990

Regulatory guidance

Department for Communities and Local Government, *Approved Documents*, various editions

Department for Communities and Local Government (2007) *Building Regulations and Fire Safety Procedural Guidance*, 4th edition

Scottish Government (2015) *The Scottish Building Standards Procedural Handbook*, 3rd edition

Publications

Bickerdike Allen Partners (1996) *Department of the Environment – Design principles of fire safety*. Her Majesty's Stationery Office

Bickerdike Allen Partners (1990) *Fire and building regulation: a review*. Her Majesty's Stationery Office

Billington, M.J., Barnshaw, S.P., Bright, K.T., Crooks, A. (2017) *The building regulations – explained and illustrated*. John Wiley and Sons Ltd.

Building Regulations and Fire Safety in Scotland, published by the Local Government and Communities Committee, October 2017

Call to Action: The EU Needs a Fire Safety Strategy, published by Fire Safe Europe

Cole, J. (2017) *Report of the Independent Inquiry into the Construction of Edinburgh Schools* www.edinburgh.gov.uk/news/article/2245/independent_report_into_school_closures_published

Colwell, S., Baker, T. (2013) *BR 135 – Fire performance of external thermal insulation for walls of multi-storey buildings,* 3rd edition. BRE Bookshop

Colwell, S., Martin, B. (2003) *BR 135 – Fire performance of external thermal insulation for walls of multi-storey buildings,* 2nd edition. BRE Bookshop

Department for Business, Innovation and Skills (2013) *Enforcement of the Regulatory Reform (Fire Safety) Order 2005* www.gov.uk/government/publications/regulatory-reform-fire-safety-order-2005-focus-on-enforcement-review

Department for Communities and Local Government (2009) *Initial Evaluation of the Effectiveness of The Regulatory Reform (Fire Safety) Order 2005*

Department for Communities and Local Government (2005) *Housing Health and Rating System – Enforcement Guidance* www.gov.uk/government/publications/housing-health-and-safety-rating-system-enforcement-guidance-housing-conditions

Department for Communities and Local Government (2005) *Housing Health and Rating System – Operating Guidance* www.gov.uk/government/publications/hhsrs-operating-guidance-housing-act-2004-guidance-about-inspections-and-assessment-of-hazards-given-under-section-9

Environment, Transport and Regional Affairs Committee (1999) *Potential Risk of Fire Spread in Buildings via External Cladding Systems.* The Stationery Office

Griffiths, H., Pugsley, A.G. and Saunders, O. (1968) *Report of the Inquiry into the Collapse of Flats at Ronan Point, Canning Town*. Her Majesty's Stationery Office

Haddon-Cave QC, C. (2009) *The Nimrod Review: an independent review into the broader issues surrounding the loss of the RAF Nimrod MR2. Aircraft XV230 in Afghanistan in 2006*. The Stationery Office

Holroyd, R. (1970) *Report of the Departmental Committee on the Fire Service*. Her Majesty's Stationery Office

Home Office (2006) *Fire safety risk assessment – sleeping accommodation* www.gov.uk/government/publications/fire-safety-risk-assessment-sleeping-accommodation

HSE (2010) *Fire safety in construction – HSG168* www.hse.gov.uk/pubns/priced/hsg168.pdf

Improving Building Standards, a Consultation Paper from the Scottish Executive, July 2001

Inge, J.R. (2007) *The Safety Case, its Development and Use in the United Kingdom*. Ministry of Defence

Interdepartmental Review Team (1994) *Fire Safety Legislation and Enforcement*. The Department of Trade and Industry

Knight, K. (2009) *Report to the Secretary of State by the Chief Fire and Rescue Adviser on the emerging issues arising from the fatal fire at Lakanal House, Camberwell on 3 July 2009*. Communities and Local Government Publications

Local Government Association (2012) *Fire safety in purpose-built flats* www.local.gov.uk/fire-safety-purpose-built-flats

Lord Cullen (1990) *The Public Inquiry into the Piper Alpha Disaster*. Her Majesty's Stationery Office

Lord Robens (1972) *Safety and Health at Work – Volume 1 – Report of the Committee 1970–72*. Her Majesty's Stationery Office

Pearson, C. and Delatte, N. (2005) *Ronan Point Apartment Tower Collapse and its Effect on Building Codes*. Cleveland State University

Performance-Based Building Regulatory Systems, Principles and Engagement, a Report of the Inter-jurisdictional Regulatory Collaboration Committee, February 2010

Reason, J. (2015) *Organizational accidents revisited*. Routledge

Safety in Tall Buildings and Other Buildings with Large Occupancy, prepared by an international working group convened by The Institution of Structural Engineers, 2002

Summerland Fire Commission (1974) *Report of the Summerland Fire Commission*. Government Office, Douglas, Isle of Man

Todd, C.S. (2008) *A Comprehensive Guide to Fire Safety*. BSI

Tricker, R., Alford, S. (2014) *Building regulations in brief*, 8th edition. Routledge

Turner, B.A., Pidgeon, N.F. (1998) *Man-Made Disasters*. Butterworth-Heinemann

White, N., Delichatsios, M. (2015) *Fire Hazards of Exterior Wall Assemblies Containing Combustible Components*. Springer

Appendix G: Typical fire safety measures in a building

Fire protection measures

Measure	Definition
Structural Fire Protection	The protection provided to the building structure in order to maintain adequate performance when exposed to fire. Structural fire protection can be provided by several methods including application of insulation materials or coatings, but protection may also be inherent within the structural element itself.
Compartmentation	Construction provided to prevent the spread of fire to or from another part of the same building or an adjoining building. For example, compartment walls and floors with a rated period of fire resistance are provided to separate individual flats.
Fire Stopping	A seal provided to close an imperfection of fit or design tolerance between elements or components, to restrict the passage of fire and smoke.
Fire Doors	A door (including the door leaf, frame, ironmongery, glazing etc.) which, when closed, resists the passage of fire/smoke to a specified level of performance.
Cavity Barriers	A construction provided to close a concealed space (e.g. an external wall cavity) against penetration of smoke or flame, or provided to restrict the movement of smoke or flame in such a space.
Fire Damper	A device which operates to prevent the passage of fire through a duct or ventilation opening. Note – where there is a need to prevent the passage of smoke, the damper needs to satisfy additional criteria to be a fire and smoke damper.
Fire Detection and Alarm Systems	A system that detects fires and warns building occupants. Fire detection systems typically use automatic smoke or heat detectors, but can also include manual 'break-glass' call points. Means of warning is typically provided by sounders and sometimes visual alarm devices also. Fire detection systems can be used to actuate other fire protection systems including smoke vents, fire and smoke dampers, and release fire doors on hold-open devices.
Fire Suppression Systems	A system designed to supress and control fires within a building. Sprinklers are a type of fire suppression system which releases water at the fire location to restrict fire growth and spread. Other fire suppression systems include gaseous and water mist systems.
Smoke Control Systems	Systems designed to control the movement of smoke within the building. Smoke control systems can include vents which open either automatically or manually in order to extract smoke. Powered smoke control uses fans to drive flow and remove smoke from a building. As well as extracting smoke, a smoke control system can often include other provisions as part of an overall smoke control strategy; examples include smoke barriers/curtains and inlet air vents.
Pressurisation System	A type of smoke control which supplies clean air into an area being protected, typically a staircase. The creation of a positive pressure to the protected area helps prevent the movement of smoke into it from an adjoining fire-affected space.
Fire Extinguishers	Portable fire-fighting equipment, which requires manual intervention for application.
Emergency/Escape Lighting	Lighting provided to illuminate escape routes that will function if the normal lighting fails.
Evacuation Lift	A lift that may be used for the evacuation of people with disabilities, or others, in a fire.
Protected Stairway	A stairway that is adequately protected from the rest of the building by fire-resisting construction.

Measures to support fire-fighting

These are building features utilised by fire and rescue services in the event of a fire.

Measure	Definition
Fire-fighting Shaft	A fire-resisting enclosure containing a fire-fighting stair, fire mains, fire-fighting lobbies and, if provided, a fire-fighting lift.
Fire Main (also commonly termed dry/wet riser)	A pipe running up or through a building which can be connected to an external water source such as a fire and rescue service pumping appliance. It allows fire-fighters to connect hoses to outlets inside the building to fight fires. A dry fire main is normally empty until supplied with water. A wet fire main is permanently charged with water.
Fire-fighter's Lift	A lift that has protection, controls and signals which enable it to be used under the exclusive control of the fire-fighters.
Smoke Clearance System	A type of smoke control system provided to assist fire-fighters in removing smoke from the building in the aftermath of a fire.

Fire evacuation approach

This refers to the way people evacuate a building (in the context of residential buildings).

Approach	Definition (in the context of residential buildings)
Stay Put	An evacuation strategy based on the principle that only the residents of the flat of fire origin need to escape initially, while other residents may remain in their own flats.
Simultaneous Evacuation	Procedure in which all parts of a block of flats are evacuated following the giving of a common alarm of fire.
Phased Evacuation	This evacuation strategy is normally adopted for complex buildings and those with a fire control centre. In a phased evacuation the first people to be evacuated are all those on the storey most immediately affected by the fire, and those on other floors with impaired ability to evacuate. The remaining floors are then evacuated, usually two floors at a time, at phased intervals.

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LONDONASSEMBLY

The Regeneration Game

Stadium-led regeneration

March 2015

Regeneration Committee Members

Gareth Bacon (Chairman)	Conservative
Navin Shah (Deputy Chair)	Labour
James Cleverly	Conservative
Len Duvall	Labour
Murad Qureshi	Labour

The Regeneration Committee

The Regeneration Committee is tasked with monitoring and reviewing the Mayor's regeneration functions and spending decisions. This includes oversight of the London Legacy Development Corporation (LLDC), the Mayor's powers through the London Plan, which are being used to promote particular areas for regeneration, and the Mayor's regeneration funds.

In 2014/15, the Committee's work programme has included stadium-led regeneration, the LLDC, the Royal Docks, Smithfield Market, and regeneration funding.

Further information about the Committee's work is available on the GLA website: www.london.gov.uk

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Cover photo: View of Wembley Stadium taken on the Committee's site visit on 8 July 2014 (London Assembly)

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Chairman's foreword

The vivid memories of football fans are an especially poignant nostalgia. They fill countless pages in newspaper articles and on websites, they have become the basis for plays and books and films. And despite the fairly ordinary matter they relate to – that of seeing a football match – they reach into all aspects of human existence including sibling rivalry and parental bonding, rites of passage, and the nature of belonging.

As we are all well aware, football, at least at the top end, is a global business netting billions of pounds through TV rights and other commercial spin-offs. Yet ticket revenues and other match-day income provide an income stream which anchors the clubs' financial positions. The stadium sits at the heart of this entertainment offer; it is a field of dreams, the stadium of light that draws the fans to the spectacle. Stadia can contain flashes of artistic brilliance (the Art Deco east stand at Highbury was Grade II listed), or memorials to battles from a bygone age (Liverpool is not the only club with a stand named after the 1900 Battle of Spion Kop), or to sporting legends or club heroes (one thinks of the Bobby Moore or the Sir Alex Ferguson stands). But the stadium also sits within a local community that may actively support the club or begrudge and despair of the Saturday parking restrictions, the packed match day buses and trains, the noisy crowds, the over-excited fans.

