Socio-Economic Diversity in the Fast Stream

February 2016







This is genuine, we want to be bold. With the evidence for change, we will make change happen. It's time to do something."

Senior Civil Service Employee

"The Fast Stream does not appear to have the data to enable it better to understand the differences in the performance of different groups of candidates in the application and assessment process. Without this data it is simply not possible for the Fast Stream to identify the nature of the problem and therefore what action will be most effective in improving diversity outcomes."

> Civil Service Commission Review of the Fast Stream (2013)

"These insights now give us that solid base for change. We need urgency, but we also need to be considered and to use evidence...not to use assumptions and gut reactions. This agenda is too important.

Civil Service Employee (2016)

Contents

Executive Summary	1
Key Findings	2
Summary of Recommendations	5
Scope, Methodology and Terms Analytical Framework	
Section One: Setting the Context	11
Background to the Fast Stream The Fast Stream in the Context of the Civil Service Accountability and Measures of Success Monitoring SEB Diversity Existing Good Practice in the Fast Stream	12 15 16
Section Two: Analysis of the Recruitment Pipeline	24
Analytical Approach The Recruitment Pipeline (Attracting Applicants) Approach to the Analysis of Recruitment Data The Recruitment Pipeline (Overview of Selection) The Recruitment Pipeline (Registration) The Recruitment Pipeline (Online Tests and E-Tray) The Recruitment Pipeline (Assessment Centre) Conclusions	25 45 50 59 63 68
Section Three: Recommendations and Learning from other Employers	79
Lessons for the Wider Civil Service	100
Closing Remarks	104
Appendices	105

Executive Summary

The Fast Stream is the Government's flagship graduate development programme, equipping candidates to become future leaders of the Civil Service. It was created to ensure that present and future governments are supported by leaders able to respond to diverse situations and changing priorities.

Senior colleagues in the Civil Service are actively engaged in efforts to secure socio-economic diversity in the Fast Stream, and many good practices are well developed. These include the collection and publication of socio-economic background (SEB) data, the removal of candidate screening criteria (e.g. UCAS points and university attended), the targeting of marketing activity based on campus diversity, and an internship programme exclusively for under-represented groups. Much progress has been made in relation to some diversity indicators, including Black, Asian and Minority Ethnic (BAME) and disability. However, in relation to socio-economic diversity, the Fast Stream is unrepresentative of the population at large. To put this in context, the profile of the intake is less diverse than the student population at the University of Oxford.

There are low levels of awareness of the Fast Stream amongst lower SEB students, and a view amongst many who are familiar with it that the programme is both attractive and intimidating. Candidates' university of study and prior attainment have been the strongest predictors of success at every stage of the selection process, despite the fact that neither are considered in the selection process. While 'university attended' in some ways reflects ability, it also encodes unfair advantage to those from higher SEB groups. To address these inequalities, further steps need to be taken to increase the pool of quality candidates from a wider range of backgrounds, and to ensure that the selection process does not indirectly preference higher SEB candidates. We also outline a number of lessons for the broader Civil Service; these are drawn from this research, the wider literature, and from other employers' practices.

We recommend a more robust methodology for measuring SEB (based on research and established practice in the higher education sector), and a number of strategic approaches to engage talented candidates from a wider range of backgrounds. These include more direct involvement of the serving Fast Stream community in supporting outreach activities. At the same time, any gains in attracting lower SEB candidates are likely to have a modest effect whilst selection tools remain focused on the social and cultural competencies associated with candidates from more affluent backgrounds. We therefore encourage the Fast Stream to closely interrogate its approach to selection. This will involve a critical review of the way that 'talent' is understood, such that diversity can be achieved without compromising a commitment to meritocracy.

The challenge is to build on existing good practice and to take much bolder steps. The rewards could be significant. The Fast Stream, and the wider Civil Service, is in a strong position to deliver a strategy to access a more diverse range of talent, and enable progress towards a workforce that is more representative of the communities that it serves. If the Fast Stream can lead by example, it is uniquely placed to galvanise other employers. Colleagues can drive forward the policy goals of social mobility, and pave the way for increased understanding of the positive impact of a more socially diverse workforce on organisational outcomes.

Key Findings

Attracting Applications

- The SEB profile of applicants to the Fast Stream is much closer to the profile of students from Oxbridge than that of the wider student population. Two factors that contribute to this are:
 - candidates from highly selective universities are much more likely to apply to the Fast Stream (institutional selectivity and SEB diversity are negatively correlated); and
 - within every university group, including the most selective, students with higher SEB are more likely to apply.