With a spate of football clubs looking to redevelopment to boost their financial strength, our report reviews the role of the football stadium in leading inner city regeneration. If football clubs, as many claim, are at the heart of their communities, how will new stadia benefit local people as well as club shareholders? Clearly, there is a balance to be struck between the costs and benefits of a new or redeveloped stadium to its owners, and the local community and businesses. The Mayor and local authorities are inevitably involved and the public purse will undoubtedly be used to support the re-development in some way – so what's the deal for the local community? Our review brings together evidence from six months of site visits and discussions with London clubs (and elsewhere) to set out for the first time how local communities should benefit from such developments and what the Mayor can do to ensure they do.

Gareth Bacon AM

Regeneration Committee Chairman

Executive summary

Stadium-led regeneration is capturing headlines as a model to rejuvenate neighbourhoods. It can give underused brownfield sites renewed purpose, bringing substantial physical improvements to historically neglected areas. And although the hard evidence for a positive economic impact is still lacking, the arrival of a well-known club, or the expansion of an existing stadium, can change people's views of the area, increasing local pride and encouraging newcomers to set up homes and businesses.

Effective regeneration cannot, however, be just about physical improvements. The development of a new or expanded stadium as an anchor tenant presents a unique opportunity to support wider economic development in an area. In contrast to a purely residential-led regeneration programme, for example, a stadium has potential to attract new visitors, injecting vibrancy to an area. Yet our review shows that partners have not always fully exploited opportunities to put new stadium locations 'on the map.'

If place-making is to happen, lessons from east Manchester, Wembley and The Emirates make it clear that new stadia must not occupy large land areas – attracting growing match day crowds and swelling shareholder profits – at the expense of the communities that host them. Feedback to our local survey shows that communities are not always opposed to stadium development. However, effective early involvement and consultation is necessary to broker stronger relations between clubs and communities.

Football clubs have a responsibility to ensure that the local community gains from a new stadium. Communities must benefit from new mixed tenure housing, and improved transport links and connections across the area. Local authorities must also capitalise on opportunities to guarantee that clubs and other incoming businesses prioritise the local workforce when sourcing new employees.

Building in these features will shift stadium-led regeneration proposals from producing limited local effects, to supporting strategic impact across the London Plan policies. That is why the Mayor should support our Stadium Charter and push for the planning framework to treat stadium applications as strategic developments.

1. What is stadium-led regeneration?

'Curiously I have no idea of the score, nor the precise year, but the journey and the location on the terrace are indelibly etched on my memory, as it was always the same.

We'd take the 161 bus to Woolwich and get off on the common. Walk across the common and down past the church, through the park, with the deer, through the back streets and eventually the turnstile and into the Valley (home to Charlton Athletic FC). We always stood on the enormous bank, far enough away to see, but not close enough to catch the ball if it went out.

The ground has changed, the 161 no longer stops on that side of the common, but the rest is like going through a time warp. I now live abroad, but every time I go back I try and get to a match as South London supporters are unique.'[1]

Stadium-led regeneration has emerged as a model of development to support both the expansion of football stadia and the regeneration of brownfield sites.

1.1. Stadium-led regeneration – where a football stadium development is used to catalyse regeneration in a local area – has emerged as a model of regeneration in the last 15 years. While the majority of sports stadia lie in semi-urban or out-of-town areas, research by KPMG points to a growing proportion of new stadia in city centre locations across Europe since 1980.[2]

1.2. London is home to a small number of completed stadium-led regeneration schemes. Arsenal FC's development of the Emirates Stadium is perhaps the best-known, alongside Wembley Stadium. Outside London, the City of Manchester (now Etihad) Stadium is another example of stadium-led regeneration. Because of the significant levels of public

[1] Reflections of a football supporter: The Guardian, 26 January 2011, Share your first-match football memories (comments p. 2, jhopgood)

[2] KPMG (2013) *A Blueprint for Successful Stadium Development*

sector investment in Manchester's 2002 Commonwealth Games venue, we have examined lessons from this development in our investigation.

1.3. Several stadium-led regeneration projects are on London's horizon. Most imminently, public interest continues to mount ahead of the Olympic Stadium reopening, while it undergoes major transformation to become a permanent new home for West Ham United FC (WHUFC). A stream of other football clubs have announced plans to develop new grounds, including both Tottenham Hotspur FC (THFC), and Queen's Park Rangers FC (QPR), in Tottenham and at Old Oak Common respectively. Fulham FC has planning permission to extend its Riverside Stand,[3] and reports suggest Chelsea FC is considering options for expansion[4] at its current ground.[5]

1.4. All these building projects sit within a context of larger ambitions to deliver physical, economic and social regeneration for their local communities. Over the course of our investigation, we visited six of the largest completed or proposed stadium-led regeneration schemes, and the table and Map 1 in **Appendix 1** show some of the regeneration impacts these have delivered or propose to deliver. These clubs' actual or proposed development timeframes and a handful of smaller clubs' plans mean that London could see several new stadium-led regeneration developments over the next decade.

1.5. Football club owners looking to build new premises have themselves led and financed schemes in most of the examples we have examined. However, the taxpayer – alongside sports associations, and The Lottery, for example – funds stadium schemes for national sporting events and so have funded all or the majority of the City of Manchester (now Etihad) Stadium, Wembley Stadium, and the Olympic Stadium. In legacy mode (or to supplement their core function, in the case of Wembley Stadium), the public bodies responsible for building these stadia may develop leasehold agreements with football clubs and other interested parties. In all cases, however, public sector organisations have an important role to play, granting planning permission, and investing in transport, social infrastructure or public realm improvements around a stadium.

[3] http://www.fulhamfc.com/stadium-development/design-concept

[4] Architects Journal, *Herzog & de Meuron working on plans for Chelsea FC*, 5 January 2015

[5] Our investigation has focussed on a number of major football club developments in the Premier League and Championship, however, we are aware that other clubs – both large and smaller – have active proposals for new stadia, or are considering redevelopment.

1.6. Both private and public-funded scenarios create an important debate about the extent to which major football stadium development can deliver regeneration for local communities when commercial gain – and hoped-for enhanced club performance – is the initial imperative. They also raise questions about the public subsidy necessary to maximise public benefit.

1.7. We set out to understand why there is a growing trend for football clubs to link their stadium expansion plans to neighbourhood regeneration. We wanted to know what clubs, local councils and communities expect from a new stadium, and how the Mayor could ensure that stadium-led regeneration meets his objectives in the London Plan to support better outcomes for local communities. The stakeholders we met in person and who have written to the Committee tell us that there are clear lessons for football clubs, local authorities, and associated partners involved in designing the stadium-led regeneration schemes now coming on-stream. **Appendix 4** sets out the methodology for our investigation.

2. What difference can a stadium make?

Summary

The benefits from new stadium schemes will accrue differently to a range of partners and stakeholders. For football clubs, a new stadium offers opportunities for increased revenue and greater financial stability. Local authorities can use stadium-led regeneration schemes to help meet their objectives for local renewal; upgrading the physical environment and delivering social outcomes. A new stadium can also provide increased facilities for community activity, and the chance to co-locate community outreach activities improving the quality and life chances for local people. But the enhanced regeneration effects of stadia over other developments are as yet unproven, therefore public bodies need to work hard to maximise the benefits and manage the risks.

'We need to move to a new stadium to thrive and to survive long term in any kind of Premier League level or even Championship level.' – Mark Donnelly, QPR FC

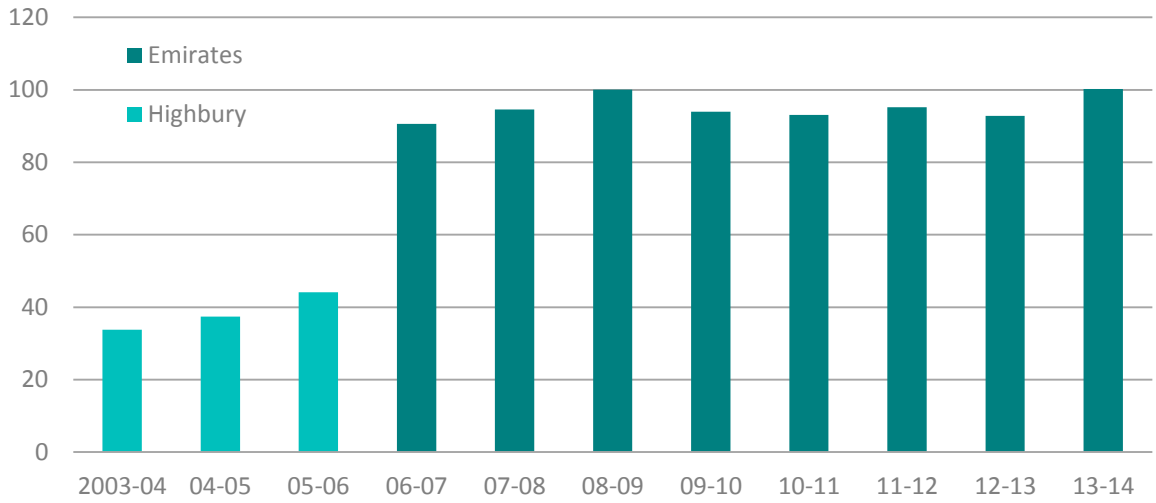
Football clubs gain financially from a new stadium

2.1. A new or larger stadium can generate significant financial returns for a football club, improving both its short-term income and long-term performance.[6] Larger stadia can lead to increased match day revenue for clubs. For example, since moving to the Emirates Stadium in 2006, Arsenal FC's annual match day revenue has almost tripled from £33.8 million in 2004, to £100.2 million in 2014, as shown in Chart 1:

[6] KPMG (2013) *A Blueprint for Successful Stadium Development*

Chart 1: Arsenal FC gate and other match day revenue, £ millions

Source: Arsenal Holdings PLC, Statement of Accounts and Annual Report (2004-05 to 2013-14)



2.2. The evidence is clear that new stadia act as revenue raisers for clubs. Brentford FC told us that it estimated the operational impact of its proposed new stadium at Lionel Road to be worth £3 million a year. The club has based its expectations on evidence from past development programmes showing that clubs expanding their premises see their average attendance rise by 60 per cent.[7] If this holds true, other clubs such as West Ham United FC and Tottenham Hotspur FC should see their (planned) new stadia filled to capacity at an average match.[8]

2.3. Development around the stadium is also used to boost club finances. For example, Millwall FC (MFC) told us that it would like to develop some of the land around the stadium. MFC said that The Den is underused and incurs annual losses, and a stake in new adjacent development, such as a hotel, would improve the club's viability. The club is unable to do so, however, as it does not have freehold ownership of the land.[9] This

[7] Summary of visit to Brentford FC on 15 July 2014, p. 1

[8] Applying the same level of increase to West Ham United FC and Tottenham Hotspur FC would see both clubs' average attendance rise to around 55,000, based on average attendance of 34,720 at WHUFC matches in 2012/13 (http://www.whufc.com/articles/20130524/hammers-fans-set-attendance-record_2236884_3189783), and 34,808 at THFC matches in 2013/14 (http://stadiumdb.com/news/2014/08/10_ranking_here_are_the_best_european_clubs_by_attendance)

[9] Developer Renewal has secured planning permission for a development in the Surrey Canal Triangle area around Millwall FC (MFC)'s stadium, The Den. The programme will include a new indoor regional sports centre, 2,400 new homes, and a new Overground station, among other developments. Written submission from Surrey Canal Renewal, p. 1

highlights the importance of land ownership for clubs, without which they may have limited means to generate non-football revenue.