These factors are mainly a result of:

- Low levels of awareness about the Fast Stream relative to many peer employers (as evidenced by Trendence data); this deficit is more acute amongst lower SEB students. The Fast Stream has a modest presence on university campuses, mainly due to limited resource. In addition, there is limited monitoring and tracking of students: colleagues are not able to evaluate the diversity of audiences reached and the impact of campus activity.
- A perception amongst many lower SEB candidates that the Fast Stream is both attractive and intimidating, likely deterring many applicants. This perception is largely due to a combination of the following:
 - A view, often formed before entrance to university, of the wider Civil Service as bureaucratic and "white, male and Oxbridge", which is impacting negatively on applications from lower SEB students.
 - Uncertainty amongst many lower SEB students about the selection process, and more fundamentally about the specific behaviours and skills that are sought by the Fast Stream, i.e. the definition of "talent". Many applicants from lower SEB backgrounds seem to be unaware of the Fast Stream definition of talent, and may be making assumptions based on their view of a "typical Fast Streamer" that deters them from applying.
 - The recruitment process being significantly longer than the average length amongst peer employers (public sector average is 11.5 weeks; Fast Stream is 18-31 weeks). The dual effect is that many lower SEB students are put off applying, and those who do apply are less likely to take the risk of not accepting job offers elsewhere during the process.
 - The assessment centre venue, 100 Parliament Street, creates a sense of mystique amongst some students, which contributes to the experience of intimidation.

- The geographical focus on London is a deterrent: research indicates that lower SEB students are less likely to move to the area.
- The publication of success rates by institution, which is commendable in its transparency, is also likely deterring students who already feel less confident about applying.
- Salary does not appear to be a significant factor in deterring lower SEB candidates.
- A high proportion of applicants to the Fast Stream are from academic subjects (such as history and literature) that are among the least diverse with regards to SEB. This is especially true in relation to the Generalist Fast Stream, which accounts for the highest proportion of applicants and appointees.
- Targeting of campus activity is currently directed, in part, by university diversity indicators (and is a feature of good practice), but the use of data to inform this could be more robust.
- There is an opportunity to invest in the diversity internship programme. The SEB diversity of the internship population has improved in the last two years although, unlike most other employers, candidates who have successfully completed an internship are made no allowances in the selection process.
- There is an opportunity to invest in school outreach programmes, and to achieve greater coordination with the school outreach activities of the wider Civil Service. Fast Stream school outreach is making a minimal contribution to changing perceptions of the Civil Service. There is no operational budget to support this critical work; at present it is modest in scale and there is no monitoring and tracking of participants. It is therefore hard to discern its overall impact on promoting awareness of, and access to, the Fast Stream.

Selection of Candidates

- A lack of SEB diversity at the application stage is compounded in the selection process, with a higher proportion of candidates from higher SEB backgrounds progressing at every stage of the process.
- One of the main findings from the regression is that the primary SEB variables do not have a significant effect on overall success of appointment. The one variable that is consistently significant across each of the recruitment stages is the type of university attended; we see that candidates graduating from more selective universities have higher odds of passing each recruitment stage. There is a relationship between SEB and university attended, evidenced from the Fast Stream data and from wider research.
- A larger proportion of lower SEB candidates do not proceed beyond the registration stage (44.4%) compared to higher SEB candidates (36.2%). Relative to the number of Fast Stream appointments made annually, there are a high number of lower SEB candidates who do not progress beyond registration, and who also have the characteristics of candidates who perform

well in later stages. These candidates represent up to a fifth of the population of lower SEB candidates not progressing beyond the registration stage.

- There is a strong linear relationship between 'UCAS points' and performance in all test scores, though this is less strong for the online competency test (which is most closely linked to the Civil Service Competency Framework; candidates can practice the online verbal and numerical tests, but not the online competency tests). We know from the Fast Stream data and from wider research that there is a relationship between SEB and UCAS points.
- Candidates who identified as 'white' are more likely to achieve higher scores in the online tests. This is more pronounced in the verbal online test compared to the numerical online test.
- At the FSAC, candidates with lower SEB were found to have lower overall candidate scores. In relation to individual competencies, "communicating with impact / leading and communicating" is the only competency against which SEB has a statistically significant effect.
- At the FSAC, the effect of being an Oxbridge graduate is particularly strong. When comparing different university groups, Oxbridge candidates on average perform over a point better than candidates who graduated from other highly selective universities.
- Our interviews suggest that the ordering of the FSAC exercises (i.e. starting with the Group Exercise) and the limited diversity of assessors could be having a negative impact on the success of lower SEB candidates.

Summary of Recommendations

The recommendations are outlined in detail in section three (from page 79)

- **A.** Introduce the approach outlined to measuring and monitoring socio-economic diversity from the 2016/17 application cycle for the Fast Stream, and make improvements to the way data are collated, coded and reported within the new Applicant Tracking System.
- **B.** Establish clearer senior leadership accountability for SEB diversity in the Fast Stream, underpinned by the proposed measures of success / targets within the Action Plan.
- **C.** Mobilise those already on the Fast Stream programme to be involved in attraction activities to a greater extent, driven by support from Permanent Secretaries and Senior Civil Servants (SCS), and inclusion of specific engagement targets in Fast Streamer corporate objectives.
- **D.** Deliver more curriculum-based interactions with universities, and engage actively with widening participation teams.
- **E.** Introduce enhanced data insights to direct resource more effectively throughout the attraction process, including, but not limited to:
 - targeting universities and academic departments;
 - evaluating the impact of campus activity and schools outreach; and
 - the iterative use of live recruitment data to inform approaches to promoting SEB diversity.
- **F.** Increase the availability and visibility of particular types of information, and push key messages that will support lower SEB applications (as outlined in the report).
- **G.** Regarding the diversity internship programme, clarify and publish the SEB eligibility criteria, and ensure robust systems are in place to track candidate progression from all early engagement activities to the Fast Stream. At the earliest opportunity, explore with the Civil Service Commission the evidence base for allowing interns to pass straight to the assessment centre on the basis of having successfully completed an internship.
- **H.** Undertake further research to understand why there is a high drop-out rate at the registration stage among candidates from under-represented groups.
- Review existing engagement with schools, working towards even more coordinated efforts, to raise aspirations amongst young people and to combat preconceptions of the Civil Service.
 Develop resources and outreach modules that can be delivered remotely by teachers, and Fast Streamers, in schools and colleges.

- J. Deliver a critical review of the way in which the Fast Stream defines and identifies 'talent', working towards more inclusive methods of identifying potential that have a clearer link to the strengths required to perform in the job. This should include:
 - reviewing the definition of talent with stakeholders;
 - analysing the impact of newly introduced assessment tools, including the situational judgement test and the move towards more strengths based interviewing;
 - exploring greater use of strengths based assessment throughout the selection process;
 - shortening the length of the recruitment process;
 - introducing at least one regional assessment centre for the 2016/17 cycle, and moving to a
 greater number of regional assessment centres in future years;
 - seeking to enhance candidate experience, and thereby engagement e.g. through gamification techniques, video assessment and realistic acted scenarios;
 - adjusting or removing those aspects of the selection process that are especially prohibitive for those from lower SEB backgrounds, as evidenced by the data analysis herein;
 - consideration of the diversity of the Fast Stream assessors, including SEB, age and occupational background; and
 - re-ordering the assessment centre exercises, primarily to ensure that the group exercise is not the opening assessment.
- **K.** Key lessons from this report and from within the wider literature / practices should be acted upon by the Civil Service:
 - i. Introduce the approach for monitoring SEB diversity for entry to the Future Leaders Scheme, Senior Leaders Scheme, High Potential Development Scheme and the Senior Civil Service (in 2016).
 - **ii.** Ensure each department has a strategy and target for improving socio-economic diversity, with accountability at Permanent Secretary level (in 2016).
 - Work towards a Civil Service wide SEB workforce census, using the approach outlined below, likely developing this in phases on the basis of the findings from (i) above (from 2017).
 - iv. Dependent on the findings of (i), investigate the effect of SEB on progression within the Civil Service, including into the programmes outlined in (i) and, most significantly, the Senior Civil Service (from 2017).

Scope, Methodology and Terms

- **1.** The full research specification is outlined in <u>Appendix A</u>. The scope of this research was to address the following questions:
 - Which measures of social mobility are most appropriate to monitor and evaluate progress in this area?
 - What can the Fast Stream learn from the existing evidence base and effective practice to inform the recruitment of candidates from lower SEB?
 - What are the perceptions of university students from lower SEB groups (applicants and non-applicants) in relation to the Fast Steam; what, if any, are the barriers to applications amongst these groups?
 - What is the differential impact, and the size of the effect, for applicants from lower SEB groups at each recruitment stage?
 - What practicable adjustments should be made to recruitment in relation to the Fast Stream programme in response to this evidence base?
 - How are the particular findings from this research applicable to the wider Civil Service?
- **2.** These questions have been addressed using a mixed methods approach, outlined briefly here and available in more detail in the appendix noted above.
 - A review of existing research in this area, and notable practice being undertaken by graduate recruiters to drive positive changes in relation to socio-economic diversity.
 Desktop research has also been undertaken to assess existing policies and practices of the Fast Stream in relation to marketing and selection.
 - Quantitative analysis of the Fast Stream recruitment data to interrogate the potential effect of applicants' socio-economic characteristics upon outcomes at each stage of the recruitment process. Secondary aims of this analysis have also included an exploration of variation between applicants from different socio-economic backgrounds and their measured competencies at different stages of the recruitment process, and where variations are found, exploring these further in terms of interaction with other factors.
 - Qualitative analysis to provide primary source data from key stakeholders, particularly in
 relation to the attraction and marketing of the Fast Stream, through the application of semistructured in-depth interviews. By cross-referencing these data against the outputs of
 targeted focus groups, a sharper focus is established on the impact of the Fast Stream
 recruitment stages on social mobility. Over 100 interviews and Focus Groups have been
 undertaken with senior civil servants, the Fast Stream team, Fast Stream candidates

(successful and unsuccessful), and prospective student applicants. The full interview protocol and topic guide is included in <u>Appendix B</u>.