2.4. In the long term, increased match day revenue can fund larger investment in players. And clubs expect their increased spending power to produce better results and performance in the Premiership and in Europe (or promotion for clubs in lower leagues), leading to even more revenue from TV rights and other commercial sources.

The enhanced regeneration effects of stadia over other developments are as yet unproven

2.5. Clearly, the football industry is a key contributor to the national economy. However, at the local level, there is limited hard evidence about the actual impact of stadium-led regeneration in the UK. The available evidence paints an equivocal picture about the unique contribution that they can bring to an area. When making choices about whether to grant planning permission or commit public funds, local agencies therefore need to bear in mind that:

- Some of the activity may have happened anyway – that is, the benefits may not be truly 'additional'. This can apply both to football clubs' charitable work, and to the job creation which interested parties may expect to flow. So, for example, WHUFC and THFC told us that they expected to expand their community work as part of their moves to new stadia. But others, for example, Mark Panton[10] and the businesses at our Islington focus group, said there is evidence that some of this activity would have happened without a new stadium, and that clubs could still do more to invest in the local area.

- Currently, the evidence is inconclusive regarding whether stadia have a 'halo' effect compared with regeneration schemes based on other land uses (for example, housing or employment). A body of research on stadium development in the United States shows there is no statistically significant economic difference from stadium schemes compared to other forms of development.[11] Urban economist Gabriel Ahlfeldt explained that while studies can often identify local impacts, *'we fail empirically to detect these effects at the level of a city or a region,'* and *'the statistical tools that we have*

[10] Written submission from Mark Panton, p. 7
[11] Written submission from Mark Panton, p. 9

available are not precise enough to get to these relatively small impacts.'[12]

- It can be difficult to isolate the impact of a stadium from other factors influencing regeneration in an area. Although sports events and stadia may produce stronger economic effects on house prices than local wages, experts suggest this may be as a result of *'improvements to local amenities rather than to the local economy.'*[13]

2.6. All these factors make it difficult to assess the extent to which a new or expanded stadium affects the local economy. Questions about the unique economic impact of a stadium matter most when public bodies face choices about how to regenerate an area. Only in a minority of cases (such as Old Oak Common) may a stadium be one of several options for development. A local authority's desire to retain a football club in the local area, or a lack of suitable alternative sites, may limit where a new stadium can be located. In all scenarios, however, it is incumbent on the public sector to maximise the benefits from such schemes and minimise the risks.

2.7. Greater transparency will be key to understanding what stadium-led regeneration schemes can deliver and who pays for it. Londoners – local authorities, stakeholders and local residents and businesses – deserve to know how a new or expanded stadium is going to affect the area. We need to know what football clubs contribute to wider regeneration, including the extent to which their section 106 agreements are fulfilled. Clubs rely on support and financial cooperation from local authorities to deliver associated connectivity improvements. Furthermore, we know that football clubs use their community foundations to deliver social programmes, but they also receive some of their funding through local authority and health commissioning.[14]

Maximising the regeneration benefits of stadia

2.8. Our evidence points to several ways that a new stadium can support regeneration. These relate to the effect stadia can have on the

[12] Gabriel Ahlfeldt, Regeneration Committee 19 June 2014, transcript p. 2

[13] What Works Centre for Local Economic Growth (May 2014) *Evidence Review 3 – Sports and Culture*, p. 26

[14] For example, we heard that West Ham United Community Sports Trust delivers much of its work through match funding from partners (Summary of visit to WHUFC on 2 September 2014, p. 2), and Brentford FC delivers educational support for schools, which was previously supported by government funding and schools now buy in (Summary of visit to Brentford FC on 15 July 2014, p. 4)

attractiveness or branding of an area, and more concrete benefits like employment and housing.

Catalytic effects

2.9. We have heard strong and recurrent claims about the catalytic effects that stadia can have on local communities. Several groups argue that stadium-led schemes bring glamour and increased footfall to an area.

2.10. Well-planned stadia can act as 'anchors', whereby local businesses follow a major football tenant.[15] The Olympic Stadium is part of a bigger vision for the regeneration of east London after London 2012. Nearby, for example, the LLDC is working with development partners to create a hub for businesses in the technology, digital and creative sectors, at Here East. It is also working with UCL, the V&A Museum, Sadlers Wells and others to develop a cultural and educational hub in the south of the Olympic Park.

Place-shaping

2.11. In this way, stadia will also be 'place-shapers.' A majority of the schemes we examined – such as the Olympic Stadium, Manchester City FC, Tottenham Hotspur FC and a proposed stadium at Old Oak Common – have been (or are being) designed as significant new visitor destinations. The LLDC hopes West Ham United FC will bring regular additional footfall to the area, supporting the local businesses in Hackney Wick and Stratford Town Centre.[16] Dr Paul Brickell acknowledged the challenge the LLDC will face in encouraging footfall at the Olympic Park on non-match days throughout the year:

> *'We have yet to see how the South Park keeps its numbers up during the cold days of winter, however there will always be people going to watch West Ham at the weekend.'*[17]

2.12. Stadium schemes are likely to involve large amounts of land but football is not the only game in town. Commenting on the area around Millwall FC's stadium, Lewisham Council told us that:

> *'by improving physical access to the site [the Surrey Canal Triangle area] and providing a mix of place making elements it is envisaged that footfall through the site will increase significantly'*.[18]

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[15] Written submission from Mark Panton, p. 7
[16] Dr Paul Brickell, Regeneration Committee 16 September 2014, transcript p. 6
[17] Dr Paul Brickell, Regeneration Committee 16 September 2014, transcript p. 6
[18] Written submission from LB Lewisham, p. 2

2.13. Local planning authorities therefore have a duty to ensure that they maximise assets around a stadium to deliver public benefit.

Employment

2.14. As large local employers, football clubs have significant opportunities to create new jobs to directly benefit local communities. For example, Arsenal FC employs nearly 3,000 people at The Emirates on match days.[19] At Old Oak Common, QPR FC has estimated that a new *'stadium and its immediately associated development would create a large amount of employment (2,000-3,000 jobs) quite quickly.'*[20] WHUFC expects to create 720 jobs at the Olympic Stadium, and the club has a target for 75 per cent of these roles to go to local people living in Newham.[21]

'We also set ourselves high targets of local employment, which was 70 per cent as a minimum, and we are achieving year-on-year about 72-74 per cent.' – Pete Bradshaw, MCFC

2.15. Football clubs can use their local profile to improve access to employment for the long-term unemployed and residents living in deprived areas. We visited Arsenal FC's learning centre, which the club built as part of its section 106 development agreement with Islington Council. Serving residents of three neighbouring boroughs, the centre provides skills-based courses alongside CV writing and interviewing skills, and tutors encourage participants to apply for jobs at the stadium.

Housing

2.16. The clubs and local authorities we met on our site visits were also keen to highlight the scope for new or redeveloped stadia to deliver new housing. Living next to a stadium is increasingly desirable for some, and it attracts a price premium. Commenting on The Emirates, Sarah Ebanja explained:

> *'I think what we know is that, anecdotally, and as you can see yourself, some people want to be around that space - obviously there are people who do not like football at all - but it is an attractor and it is viewed as sexy. People wanted to move there.'*[22]

2.17. As well as providing new accommodation, residential development helps football clubs to part-fund new stadium construction. For example:

- Arsenal FC converted the club's former Highbury ground into 655 apartments, the most expensive of which sold for approximately £1 million;[23]

[19] Ken Friar, Regeneration Committee 19 June 2014, transcript p. 5
[20] Written submission from QPR FC, p. 1
[21] Written submission from the LLDC, p. 4
[22] Sarah Ebanja, Regeneration Committee 19 June 2014, transcript p. 13
[23] Summary of visit to Arsenal FC on 15 July 2014, p. 2

- THFC plans to develop 222 new homes near its stadium at Brook House (through Newlon Housing);[24]

- Brentford FC has partnered with developer Wilmott Dixon to build 910 homes around its new stadium. The club also plans to build around 100 family housing units at Griffin Park;[25]

- Development partner Galliard Group has recently submitted plans to develop WHUFC's current Boleyn Ground into 838 homes (over two-thirds of which will be one or two-bed units).[26] The homes will be part of a mixed residential and commercial development;[27] and

- QPR told us it had an ambition to lead on delivery of the 24,000 new homes the GLA envisages in the Vision for Old Oak Common.[28]

2.18. Some of the completed schemes we examined made a valuable contribution to local affordable housing. In its section 106 agreement with Arsenal FC, for example, Islington Council secured almost 50 per cent affordable housing, across approximately 3,000 new or refurbished homes delivered through the scheme.[29] Around Wembley Stadium, 45 per cent of the first phase of housing by developer Quintain is affordable, along with 70 per cent planned in the second phase.[30]

Enhancing opportunities to benefit local communities

2.19. The evidence also warns of a number of risks, and the measures clubs and local authorities could take to reduce them.

Supporting local businesses

2.20. Not everyone may welcome new economic development around a new or expanded stadium. Some community groups argued that big business interests – both football clubs themselves and the chains they may attract – will squeeze out local, independent businesses. Tottenham Business Group explained the concerns of some local traders:

[24] THFC site visit presentation to the Committee, 8 July 2015
[25] Summary of visit to Brentford FC on 15 July 2014, p. 2
[26] Planning schedule accessed at https://pa.newham.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=NG3ZV5JY5F400 on 6 March 2015
[27] Summary of visit to West Ham United FC on 2 September 2014, p. 3
[28] Mark Donnelly, Regeneration Committee 16 September 2014, transcript p. 11
[29] Summary of visit to Arsenal FC on 15 July 2014, p. 1-2
[30] Summary of visit to Wembley Stadium on 8 July 2014

'The majority of businesses are freeholders often living above their premises. We have been given no other recourse but to go [...] The High Street shops are derided as low value businesses, yet the 'chicken shop' run by one of the local businessmen is one of the most popular eateries on the High Road.'[31]

2.21. Local authorities can work with football clubs to ensure that this does not happen and that locally-owned businesses benefit from stadium-led regeneration. Speaking to some traders near The Emirates, we heard that few had benefitted from any stadium 'spill over' effects. In their view, food and beverage outlets in the stadium's immediate vicinity had gained most. Transport changes, such as removing ticket barriers at Finsbury Park – while a safe and useful adaptation for match days – increased problems such as drug dealing and black market trading the rest of the time, which could have a negative effect on businesses trying to trade all week.

Local people must benefit from new employment

2.22. Football clubs have a clear opportunity to address concerns around low-wage jobs. This is especially important when considering stadium-led regeneration because, as Mark Panton highlighted, *'[stadium-led] regeneration schemes might bias local development towards low-wage jobs related jobs'*.[32] The Premier League recently announced the value of its TV rights had risen by 70 per cent, yet media reports suggest that none of its clubs – except Chelsea FC – pay their employees the Living Wage.[33] The LLDC reassured us that long-term operational jobs will be delivered at the Olympic Stadium: for example, security, stewards, catering, ticket sales. We welcome the agreement the E20 partnership will have with the future stadium operator, requiring the operator to use Newham Council's employment brokerage service (Workplace), and to pay staff the London Living Wage.[34] London's Premier League clubs should take the opportunity to show leadership by committing to paying their staff the London Living Wage.

2.23. Clearly, local authorities have a key role too. They can help local people access the jobs created as a result of a new stadium development. We heard that Islington Council worked with Arsenal FC, the local Chamber of Commerce, local colleges and the local community to improve local

[31] Written submission from Tottenham Business Group, p. 1
[32] Written submission from Mark Panton, p. 6
[33] Evening Standard, 11 February 2015, *Premier League boss Richard Scudamore under fire over minimum wage paid to stadium staff*
[34] Written submission from the LLDC, p. 4

residents' access to new employment opportunities at The Emirates. Manchester City FC (MCFC) told the Committee that it works with a local university and college to determine which training courses will equip people with the skills required to access new jobs at the Etihad stadium.[35]

'It is just as incumbent on the local authority, the voluntary sector, and other public sector bodies […] to ensure that they are doing whatever they can to prepare individuals to be able to take those opportunities.' – Sarah Ebanja

2.24. In our view, future stadium-led regeneration programmes should maximise employment pathway and apprenticeship schemes. WHUFC runs a very positive scheme where apprentices enrolled on its *Leadership Through Sport* programme study accountancy qualifications and receive support to access to jobs in Canary Wharf. At Old Oak Common, we expect the OPDC to honour its commitment to consider employment targets in the letting of contracts, and agreements with employers to employ local people.[36]

Housing at the right price and tenure mix

2.25. We saw signs that future stadium-led regeneration schemes are not on track to achieve the good levels of affordable housing in previous schemes. Affordable housing is important if new accommodation is to be within the reach of existing communities. Brentford FC has secured an exemption from Hounslow Council from including affordable housing among the 910 units it plans to build. We heard that the club has gained this exemption on the grounds of the site's predetermined viability.[37] However, Brentford FC will have to include affordable housing in the third of three building phases, if developer Wilmott Dixon has achieved a certain level of profit in the first two stages of development.[38] At the Boleyn Ground, WHUFC's development partner Galliard's proposal for new housing includes six per cent affordable housing.[39]

2.26. In another example, a local community group, Our Tottenham, claims that Haringey Council has watered down affordable housing targets around THFC's proposed new stadium:

> *'The local authority acknowledges the major need for new affordable homes in Haringey, but scrapped the requirement for 50 per cent of 200 flats in the southern development to be*

[35] Pete Bradshaw, Regeneration Committee 19 June 2014, transcript p. 34
[36] Letter from Victoria Hills to the Chairman, 19 November 2014
[37] Summary of visit to Brentford FC on 15 July 2014
[38] Summary of visit to Brentford FC on 15 July 2014
[39] The Guardian, 24 February 2015, Local residents angry at lack of social housing at West Ham's ground

affordable homes while allowing THFC to increase the number of new homes to 285'.[40]

'There is no provision for affordable housing or for suitable amenities such as medical care or education.' – Survey respondent commenting on Brentford

2.27. Stadium-led regeneration schemes should support the Mayor's housing targets, including his objectives for affordable housing. We welcome the fact that these schemes can support the construction of new housing where it is desperately needed. And we recognise that sometimes compromises need to be struck between viability and a balanced housing offer. However, tenure mix and who lives around a new stadium is important because the Mayor's strategic objective is to deliver mixed and balanced communities.[41]

Accelerate the development of new infrastructure

2.28. Creating a new destination is a strategic, complex and long-term task. In Manchester, while MCFC have been tenants of the (now) Etihad Stadium since 2003, there remains a significant task ahead to make east Manchester a destination in its own right. On our visit, we heard that the area had only recently received a connection to the tram network, despite plans to develop the link before the 2002 Commonwealth Games. Pete Bradshaw told us:

> *'The next phase has to be how do we do something that actually attracts people 365 days a year into east Manchester to create the footfall, to create the viability of spend and continuous spend, and make it a day-in, day-out destination venue in its own right.'*[42]

Conclusion

2.29. While there is a lack of firm data about the economic impact of a stadium, our evidence indicates that stadium-led regeneration schemes can act as a catalyst for physical and social regeneration. They can make sites attractive to new business and residential entrants and create new jobs and opportunities.

2.30. Clubs must take steps to ensure that stadium schemes enhance quality of life for existing residents, however. Perhaps tellingly, only 10 per cent of our survey respondents thought that existing residents would gain 'a lot' of benefits from a new stadium. For example, 70 per cent of our survey respondents felt that a redeveloped stadium would have a negative impact on local parking, and 64 per cent thought it would create more noise. Residents around Brentford FC expressed particular concerns that

[40] Written submission from Our Tottenham, p. 10
[41] London Plan Policy 3.9
[42] Pete Bradshaw, Regeneration Committee 19 June 2014, transcript p. 9

the new stadium would lead to gridlock in an already congested area and more parking problems for local people. Furthermore, high rise housing – a feature of many stadium-led development schemes – could have a negative impact on local groups. Some survey respondents in the Brentford area observed that the new tall residential towers Brentford FC proposes building will change the local skyline and negatively affect residents' views of the river, for example.

'There is clearly also a need for greater involvement of communities and stakeholders at all levels if sports is to be used successfully in urban regeneration schemes.' – written submission from Mark Panton

2.31. Clubs and local authorities risk missing out on delivering a genuine regeneration benefit to existing local communities, if they do not take an inclusive and transparent approach in the planning and design stages. Among respondents to our survey, just 29 and 25 per cent of respondents were satisfied with consultation by the football club and local authority respectively (on issues related to stadium development). Michelle Moore explained how deeper links between clubs and local communities can be mutually beneficial, observing that a 'true community football club' would invest in:

> *'Really good consultation, and they will be looking at how they can involve those supporters and those fans in the running of that club in some way. Then you would build real social capital. You would build a real legacy and loyalty with that community.'*[43]

2.32. Clubs may not always know best how local communities want to use new stadia facilities but they need to take the time to consult. Pete Bradshaw explained that MCFC had designed a community use agreement enabling local groups to use the Etihad Stadium for meetings and events, but it had to revise its approach substantially following low uptake.[44] Clubs risk disengagement if they present their stadium development proposals and community use plans to local groups with little scope for communities to say at an early stage what local facilities they want. They can make some quick wins, by, for example, offering subsidised rates for hiring space at the club, as business owners at our Islington focus group suggested.

2.33. We know that the LLDC has created a park panel – enabling local groups to have a say on the area's physical development and future neighbourhoods – and a Youth Panel.[45] Given the profile of the stadium and the scope for community benefit, the E20 Stadium Partnership could set aside a position on the E20 Stadium Partnership board for a member of the park panel. We welcome the Mayor's commitment for community

[43] Michelle Moore, Regeneration Committee 19 June 2014, transcript, p. 25
[44] Pete Bradshaw, Regeneration Committee 19 June 2014, transcript p. 24
[45] Paul Brickell, Regeneration Committee 16 September 2014, transcript p. 27

representatives (representing residents and businesses) to sit on the new OPDC board.[46] It is not too late for the E20 Stadium Partnership to adopt the same approach.

2.34. To maximise the benefits to local communities we call on the Mayor to endorse our charter for stadium-led regeneration. This brings together a set of practical measures clubs and stadium operators need to observe in drawing up their redevelopment plans. Stadium developments can have strategic impact on local communities, areas outside the host borough, and London Plan policies. We want to see this charter embedded in the London Plan so that developers, club owners and planning authorities have to have regard to it.

Recommendation 1

In the next iteration of the London Plan, the Mayor should incorporate a Charter for stadium developments as part of amendments to the Plan. In the intervening period, the Mayor should have regard to the Charter when reviewing stadium planning applications.

Local authorities should have regard to the stadium Charter in their Local Plans.

[46] MD 1421, *Designation of Old Oak and Park Royal Mayoral Development Area and Corporation*, p. 4. The Committee heard about the GLA's plan to facilitate community involvement in the new Mayoral Development Corporation at Old Oak Common. Aspects of this approach could be used to support community involvement in publicly-funded stadia.

Charter for effective stadium-led regeneration

Football clubs and relevant local authorities seeking to develop a stadium-led regeneration scheme should commit to:

- A clear vision and policies for place-making around the new (or expanded) stadium, including public transport connectivity and permeability between the stadium and surrounding area.
- Undertake a skills mapping exercise to assess local capacity to take advantage of new jobs. The results should inform a skills and employment strategy, including measures to prepare and upskill local communities in order that they can access the new jobs.
- Pay the London Living Wage to all stadium employees.
- Support the Mayor's housing targets in all stadium-led regeneration schemes, where practical. Any new housing developed as part of, or around, a new stadium, should aim to be mixed tenure, to include both family and social rented affordable housing.
- Demonstrate how they have consulted with a diverse range of local community and stakeholder groups to:
  - identify effective uses of the stadium scheme as a community asset;
  - communicate what social infrastructure will be provided; and
  - establish an ongoing relationship with the community.

In addition, in cases of a stadium financed or part-financed with public funds, the Mayor should:

- Require a community forum to be set up to involve the public and communities in a football stadium before the new venue is built. This would give communities a say on how the stadium is used, and what social infrastructure is provided.

3. When should the Mayor intervene in stadium-led regeneration?

Summary

There are two reasons for the Mayor to intervene in stadium-led regeneration projects: if projects stall; and when the level of public investment is so great that there needs to be clear agreements about any on-sales.

Stadium schemes stall for a range of reasons, incurring costs for football clubs and communities

3.1. A new stadium can take a long time to deliver from inception to completion. Among the schemes we visited timescales range from six, to over fifteen years.[47]

3.2. Delays can arise where public-private partnerships are unstable, or as the vision for an area changes. In Tottenham, for example, construction of THFC's proposed stadium has not yet commenced, partly due to renegotiations between the club and council about the contributions THFC will make towards public realm and transport improvements. These discussions resulted in Haringey Council reducing the amount that it expects THFC to contribute from £16.4 million to £0.5 million.[48] A lengthy review of the club's application for a compulsory purchase order of part of the development site has further delayed the scheme.[49] Millwall FC expressed concerns about the progress of regeneration proposals for the Surrey Canal Triangle area around The Den.[50]

3.3. Delays produce costs for multiple stakeholders, and could affect the viability of schemes. In Arsenal FC's case, we heard that:

> *'…for every year that that stadium development could have been delayed, it would create an additional cost of £50 million or*

[47] Appendix 1
[48] LB Haringey, Planning Sub-Committee, *Tottenham Hotspur FC Stadium Redevelopment (Northumberland Development Project) – Revising the s106 Agreement to support a viable development scheme*, 13 February 2012, p. 9
[49] Summary of visit to Tottenham Hotspur FC on 8 July 2014, p. 2
[50] Note of informal meeting with Millwall FC on 2 October 2014, p. 2

£60 million for Arsenal, and they would get to a point when it would not be viable for them to do it.'[51]

3.4. Similarly, communities and local areas could lose out on local economic development, and uncertainty can put off potential investors. Delays can also lead to clubs spending money on obsolete stadium assets. League One club – Brentford FC – told us that if the club is unable to move to a new stadium within three years, it will incur costs in modifying its existing stadium.[52]

3.5. Local authorities intervening in a timely way can reduce delays. Chief Executive of Newham Council, Kim Bromley-Derry, explained the role of local authorities in maintaining pressure on developments to deliver the community benefits they promise:

'…that is one of the roles of the public sector: to ensure the benefits to the community of any investments or to work collaboratively with private investments to accelerate and enhance those.'[53]

The Mayor can facilitate a unified vision, and partnership working

3.6. Unity of vision is important to avoid piecemeal development. Islington Council and Arsenal FC made it clear that developing the Emirates Stadium relied on both stakeholders having a shared objective, as Sarah Ebanja explained:

'From a Council's perspective, we wanted to bring back into use brownfield land that had been empty for 20 or 30 years. In essence it was an area of opportunity that we had sought investors and developers for what we could not achieve. At that time our focus was on new homes in the borough… The other aspect was to create new commercial/business space.'[54]

3.7. This is where the Mayor should step in. The Mayor's objectives for stadia fall under his aims for sports facilities, as set out in the London Plan.