- **3.** 'Attraction' is used throughout to describe those activities designed to encourage candidate applications (e.g. online marketing, campus visits, social media, relationships with university careers services), and 'selection' is used to describe the various stages to determine which candidates are offered employment in the Fast Stream.
- 4. Socio-economic background (SEB) is the set of social and economic circumstances from which a person has come, and socio-economic status (SES) is a person's current social and economic circumstances. Social mobility is a measure of the ability to move from lower SEB to higher SES. We use SEB to describe the candidates who meet one of the primary SEB variables (outlined in <u>Appendix G</u>), and categorise candidates as being from a lower or higher SEB background based on these variables. Where specific indicators are used in isolation (e.g. NS-SEC), this is made clear.
- 5. When undertaking interviews with prospective Fast Stream candidates and current Fast Stream participants, interviewees applied the term 'Civil Service' in a specific context. Rather than referring to the wider pool of public employees, it was instead typically applied as analogous to the term 'Whitehall', the metonym referring to those employed in central government administration. Unless explicitly described to the contrary, throughout this report the term 'Civil Service' is applied in the context of 'central government administration'.
- 6. A glossary of acronyms is available in <u>Appendix C</u>.
- 7. In order to group universities for the purposes of analysis and commentary, we refer to the *Sutton Trust 13* (ST13) and *Sutton Trust 30* (ST30) groupings, which are the most highly selective British Universities as identified by average rankings of the most relevant surveys. These groupings are regularly used in literature to explore socio-economic diversity. Where we refer to ST13, this excludes Oxbridge (the University of Oxford and the University of Cambridge are given a separate grouping) and the ST30 excludes ST13 and Oxbridge institutions. The methodology for construction of these groups and the universities within each are available¹.

¹ https://en.wikipedia.org/wiki/Sutton_Trust

Analytical Framework

- 8. Figure 1 details the analytical framework applied in approaching the research questions. This addresses matters relating to context and key aspects of the attraction and selection journey, exploring barriers to the Fast Stream for candidates from lower SEB backgrounds. We begin by looking at three areas of context, which provide the backdrop against which the recruitment process takes place, then analyse the recruitment pipeline, before moving to recommendations.
- **9.** Recommendations are made in response to this analysis, and include lessons from, and for, other employers. We have designed a two-year action plan to realise the recommendations, and validated this in partnership with the Fast Stream team.

Figure 1: Analytical Framework



Additional selection routes are present for some Fast Stream programmes. Within the analysis, we have focused on the selection routes / tools that are common to all programmes, mainly due to sample sizes.

Section One: Setting the Context

Background to the Fast Stream

10. [From the Fast Stream 2014 Annual report]

"The Fast Stream is the Civil Service's graduate development programme, designed to equip some of the brightest graduates with the knowledge, skills and experience they need to be the future leaders of the Civil Service. It is an investment in talent, intended to ensure that present and future governments are supported by an efficient and effective Civil Service with the right skill set and the versatility to respond to changing priorities.

Fast Streamers' personal development is achieved through a programme of carefully managed contrasting postings, supplemented by formal learning and other support such as coaching, mentoring and action learning. The Fast Stream is managed by a dedicated team in Civil Service Resourcing, part of Civil Service HR, which reports to the Minister for the Cabinet Office. The Fast Stream team also manage the Summer Diversity Internship Programme (SDIP). The Cabinet Office launched SDIP more than ten years ago to encourage more undergraduates and graduates from under-represented groups to think seriously about the Civil Service, and especially the Fast Stream, as a preferred employer."

11. Additional information about the programme (including details of the different streams within it) is available on the Fast Stream website:

www.gov.uk/government/organisations/civil-service-fast-stream

The Fast Stream in the Context of the Civil Service

12. The Fast Stream population accounts for just over half of one per cent of the Civil Service². This small proportion, and the unique nature of the Civil Service as an employer, means it is important that analysis accounts for this wider context, and that consideration is given to how learning from this study can be applied to it. In this respect, the key contextual factors are explored below and the penultimate section of this report is dedicated to outlining wider learning for the Civil Service.

Civil Service Commission Recruitment Principles

13. The Constitutional Reform and Governance Act 2010³ requires that the selection of civil servants must be "on merit on the basis of fair and open competition". The Act also requires the independent Civil Service Commission to produce "Recruitment Principles", explaining and interpreting the requirement.

Figure 2: Civil Service Commission Recruitment Principles

Merit	means the appointment of the best available person judged against the essential criteria for the role. No one should be appointed to a job unless they are competent to do it and the job must be offered to the person (or people) who would do it best.
Fair	means there must be no bias in the assessment of candidates. Selection processes must be objective, impartial and applied consistently.
Open	means that job opportunities must be advertised publicly. Potential candidates must be given reasonable access to information about the job and its requirements, and about the selection process. In open competitions anyone who wishes must be allowed to apply.