In the London Plan, the Mayor:

[51] Sarah Ebanja, Regeneration Committee 19 June 2014, transcript p. 22
[52] Summary of visit to Brentford FC on 15 July 2014, p. 2
[53] Kim Bromley-Derry, Regeneration Committee 16 September 2014, transcript p. 35
[54] Sarah Ebanja, Regeneration Committee 19 June 2014, transcript p. 6

- Requires large sports facilities providing for spectator sports to deliver broader community benefit, enabling them to 'host a wide range of other community activities;'[55]

- Commits to working with local stakeholders to promote and develop sporting facilities;[56] and

- Requires borough Local Development Frameworks to enhance the 'economic contribution and community role' of sporting developments.[57]

'The existing residents were assured that when the stadium was built, the local underground station, Holloway Road (already a busy one) would be upgraded and extended. Once the deal became a fact, it was announced that this would be too expensive.' – Survey respondent commenting on The Emirates

3.8. Under the Mayor of London Order 2008, local authorities must refer to the Mayor planning applications of 'potential strategic importance', which meet certain criteria (for example, number of homes, floor space, or height).[58] While many stadium schemes will meet referable criteria, sports stadium schemes are not currently automatically included within this provision, and we argue that they should be. This would mean that the Mayor has a say on plans for new and expanded stadia of all sizes, providing an opportunity to assess the extent to which they meet the London Plan objectives. Involving the Mayor will add weight to the demands that the stadium delivers regeneration and associated community benefit.

3.9. Where the Mayor plays a role in delivering transport improvements linked to stadium developments – such as enhancing access to new or existing stadia for Arsenal FC, Brentford FC, Millwall FC, and QPR, he should be using this leverage to ensure that the clubs meet our charter. This could reduce the risk of clubs and local authorities missing much-needed opportunities to upgrade local transport and other amenities to deal with a stadium scheme.

The Mayor must safeguard the public purse

3.10. In addition, the GLA may – at times – be required to provide funding to assist privately-financed schemes. THFC's stadium is an example of the Mayor acting as facilitator, because the Mayor has allocated some of the Mayor's Regeneration Fund to public realm works around the stadium. In effect, the Mayor's contributions cover some of the costs for which THFC was liable under the original section 106 agreement with Haringey Council, such as highway, parking and pedestrian route works, and

[55] London Plan (2011), Paragraph 3.111
[56] London Plan (2011), Policy 3.19
[57] London Plan (2011), Policy 4.6
[58] https://www.london.gov.uk/priorities/planning/strategic-planning-applications

passenger capacity improvements at Tottenham Hale Station.[59] In Tottenham, the Mayor also appointed advisor Neale Coleman as co-chair of the Tottenham Joint Strategic Forum with Haringey Council. This increases the Mayor's sway.

3.11. The Olympic Stadium represents London's priority stadium-led regeneration scheme. Taxpayers, through the Olympic Delivery Authority, paid £429 million to build the Stadium.[60] The LLDC – which the Mayor chairs – is now converting the stadium for its post-Games use, at a cost of £190 million to date.[61] In contrast to Wembley Stadium, its principal tenant WHUFC will be a privately-owned football club, which has contributed £15 million to the conversion costs, and according to one media report, the club will pay £2.5 million annual rent.[62] Other clubs, including Arsenal FC, highlighted the differences between WHUFC's costs, and those of clubs which had self-financed their stadia.

3.12. The Assembly has long recognised the benefits of the Stadium being occupied by a football club as an anchor tenant to maximise footfall and deliver a return for public sector investors.[63] But the public have a right to transparency over the arrangements the stadium partnership has with the Club to safeguard taxpayers' investment. Moreover, recent legislation requires local authorities commit to the principles of open data and transparency, in line with the *Local government transparency code 2014.*[64]

[59] LB Haringey, Planning Sub-Committee, *Tottenham Hotspur FC Stadium Redevelopment (Northumberland Development Project) – Revising the s106 Agreement to support a viable development scheme*, 13 February 2012, p. 6

[60] ODA, October 2012, *London 2012 Olympic and Paralympic Games Quarterly Report*, p.12

[61] The LLDC let a contract to Balfour Beatty worth £154 million for the stadium conversion, and it has since agreed to pay the contractor a further £36 million for additional strengthening work. Minutes of Audit Panel, 22 October 2014, para 6.8

[62] The Independent, West Ham confirmed as future tenants of Olympic Stadium - now the £160m revamp begins, 22 March 2013

[63] See, for example, Economic Development, Culture, Sport and Tourism Committee (September 2010), *Legacy United? The legacy of London's Olympic venues*, p. 30

[64] https://www.gov.uk/government/publications/local-government-transparency-code-2014

'The new Stadium will automatically put West Ham on a pedestal around the world…' – WHUFC Joint-Chairmen[65]

3.13. Therefore, there is a very significant public interest in the Olympic Stadium as the cornerstone of arguably the UK's highest profile regeneration project. One report suggests that WHUFC will be worth £400 million following its move to the Olympic Stadium; up from its £105 million valuation in 2010.[66] Given that public finances worth over £600 million have funded the stadium's construction and conversion costs, Londoners deserve to know what they will receive, should WHUFC's owners sell up. We know that the E20 Stadium Partnership has an agreement with WHUFC that the club will *'make a windfall payment to the LLDC above an agreed base case'* should its owners sell the club within the next ten years.[67] However, we do not know the financial value of this agreement for the taxpayer.[68] Moreover, as an exemplar scheme, the Olympic Stadium should comply with all the points in our Charter.

Conclusion

3.14. The Mayor should make better use of his leverage to achieve regeneration around new stadium developments. The Mayor and GLA should treat stadium development schemes as major strategic projects. Our evidence base suggests that new stadia can have a significant potential impact on local communities. Crucially, they affect the Mayor's ability to deliver on a number of policies in the London Plan, from employment, to community infrastructure, and transport, for example.

3.15. Even in schemes where the Mayor has limited involvement, we should not underestimate the capacity he has to influence schemes. For example, he could use his leverage to ensure that the conversion of WHUFC's Boleyn Ground includes a higher proportion of affordable housing.[69] Crucially, he has leverage through Transport for London (TfL) transport improvements which accompany many stadium proposals, on occasion funding part of the facilitative works around a stadium (in the case of Tottenham).

3.16. Local planning authorities determine stadium-led regeneration schemes. But local authorities have a wider role in addition to determining planning applications. Supported by the London Plan, they establish a framework for regeneration, by setting policy through their Local Plans. Local authorities work in partnership with football clubs and community

[65] WHUFC, *A message from the Joint-Chairmen*, 18 January 2015
[66] The Times, *Deal suits West Ham down to the ground*, 9 January 2015
[67] West Ham United, General FAQs
[68] In the leasehold agreement between E20 Stadium LLP and West Ham United FC, there are provisions that cover the scenario of West Ham being sold, which the LLDC has informed officers are commercially confidential.
[69] See paragraph 3.25

stakeholders to deliver outcomes to support the regeneration of the local area.

3.17. We recognise that the Mayor can play an important role in supporting local authorities to achieve a good deal from football clubs and developers, however. As the planning process may be the Mayor and other public bodies' main involvement in schemes that are otherwise privately-funded (for example, Arsenal FC, Queen's Park Rangers), the Mayor should use this power prudently. In determining planning applications, local authorities and the Mayor should assess whether the stadium scheme helps deliver relevant Mayoral strategies, including the London Plan, to ensure that maximum public benefit is derived from the schemes.

3.18. Undoubtedly, WHUFC's deal with the E20 Stadium Partnership for the Olympic Stadium deal represents a very favourable outcome for the club. We would like to see greater transparency about the agreements the Partnership has with the club. Moreover, the Mayor – as Chair of the MDC – needs to give Londoners a commitment that their investment is guaranteed.

Recommendation 2

Stadium proposals should be subject to strategic oversight by the Mayor. The Mayor should lobby the Department for Communities and Local Government to amend the Mayor of London Order 2008 to include significant stadium expansion within the categories of planning applications that are referable to the Mayor.

Recommendation 3

The Mayor should make provisions for reviewing leasehold agreements – or clawback – for football clubs occupying public-funded stadia, should clubs be sold. Whilst recognising commercial confidentiality, this should not stop interested parties and members of the public from being able to assess the public benefit where either planning decisions or public subsidy contribute to the delivery of a commercial venture.

Specifically, in the case of the Olympic Stadium, the Mayor should publish information about the content of the agreement for clawback with WHUFC. The Mayor should write to the Committee by the end of May 2015 outlining (without prejudicing commercial confidentiality) what the clawback agreement between the E20 Stadium Partnership and WHUFC contains.

Appendix 1 Stadium case studies[70]

Stadium and football club	City of Manchester/ Etihad Stadium (Manchester City FC)	Wembley Stadium (England football team)	The Emirates (Arsenal FC)	Olympic Stadium – *undergoing transformation* (West Ham United FC)	Lionel Road stadium – *to be constructed* (Brentford FC)	New White Hart Lane stadium - *to be constructed* (Tottenham Hotspur FC)
Capacity	48,000 (62,000 from summer 2015)	90,000	60,000	54,000	20,000	56,000
Financing (cost and whether majority public or private sector funds)	£112m construction (public)[71]; £42m transformation (public and club)[72]	£750m construction (public and private)[73]	£390m construction (club)	£429m construction (public); £154m+ transformation[74]	£71m construction (club)[75]	£400m construction (club)[76]
Timescales	Unknown (opened for 2002 Commonwealth Games; MCFC moved in 2003)	c. 15+ years (Development plans began in early 1990s; new stadium opened in 2007)	c. 6+ years (Site purchased in 2000; new stadium opened in 2006; 29 months to build)	c. 9 years (Constructed for London 2012; permanent re-opening in summer 2016).	c. 16 years (planned relocation over 12 years; purchased site in 2012; could move for 2016/17 season.[77]	c. 8 years (club bid for relocation to Olympic Stadium in 2011; plans to open new stadium for 2018/19 season)

[70] Based on information gathered on the Committees site visits and online sources

[71] Public sector and Lottery funding (Manchester City Council, Sport England (Lottery Fund), European Regional Development Fund and Government programme sources) http://www.theguardian.com/football/2011/oct/04/manchester-city-council-stadium-naming-rights?

[72] £22m from council funding for conversion; £20 MCFC funding for hospitality

[73] £120m Lottery grant; remainder borrowing. Earlier estimates reported by the House of Commons Culture Media and Sport Committee in 2002 put the cost at £353m, but the final cost was £750m; http://www.wembleystadium.com/Press/Press-Releases/2013/4/90-Years-Of-Wembley-Stadium.aspx

[74] Of which £15m from WHUFC. Transformation to include unconfirmed additional costs (roof)

[75] To be financed through housing development

[76] THFC has spent £100m to date on land assembly (site visit). £8.5m of Mayor's Regeneration Fund allocated to fund facilitating works (e.g. walkway from WHL Station, and public realm)

[77] New housing is phased to be built over 9 years

Stadium and football club	City of Manchester/ Etihad Stadium (Manchester City FC)	Wembley Stadium (England football team)	The Emirates (Arsenal FC)	Olympic Stadium – *undergoing transformation* (West Ham United FC)	Lionel Road stadium – *to be constructed* (Brentford FC)	New White Hart Lane stadium - *to be constructed* (Tottenham Hotspur FC)
Non-football uses	Concerts, plus a 2015 Rugby World Cup match	Rugby League, American football, concerts (operates 30-35 days a year)	Up to 3 concerts a year	5 Rugby World Cup matches in 2015, UK Athletics (summer); up to 10 concerts a year	Capacity for rugby; Community Sports Trust (and Learning Zone)	*Unknown*
Hard impacts – (e.g. infrastructure)	New tram stop built to connect the Stadium to the city; new footbridge opening to link the stadium and new MCFC Academy campus.	The site has been designed to encourage sustainable travel. There is a partnership with TfL and the GLA to invest in infrastructure.	New £70m Waste Recycling Centre built at cost of (funded by Arsenal FC). Adult learning centre, used by 500 people a year.	£6bn transport investment *(Difficult to isolate the stadium's impact from the other venues and transformation of the Olympic Park area.*	CIL in place. Section 106 agreement includes contributions to education, bus services, CPZs, public realm and Gunnersbury Park.	Wider Tottenham masterplan includes 'destination retail' and indoor sports, cinema, library and learning centre.
Stadium employment and apprenticeships (construction/ operational)	60% local employment in construction jobs[78]; 30 corporate apprentices; 68 construction apprentices (Academy)[79]	106 stadium employees, and 600-700 FA employees now located at the stadium	New stadium has created new temporary employment in an area that was previously derelict[80]	888 construction employees as at July 2014 (26% local);[81] 720 once operational; 75% of which local employment	200 construction jobs over 9 years; followed by c. 300 FTE jobs after construction (stadium, hotel and retail uses)[82]	THFC will offer 50 apprenticeships within the club.

[78] http://www.mcfc.com/The-Club/Stadium-Expansion/Community-Benefits
[79] 94% of whom have long-term job prospects
[80] Committee heard from Learning Centre participant about zero-hours employment in hospitality roles
[81] Letter from Dr Paul Brickell to the Chairman of the Committee, 22 October 2014
[82] Brentford Football Club, Summary of Proposals, November 2013

Stadium and football club	City of Manchester/ Etihad Stadium (Manchester City FC)	Wembley Stadium (England football team)	The Emirates (Arsenal FC)	Olympic Stadium – *undergoing transformation* (West Ham United FC)	Lionel Road stadium – *to be constructed* (Brentford FC)	New White Hart Lane stadium - *to be constructed* (Tottenham Hotspur FC)
New jobs in local area (excluding stadium)	*Unknown; the club procures 84 per cent of goods and services within the M40 corridor*	1000 new jobs at retail outlet	*Unknown*	Up to 20,000 to be created at the Olympic Park over next 10 years[83]	*Unknown*	530 jobs so far (NDP) Overall employment uplift expected to be 5000[84]
Housing	None built by club (Manchester City Council has delivered 1000 new homes in the surrounding area in recent years).	500 units built to date (45% affordable). Housing will take 10-15 years to deliver.	3000 new and refurbished homes (c. 50% affordable). Highbury Stadium converted into 655 apartments.	7000-8000 new homes to be built on the Olympic Park; one third affordable housing; 40% family housing.[85] Boleyn Ground to be developed for housing (838 units) and retail.	910 new homes planned (0% affordable; 1-3 bedroom units) Griffin Park to become 100 family units.	Plans to develop Brook House (222 units). To include 100 shared ownership units, 122 homes for rent and a new building for the Hartsbrook free school.[86] 3000 homes envisaged as part of wider Tottenham masterplan (across 70 acres).[87]

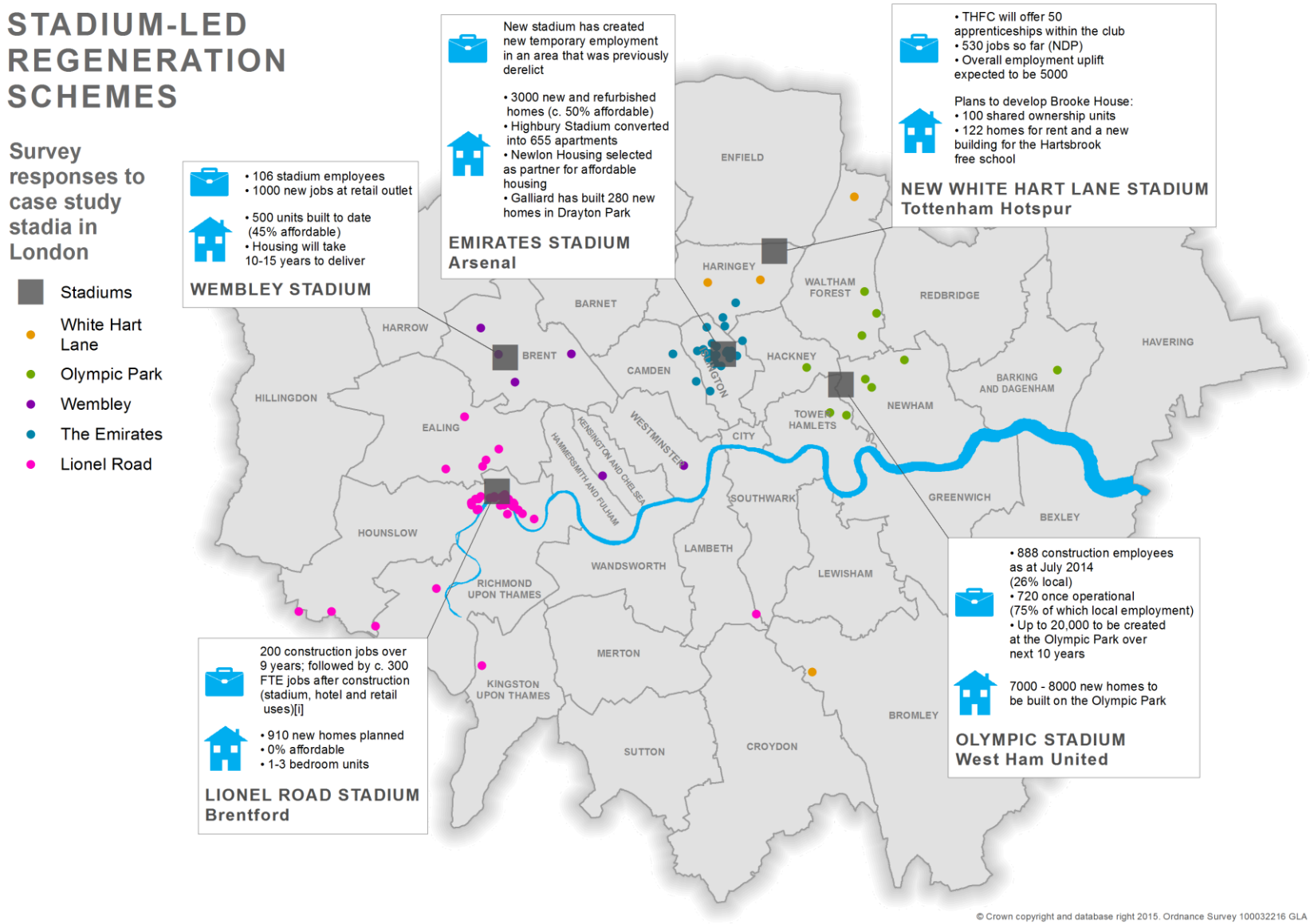
[83] Letter from Dr Paul Brickell to the Chairman of the Committee, 22 October 2014
[84] Haringey is revising in light of new masterplan
[85] Figures from LLDC written submission. Housing to be built as part of LLDC Legacy Communities Scheme, not by WHUFC
[86] http://www.tottenhamjournal.co.uk/news/spurs_stadium_development_school_and_homes_scheme_hits_top_spot_1_3592478
[87] THFC presentation at the Committee's site visit on 8 July 2014

Stadium and football club	City of Manchester/ Etihad Stadium (Manchester City FC)	Wembley Stadium (England football team)	The Emirates (Arsenal FC)	Olympic Stadium – *undergoing transformation* (West Ham United FC)	Lionel Road stadium – *to be constructed* (Brentford FC)	New White Hart Lane stadium - *to be constructed* (Tottenham Hotspur FC)
Associated regeneration and partners involved	Near the stadium and Academy, there are plans for commercial-led development (including retail to the south, and a leisure destination with hotels and retail to the north). MCFC soon to deliver a 50-year travel plan, with the possibility of installing new cycle lanes along the road linking the site to the city.	Quintain purchased the land around stadium from Wembley Stadium PLC in 2002. Quintain is developing a destination scheme, including residential, retail outlet, and cinema. LB Brent is redesigning junction and public realm in Wembley town centre.	Newlon Housing selected as partner for affordable housing element of Arsenal scheme. Galliard has built 280 new homes in Drayton Park.	LLDC responsible for the regeneration legacy of the Olympic Park and surrounding area. 6 Growth Boroughs (Newham, Hackney, Waltham Forest, Tower Hamlets, Greenwich, Barking and Dagenham) aiming to achieve convergence with rest of London over 30 years.	Long term infrastructure plan for M4 'Golden Mile', including new rail links.[88] LB Hounslow plans Kew Gate regeneration: developers St George, St James, Ballymore new residential. Sports and community regeneration at Gunnersbury Park.[89]	Stadium part of wider Northumberland Development Project, including new Sainsbury's, University Technical College (opened September 2014). LB Haringey developed a masterplan for the High Road West area, including changes to White Hart Lane station, new stadium walkway, and new housing at Love Lane Estate.
Community benefits	4500 hours of community use annually. 5 acres of Academy site donated to city council for community use: new sixth form college and community pitch.	1% of stadium profits allocated to local causes	Stadium used for community programmes in 4 boroughs (e.g. workshops). New sports centre to open spring 2015. £500,000 disbursed locally through a	100,000 free tickets available to Newham residents every year. Stadium to host 10 community events a year and Newham Run. Adjacent	Brentford FC Community Sports Trust (CST) Learning Zone (LZ) delivers curriculum-linked activities for 1000 students a year. LZ facility will be 3 times bigger in new stadium.	

[88] Plans for conversion of a goods railway line to Willesden Junction, and reinstatement of a disused line to Southall.
[89] New pitches and community hub (requires Sport England and other funding).

	MCFC funded a new high school in the area which opened 5 years ago.		community trust.	community athletics track will provide community access 250 days a year.		
Charitable/ foundation work	Wellbeing scheme run by the club is free and reaches 500,000 people every year	Big Lottery Fund requires Wembley Stadium PLC to put 1% of annual profits towards charitable causes	Community programme worth £1m a year. Gunners Fund distributes grants worth a total of £50,000 a year.	West Ham Community Trust work worth c. £1.3m a year on 20+ work streams; expected to expand following move	Community activities currently worth £8m a year; expected to increase to over £11m a year following the move.	"Largest charitable foundation in the Premier League", underwritten to value of £4m a year
Stadium and football club	**City of Manchester/ Etihad Stadium (Manchester City FC)**	**Wembley Stadium (England football team)**	**The Emirates (Arsenal FC)**	**Olympic Stadium – *undergoing transformation* (West Ham United FC)**	**Lionel Road stadium – *to be constructed* (Brentford FC)**	**New White Hart Lane stadium - *to be constructed* (Tottenham Hotspur FC)**

Map 1: Five case study football clubs in London, showing survey respondents and some associated outcomes



Map 2: Locations of London's football clubs in the top six divisions

Appendix 2 Recommendations

Recommendation 1

In the next iteration of the London Plan, the Mayor should incorporate a Charter for stadium developments as part of amendments to the Plan. In the intervening period, the Mayor should have regard to the Charter when reviewing stadium planning applications.