² Civil Service Commission Review of the Fast Stream: http://civilservicecommission.independent.gov.uk/wp-content/uploads/2014/02/Fast-Stream-report.pdf

³ www.legislation.gov.uk/ukpga/2010/25/contents

- **14.** This legal requirement informs the basis of assessment throughout the study. These principles are also open to some interpretation, and can sometimes come into conflict with one another in ways that are not straightforward. For example, they have specific implications relating to the recruitment practices adopted by some other employers, including:
 - The use of socio-economic characteristics to make adjustments to candidates' pass marks in the selection process (sometimes referred to as 'contextual recruitment'). The principle of meritocracy could challenge this practice.
 - Developing concentrated relationships with limited numbers of universities, such that others are excluded. The principle of open and fair competition could challenge this practice.
 - Appointing candidates who have successfully completed an internship, by allowing them to bypass some, or all, of the standard selection process (of special relevance here as the Fast Stream internship programme is exclusively for under-represented groups). The principle of meritocracy could challenge this practice.
- **15.** The Civil Service Commission conducted a review of the Fast Stream in 2013, concluding that:

"...the Fast Stream is compliant with the Recruitment Principles... however, the Fast Stream does not appear to have the data to enable it better to understand the differences in the performance of different groups of candidates in the application and assessment process. Without this data it is simply not possible for the Fast Stream to identify the nature of the problem and therefore what action will be most effective in improving diversity outcomes. The Commission is very concerned about this."⁴

16. The Fast Stream recruitment budget was significantly reduced from 2010, in line with wider cost savings across the Civil Service (though the Fast Stream continued to recruit in strong numbers during this time). During the current recruitment cycle, while the overall marketing budget has remained static, this has been boosted by a £300,000 fund, achieved through efficiency savings in the recruitment process, to promote diversity and inclusion – an increase from the 2013 spend of £15,000. However, this increased budget is allocated to third parties to support diversity across five areas (socio-economic diversity, ethnicity, disability, LGBT, and schools outreach), and HMRC contractual arrangements place limitations on how the money can be

⁴ http://civilservicecommission.independent.gov.uk/wp-content/uploads/2014/02/Fast-Stream-report.pdf

spent. The net effect is a modest budget compared to peer employers which, combined with an equally modest level of staffing, leaves very little room for manoeuvre. This is compounded by the lack of predictability about future budgets, which can hinder long-term planning and the development of ambitious strategic programmes of work that could have significant impact on the diversity of intake.

17. The wider business case for a diverse workforce, over and above arguments of equality of opportunity within recruitment, is increasingly well rehearsed by private sector firms who recognise the attraction of a workforce that reflects its customer base, and by public sector employers such as the NHS who see an improvement in outcomes and user satisfaction when staff broadly represent the communities they serve. While the latter in particular is also true of the Civil Service, its particular role as the engine room of government imparts a further, distinct business rationale for socio-economic diversity; a diverse Civil Service providing the best possible support and advice to ministers should not only save the Government from costly errors, but also have the potential to increase the impact of policy significantly and for the greater good. A Civil Service workforce that better reflects national demographics has the potential for increased efficiency and performance through accessing a wider range of skills and attributes. A more diverse workforce is better placed for internal challenge of any existing 'received wisdom' and cultures of established practice, where the collective experiences of those shaping policy better ensures exploration of the widest range of potential solutions.

"Having people that have experienced poverty, experienced insecurity, and bringing those lived experiences into the policy making discussions could have a huge impact. I don't think that's properly appreciated within the Civil Service, and I definitely don't think that's communicated outside of the Civil Service."

(Student Focus Group, lower SEB)

18. The Civil Service is a unique, and large, employer. The Fast Stream is in a strong position to seize the opportunity to build on existing work to access a wider range of talent in order to make progress towards a workforce that is more representative of the communities it serves. This evidence base could be used not only to deliver leadership across the wider Civil Service, but also to use its position to leverage effective practice across the professions. Historically, the Fast Stream, the Civil Service more widely, and public sector employers in general, have not been forthcoming in publically sharing their best practice in this area. In contrast many competitor organisations are sharing their innovations more loudly, even where those innovations are perhaps less impactful than one might assume. The Fast Stream is well placed to lead the way in demonstrating best practice in a number of areas, and by extension setting a clear and stretching direction of travel for others to follow. The specific areas the Fast Stream could lead on are defined within our recommendations.