Local authorities should have regard to the stadium Charter in their Local Plans.

Charter for effective stadium-led regeneration

Football clubs and relevant local authorities seeking to develop a stadium-led regeneration scheme should commit to:

- A clear vision and policies for place-making around the new (or expanded) stadium, including public transport connectivity and permeability between the stadium and surrounding area.

- Undertake a skills mapping exercise to assess local capacity to take advantage of new jobs. The results should inform a skills and employment strategy, including measures to prepare and upskill local communities in order that they can access the new jobs.

- Pay the London Living Wage to all stadium employees.

- Support the Mayor's housing targets in all stadium-led regeneration schemes, where practical. Any new housing developed as part of, or around, a new stadium, should aim to be mixed tenure, to include both family and social rented affordable housing.

- Demonstrate how they have consulted with a diverse range of local community and stakeholder groups to:

  - identify effective uses of the stadium scheme as a community asset;
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In addition, in cases of stadia financed or part-financed with public funds, the Mayor should:

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Specifically, in the case of the Olympic Stadium, the Mayor should publish information about the content of the agreement for clawback with WHUFC. The Mayor should write to the Committee by the end of May 2015 outlining (without prejudicing commercial confidentiality) what the clawback agreement between the E20 Stadium Partnership and WHUFC contains.

Appendix 3 Survey Results

Stadium-led regeneration survey

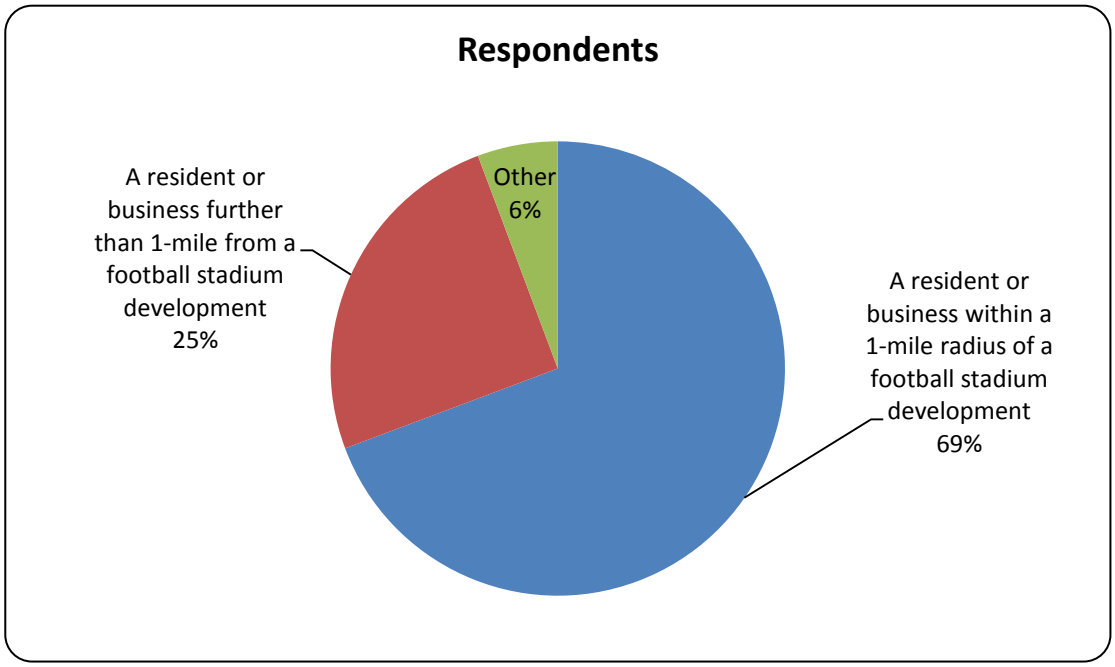
The Committee ran an online survey between 4 September and 31 October 2014 to seek the views of people living and working near new or redeveloped football stadia, or near where a new stadium was proposed.

The survey was hosted on Talk London, the GLA's online engagement portal. It was advertised on the Committee's website and through social media channels, specifically targeting people in areas near new or proposed new stadia. Respondents to this survey were self-selecting, and therefore the sample is not representative of London's population.

1. Respondents

140 people responded to the Committee's survey.[90]

We asked people whether they were responding as local residents and businesses, or in a different capacity. The chart below shows who responded. Almost 7 in 10 respondents lived or worked within 1 mile of a stadium development.



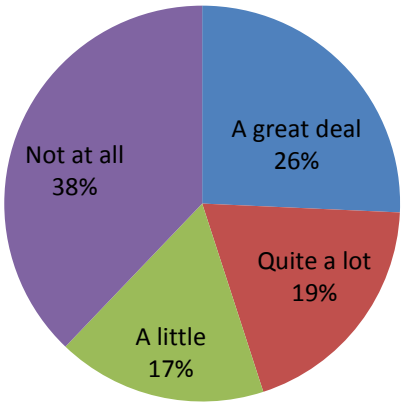
[90] There were 140 fully completed surveys. These results do not include 32 respondents who partially responded.

We asked respondents to name which stadium their responses related to. A table showing the number of responses for each stadium is provided at the end of the appendix. Over 41 per cent of respondents (58 people) commented on Brentford FC. The large number of responses relating to Brentford FC is likely to reflect the fact that the club's plans for a new stadium had a high profile at the time the survey was run (with the club's planning application having been approved by the local council in July 2013). Twenty-one per cent of respondents commented on Arsenal FC and the remainder were shared relatively equally among other past and current football clubs and stadia involved in stadium-led regeneration.

2. Opinions on the impact of a redeveloped stadium

We asked respondents whether a new stadium would improve the local area. Sixty-two per cent thought it would have some positive impact,[91] and just over a quarter said it would improve the area a great deal. Over one third thought that it would not improve the area at all.

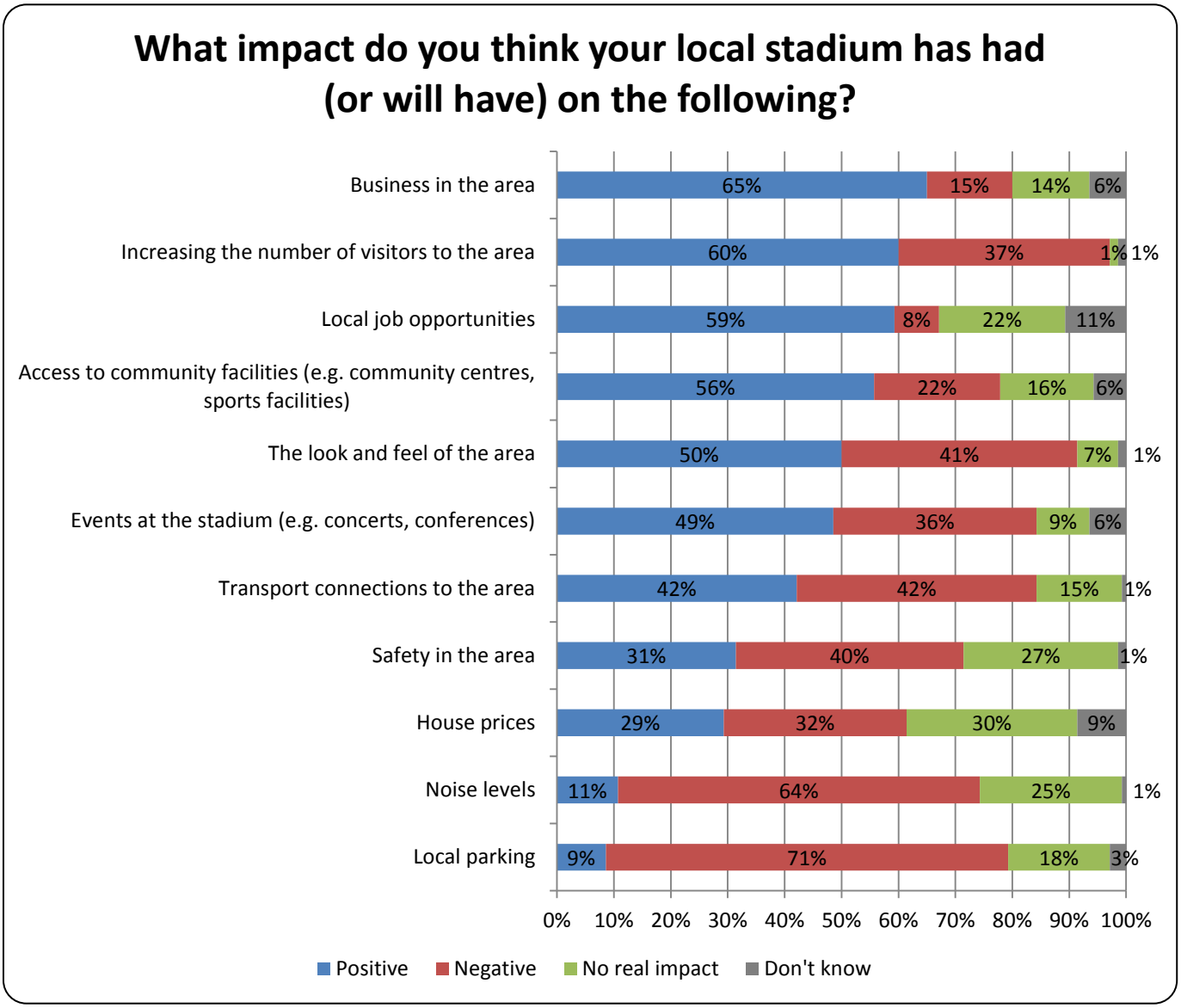
Overall, to what extent do you think the new, or redeveloped stadium has improved, or will improve, the local area?



[91] This includes those who said 'a great deal', 'quite a lot', or 'a little'.

3. Specific impacts of a stadium development

We asked survey respondents what impact they thought a stadium had (or would have) on a number of specific issues in the local area.[92]



[92] The results for both 'a significant positive impact' and 'a slight positive impact' have been combined into one category, as have the results for 'a significant negative impact' and 'a slight negative impact'.

Positive

Local business, increased visitor numbers, access to community facilities and local job opportunities were the local issues that respondents felt would benefit most positively from the stadium. Over 50 per cent of respondents said these would have a positive impact.

Negative

In contrast, respondents identified parking and noise levels as negative impacts of the stadium. 71 per cent of respondents felt that the stadium would have a negative impact on local parking, and 64 per cent thought it would negatively affect noise levels.

Split opinion

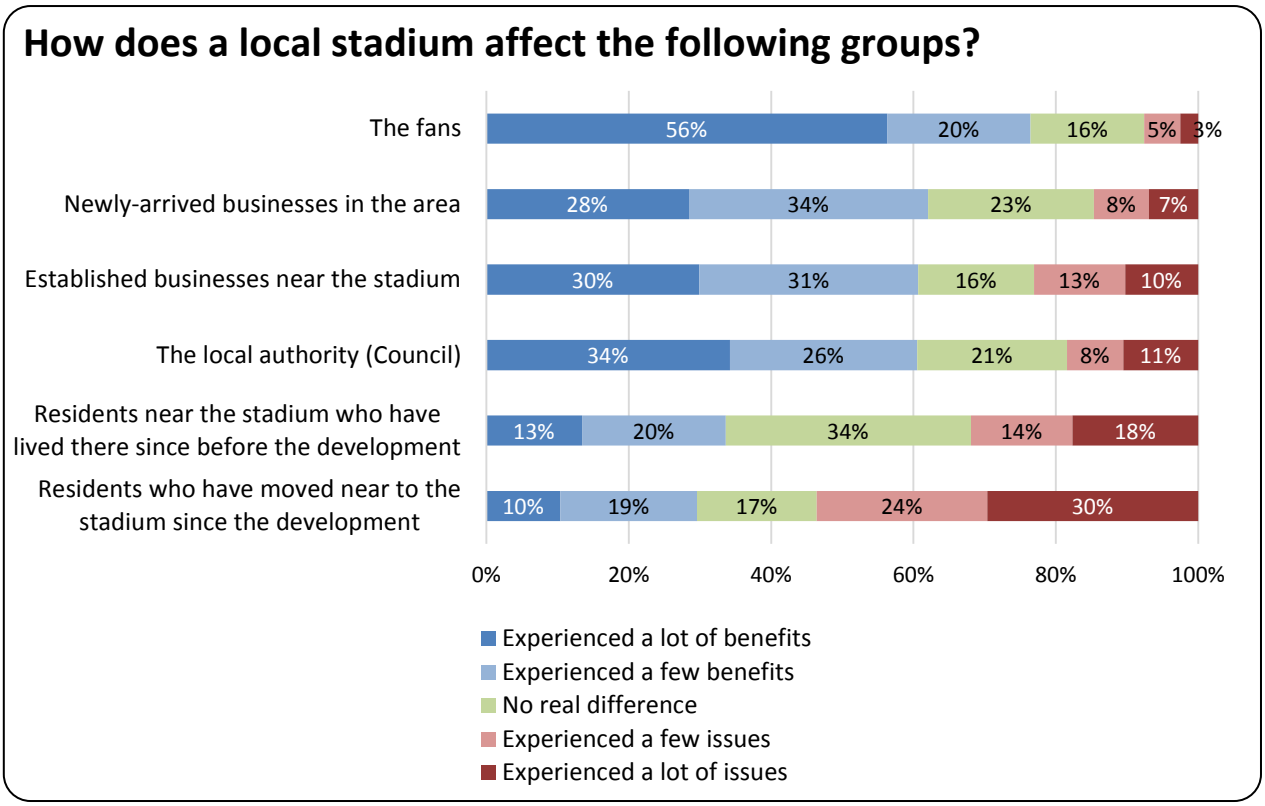
A number of issues attracted similar levels of positive and negative responses. On transport connections to the area, for example, 42 per cent thought the stadium had a positive effect, while a further 42 per cent thought that it had a negative effect. Opinion was similarly divided on safety in the area, with 31 per cent considering the stadium had a positive impact, and 40 per cent who thought it had a negative impact.

No change/ neutral

House prices were the issue on which the largest proportion respondents thought that the stadium would have no real impact (with 30 per cent choosing this option).

4. Who benefits from stadium-led regeneration?

We also asked respondents which groups benefit from stadium-led regeneration.



Positive

Of the stakeholder groups we listed, 56 per cent of respondents thought that fans experienced a lot of benefits, and only 8 per cent of respondents thought that fans experienced a lot or a few issues.

Sixty per cent of respondents thought that local authorities and newly arrived and established businesses near the stadium would experience at least some benefits from the stadium.[93]

Negative

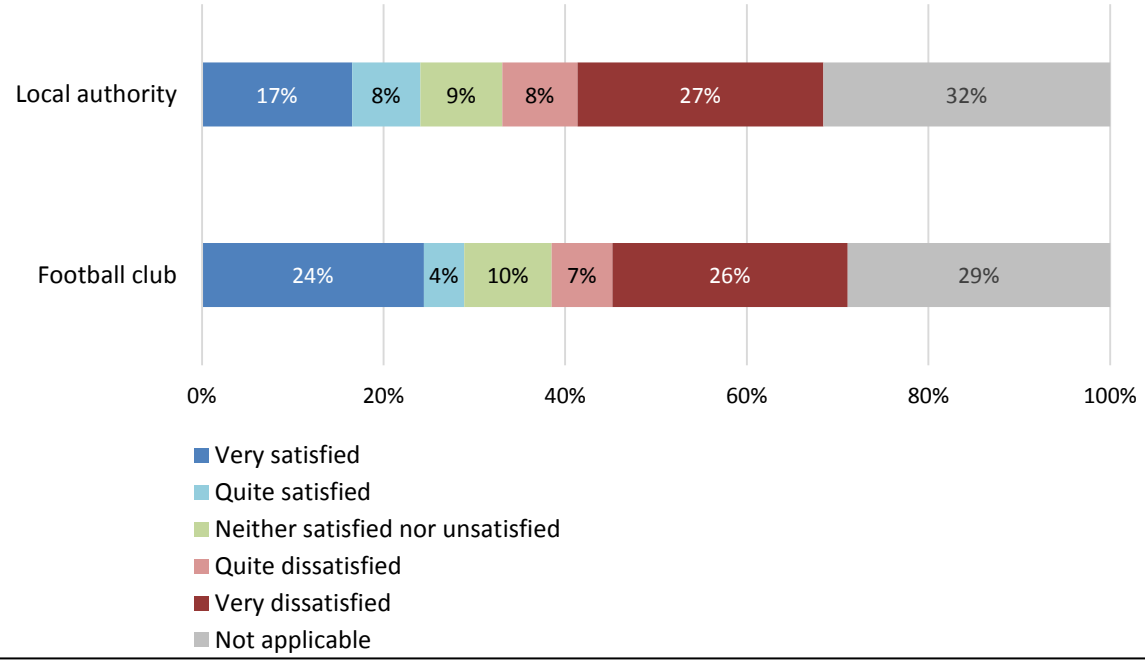
Respondents said that the group that experience the fewest benefits were residents near the stadium who have lived there since before the development, with only 10 per cent saying this group experienced a lot of benefits, compared to 30 per cent who thought this group experienced a lot of issues.

[93] This includes those who said 'experienced a lot of benefits' or 'experienced a few benefits

5. Consultation

We asked people whether they had been consulted about the stadium development by the football club or the local authority.

If your local authority or football club consulted you about a stadium development, how satisfied were you with this?



Respondents were slightly more satisfied with consultation by the football club compared to consultation by the local authority. Twenty-eight per cent of respondents were very or quite satisfied with consultation by the club, and 25 per cent of respondents were very or quite satisfied with consultation by the local authority.

However, more than 25 per cent of respondents were very dissatisfied with consultation, whether by the football club or the local authority.

Three in ten respondents chose 'not applicable' for both consultation by the local authority and the football club. There could be several reasons for this, such as not having lived near the stadium at the time of the consultation, or not having been consulted.

6. Qualitative results

We asked respondents two open-ended questions:

- Please tell us what impact you think your local stadium has had on the surrounding area (allowing respondents to provide further information on the issues stadium development might affect). **125** people answered this question.

- Please tell us more about why you were satisfied or dissatisfied with the consultation (providing opportunity to comment on consultation processes for stadium-led regeneration). **89** people answered this question.

Comments on the impact of a redeveloped stadium on the local area

A sample of some of the themes raised in the open comments is shown below:

Positive impacts of new stadia

- New people coming into the area will improve it

- New money will benefit local businesses and pubs

- Areas around the Olympic Park are being regenerated, but football plays only a small part

- Clubs are already invested in the community, and they will continue to be in the new venue

- There is considerable pride in local clubs

Negative impacts of new stadia

- Perceived problems with parking, noise, and litter affect residents' standard of living

- There is already considerable disruption (i.e. congestion and anti-social behaviour) on match days due to the fan influx

- Stadium-led regeneration is good for those who can afford to live near it, but not for those who cannot

- Closure and relocation of pre-existing businesses on stadium development sites

- *Brentford FC specifically*: Expectations that the new (larger) stadium will worsen congestion on already congested local roads

Comments on levels of satisfaction with consultation on stadium redevelopment

A sample of some of the themes raised in the open comments is shown below:

- People attend consultation events if they are interested

- The local authority is consulting residents, but from a biased position

- Local authorities are too close to football clubs

- The football club ignores local residents' opposition to additional revenue-generating activities (i.e. concerts)

- No awareness of, or involvement in, consultation activities

- The club has reneged on promises it made to the local community during consultation

- Permission was granted for a new stadium, despite lack of support; opponents were ignored

Breakdown of survey respondents

Which stadium do you live near / are you commenting on in this survey?	
Brentford - Griffin Park/ Lionel Road site	58
Arsenal - The Emirates	29
West Ham United - Olympic Park	8
Dulwich Hamlet - Champion Hill	8
Chelsea - Stamford Bridge	6
Queen's Park Rangers - Loftus Road/ Old Oak Common	6
Wembley	6
Charlton Athletic - The Valley	5
Fulham - Craven Cottage	4
Tottenham - White Hart Lane	4
Other	6
Total	**140**

Appendix 4 How we conducted this investigation

At its meeting on 19 June 2014, the Committee agreed the terms of reference for its investigation, to:

- Review evidence from past and current stadium-led regeneration schemes to assess the benefits of stadium development programmes to both football clubs and local communities;
- Review the role of the Mayor in stadium regeneration schemes and assess the extent to which his objectives for stadium-led regeneration in the London Plan are being met; and
- Develop recommendations for the Mayor to ensure current stadium development schemes – in particular the Olympic Stadium – deliver a genuine regeneration legacy for local communities.

In our investigation, we have gathered evidence from a broad range of groups that a new stadium affects. This includes football clubs, local councils, developers, advisors, community groups, local businesses, and individuals, including those who live near new or proposed stadia.

We held two formal meetings with the following guests:

19 June 2014

- Gabriel Ahlfeldt, Associate Professor of Urban Economics and Land Development, London School of Economics;
- Pete Bradshaw, Head of Infrastructure and CSR, Manchester City FC;
- Sarah Ebanja, Chair, Newlon Group, and independent consultant (formerly Deputy Chief Executive, London Borough of Islington);
- Ken Friar, Director, Arsenal FC;
- Michelle Moore, Moore Development Consultancy; and
- Antony Spencer, Stadium Capital Holdings.

16 September 2014

- Dr Paul Brickell, Executive Director of Regeneration and Community Partnerships, London Legacy Development Corporation (LLDC);
- Kim Bromley-Derry, Chief Executive, London Borough of Newham;
- Mark Donnelly, Chief Operating Officer, Queen's Park Rangers FC; and
- Joe Lyons, Head of Community, West Ham United Football Club.

We also carried out six site visits to stadia and football clubs, invited groups to submit written information, conducted a survey of residents and businesses living and working near football stadia, held a focus group with businesses operating near the Emirates Stadium in Islington, and held informal meetings with Cargiant and Millwall FC.[94] The transcripts, visit and meeting summaries are available on the website.

[94] We met with Cargiant, landowners of an area at Old Oak Common, where a future potential stadium for QPR FC is proposed. We met with Millwall FC regarding proposals for development around The Den Stadium (Surrey Canal Triangle).

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Hindi

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درکار ہو تو، براہ کرم نمبر پر فون کریں
یا مذکورہ بالا ڈاک کے پتے یا ای میل
پتے پر ہم سے رابطہ کریں۔

Arabic

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فرجاء الاتصال برقم الهاتف أو الاتصال على
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Gujarati

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