Accountability and Measures of Success

- **19.** Senior colleagues in the Civil Service are actively engaged with the challenge of socioeconomic diversity in the Fast Stream. This is evidenced in part by the recently appointed champion for social mobility (Permanent Secretary of the MOD), in public statements from the Chief Executive of the Civil Service⁵ and the Cabinet Secretary⁶, and in the business plan for social mobility in the 'Talent Action Plan'⁷. These intentions have also been boosted by challenge from the Social Mobility and Child Poverty Commission, with the Fast Stream featuring in the 'Elitist Britain'⁸ report in 2013 (which provoked much media coverage) and in the Commission's annual 'State of the Nation'⁹ reports in 2014 and in 2015. The introduction of the Social Mobility Business Compact Champions¹⁰ scheme is also an opportunity for the Fast Stream to gauge progress, and an important vehicle through which to show leadership in this area.
- 20. There was a feeling amongst some of our interviewees, however, that these public statements are not currently matched by pragmatic approaches to change. This may be a consequence of a limited evidence base to inform changes and to understand their effects. There is uncertainty about how success should be measured in relation to SEB diversity, and accountability is fragmented between groups. Strategic coordination of this work within the Fast Stream, and more widely across the Civil Service, with clear accountability, will be essential to success. Otherwise, change is likely be modest and slow.
- **21.** The recommendations outlined within this report are translated into specific performance indicators and measures of success in the two-year action plan, including:
 - socio-economic patterning in the Fast Stream over time;
 - this patterning and progress compared to similar employers;
 - the applicant and intake population compared to the eligible candidate pool; and
 - specific programme related outputs in relation to initiatives designed to promote socioeconomic diversity (e.g. schools outreach, involvement of the Fast Stream community).

⁵ https://civilservice.blog.gov.uk/2015/04/28/social-mobility-in-the-civil-service/

⁶ https://civilservice.blog.gov.uk/2015/06/12/im-proud-to-champion-the-summer-diversity-internship-programme/

⁷ www.gov.uk/government/publications/talent-action-plan-removing-the-barriers-to-success

⁸ www.gov.uk/government/uploads/system/uploads/attachment_data/file/347915/Elitist_Britain_-_Final.pdf

⁹ www.gov.uk/government/uploads/system/uploads/attachment_data/file/365765/State_of_Nation_2014_Main_Report.pdf 10 www.gov.uk/government/publications/business-compact-signatories-and-factsheet/social-mobility-business-compact-factsheet

Monitoring SEB Diversity

"It's not like the other diversity characteristics that we focus on; [it is] more complicated. I'm not sure most employers really know who they are talking about [in this area]. We need a sensible way to measure this, it's good that we have been doing so for a while, but it's quite simplistic."

(Civil Service Employee)

- 22. Approximately 25% of top employers measure the socio-economic background of their graduate intake¹¹ (the percentage measuring this in the wider workforce is much lower). Despite this, and the significant policy emphasis on access to the professions, there is no consensus on how to measure SEB amongst employers. Without this standardised approach, progress in this area is compromised; it is problematic to compare employers, to evaluate the impact of specific approaches, and to diagnose what is happening across different sectors to inform policy solutions.
- **23.** Many employers have adopted the measures outlined in the Social Mobility Toolkit.¹² This is good progress in the right direction, but the Civil Service has an important opportunity to take the lead in establishing a more robust, standard measure that can be used to assess progress, and to evaluate and inform policy in this area.
- 24. Although only approximately a quarter of employers are monitoring socio-economic diversity amongst their graduate intake, many more have specific strategies to address it. This is not the case across other diversity measures, and suggests that many employers are attempting to address socio-economic diversity without a proper understanding of: the scale of the problem they face; how to achieve the greatest impact in tackling it; or how then to evaluate the impact achieved.

¹¹ High Fliers 2015 and AGR www.highfliers.co.uk/download/2015/graduate_market/GMReport15.pdf 12 www.professionsforgood.com/wp-content/uploads/2014/05/SocialMobilityToolkit-2014-low-res.pdf

Figure 3: The % of employers that are monitoring diversity indicators and have active strategies to address them (source: AGR 2015)



Measuring Strategy to Address

25. Disaggregating this analysis by sector reveals that the public sector is the only one in which more employers are measuring socio-economic diversity than are taking action to promote it. This suggests that while commitments to measure are being upheld, public sector employers are either waiting for data to provide an evidence base for action, or stalling on implementing action for other reasons.

Figure 4: The % of employers that are monitoring SEB diversity, and have active strategies to address them by sector (source: AGR 2015)



Targeted Strategy to Address Socio-Economic Diversity Monitoring Socio-Economic Diversity

26. With regards to what is being measured, within those employers who are collating candidates' socio-economic background, practice is inconsistent and typically based on measures that are assessed as being too crude, and are sometimes impossible to verify. Employers typically use more than one measure; the most widely-used metric is whether an applicant is a first generation graduate (95.0%), followed by their type of schooling (82.5%), and whether they had been in receipt of free school meals (62.5%). This varying use of metrics means that progress on social mobility is more complicated to track than the progress on other indicators such as gender or ethnicity. This is presented in figure 5 below and, in figure 6, segmented by the three sectors in which the most employers are measuring SEB.



Figure 5: Measures of SEB diversity used by employers (source: AGR)

Figure 6: Measures of SEB diversity used by employers by sector; accountancy, law and public sector (source: AGR)

Sector	Parents' occupation	First generation graduate	Whether the candidate claimed Free School Meals as a student	State or private schooling
Accountancy	40%	100%	100%	80%
Law	5%	94%	35%	100%
Public Sector	14%	86%	100%	86%

- **27.** The Fast Stream has collected the following socio-economic information from candidates since 2011:
 - School type
 - Previous or current parental involvement in higher education
 - National Statistics Socio-Economic Classification (NS-SEC, based on parental occupation)¹³
 - Eligibility for free school meals (FSM) (since 2013)
- 28. During the last two years of data collection, the response rate has been just above 90%. Colleagues at the Fast Stream have, to a large extent, been guided on their selection of indicators by the Social Mobility Toolkit,¹⁴ and the use of NS-SEC by the Office for National Statistics (ONS) and the Higher Education Statistics Agency (in their publication of performance indicators in higher education for the four national funding councils).¹⁵ This latter indicator also underpins many of the Social Mobility Indicators established by the former Deputy Prime Minister's Office in 2015.¹⁶
- **29.** Receipt of FSM is not a reliable indicator of socio-economic disadvantage when used in isolation. This argument is well rehearsed elsewhere; analysis in 2012 from the Department for Education¹⁷ demonstrated that 14% of pupils entitled to FSM were not claiming them (the proportion was the same for both primary school and secondary school aged pupils), and that the proportion was as high as 1 in 3 in certain Local Authorities. One of the implications is that a reasonable proportion of pupils who are entitled to FSM may not be aware of this. The eligibility criteria for FSM is also changeable (including recent reforms); more fundamentally, FSM may reveal information about a candidate's parental income, but little information about their occupation or relative social status. FSM is also a crude measure of household income, since it does not distinguish between low income and very low income, or between those households just above and far above the threshold for eligibility.
- **30.** The collection of information about school or college type is often too broad to be useful. The range of institutions that fall into the category "state-run, non-selective" is wide, and the disbursement of bursaries and scholarships (which are not typically associated with economic

- 14 www.professionsforgood.com/wp-content/uploads/2014/05/SocialMobilityToolkit-2014-low-res.pdf
- 15 www.hesa.ac.uk/pis

 $^{13\} http://ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html$

¹⁶ www.gov.uk/government/publications/social-mobility-indicators

¹⁷ www.gov.uk/government/uploads/system/uploads/attachment_data/file/183380/DFE-RR235.pdf

need) within the independent school sector is too varied to determine the extent of disadvantage indicated by being a recipient.

31. It is important to achieve consensus on how to measure SEB most effectively. SEB is a measure of one's historical access to collectively desired resources and is a fundamental construct in the social and health sciences. The purpose of measuring SEB is to identify candidates who have experienced social, educational, cultural and/or economic disadvantage which is likely, based on research findings, to have impacted negatively on access to university and to the Fast Stream. Socio-economic disadvantage is not binary, and it cannot be revealed by a single indicator.

Figure 7: Characteristics of effective measures of socio-economic status

Has predictive validity	Reflects what it purports to measure, i.e. socio-economic status, such that lower status can be reasonably assumed to adversely affect educational progression and access to the Fast Stream	
Transparent	Open for scrutiny and widely understood	
Reliable	Consistent results over time	
Wide reaching	Makes the best use of existing data sources	
Cost effective and timely	Collected and analysed cost-effectively and provides information in a timely manner / can be linked in with existing recruitment infrastructure	
Comparable	Against other employers, against previously collated data, and against eligible candidate pools' populations	
Practicable	Minimises intrusion for the respondent and is likely to yield high response rates	

Existing Good Practice in the Fast Stream

[The Civil Service is] much more open and up front about issues [of diversity] – much more vocal about their weaknesses. One of the reasons I applied is that they don't focus on if you have a great accent, or come from a particular background."

(Successful candidate interviewee, lower SEB)

"I think they are doing a good job in trying to demystify the Civil Service as a finishing school for Eton and Oxbridge educated white males."

(Successful candidate interviewee, lower SEB)

- **32.** The Fast Stream has already made good progress by introducing practices that are aimed at supporting SEB diversity. It is also noteworthy that colleagues have actively responded to a number of our interim recommendations, made in September 2015. Against a backdrop of limited resource, the most notable of their established practices are:
 - the collection and transparent publication of SEB data;
 - universal pass marks for test scores informed by the analysis of their effect on diversity, and the weighting of tests that appear to have fewer negative outcomes against diversity indicators;
 - a move towards selection tools that are evidenced to have fewer negative outcomes against diversity indicators, including situational judgement tests;
 - an internship programme that is exclusively for underrepresented groups, i.e. lower SEB, BAME candidates, and those declaring a disability;
 - an appetite for evidence-based change, including the commissioning of this study;
 - university targeting based on a number of indicators, including levels of diversity; and
 - absence of pre-application screening criteria (excluding requirement of a 2:2 or higher).
- **33.** These two final points are important to note, since much literature in this area¹⁸ cites university targeting (to the most selective, and thereby generally the least socio-economically diverse) and screening criteria as two primary contributing factors restricting access to the professions amongst lower SEB candidates. On this latter point, the Fast Stream has not, for many years, applied attainment screening criteria beyond the requirement for a 2:2 degree (2:1 for some

¹⁸ www.gov.uk/government/uploads/system/uploads/attachment_data/file/474251/BIS-15-464-employer-graduate-recruitment.pdf

programmes); despite this, many employers have recently received positive press for removing the requirement for specific UCAS tariff, with the suggestion that it represents innovative practice.¹⁹

34. Figure 8 below details trends in employers' use of screening criteria. It reveals that most practices have remained fairly static, particularly when referring to the latest three year trends. These data also suggest that as some employers removed the requirement for a 2:2 degree from 2008 – 2011, these same employers have likely increased this requirement to a 2:1, rather than removing it altogether. No data were collected in relation to UCAS information in 2010 and 2011.

Figure 8: Initial application screening criteria across all employers (Source: AGR). UCAS data not collected in 2010 and 2011



35. Focusing on the public sector, we can see that the majority of employers require a 2:1 degree, and that almost a quarter continue to have a minimum requirement in relation to UCAS points. We can see from these data that the Fast Stream is ahead of many peer employers in not having screening criteria that might exclude a higher number of lower SEB candidates.

¹⁹ www.theguardian.com/education/2015/may/03/pwc-recruiters-say-a-level-results-unfairly-aid-private-school-pupils www.accountancylive.com/ey-removes-academic-requirement-graduate-recruitment-criteria



Figure 9: Initial application screening criteria within the Public Sector (Source: AGR)

36. It is important to acknowledge the positive moves that the Fast Stream has introduced, but also noteworthy that, despite these actions, SEB diversity remains a significant challenge. There is clearly something more complex taking place within attraction and selection that is causing the lack of SEB diversity amongst the Fast Stream intake.

Section Two: Analysis of the Recruitment Pipeline

Analytical Approach

- **37.** The recruitment pipeline, as outlined in the analytical framework (figure 1), includes attraction (generating applications) and selection (choosing from those candidates). It is a system driven by: the changing demand for graduates; the nature of the labour market; wider resourcing strategies; and previous experiences of recruitment. The academic literature indicates that employers seeking to improve socio-economic diversity should consider these issues systematically, rather than focusing on a single aspect of the process.²⁰ Our analysis identifies the impact of each stage of the process on the success of lower SEB candidates and it is informed by the following data:
 - Fast Stream recruitment data from 2011 2015, analysed to identify the factors associated with success or failure in the selection process, as outlined below
 - External data sets to compare candidate populations against campus populations (i.e. the pool from which they are primarily drawn)
 - Interviews with over 100 key stakeholders (students, candidates and colleagues in the Civil Service), as outlined in the research specification, to add insights to the data findings
 - Bespoke marketing insights, commissioned by the Fast Stream, delivered by Trendence (see <u>Appendix D</u>) and High Fliers (see <u>Appendix E</u>), and analysis from the Association of Graduate Recruiters (AGR),²¹ to inform analysis about perceptions of the Fast Stream, and the effect of these on applications from lower SEB candidates.

²⁰ www.gov.uk/government/uploads/system/uploads/attachment_data/file/474251/BIS-15-464-employer-graduate-recruitment.pdf www.gov.uk/government/uploads/system/uploads/attachment_data/file/434791/A_qualitative_evaluation_of_noneducational_barriers_to_the_elite_professions.pdf

²¹ Bespoke analysis was derived from the AGR annual survey, which over 200 employers responded to: www.agr.org.uk/AGR-Surveys

The Recruitment Pipeline (Attracting Applicants)

Key Findings

- The SEB profile of applicants to the Fast Stream is much closer to the profile of students from Oxbridge than that of the wider student population. Two factors that contribute to this are:
 - candidates from highly selective universities are much more likely to apply to the Fast Stream (institutional selectivity and SEB diversity are negatively correlated); and
 - within every university group, including the most selective, students with higher SEB are more likely to apply.

These factors are mainly a result of:

- Low levels of awareness about the Fast Stream relative to many peer employers (as evidenced by Trendence data); this deficit is more acute amongst lower SEB students. The Fast Stream has a modest presence on university campuses, mainly due to limited resource. In addition, there is limited monitoring and tracking of students: colleagues are not able to evaluate the diversity of audiences reached and the impact of campus activity.
- A perception amongst many lower SEB candidates that the Fast Stream is both attractive and intimidating, likely deterring many applicants. This perception is largely due to a combination of the following:
 - A view, often formed before entrance to university, of the wider Civil Service as bureaucratic and "white, male and Oxbridge", which is impacting negatively on applications from lower SEB students.
 - Uncertainty amongst many lower SEB students about the selection process, and more fundamentally about the specific behaviours and skills that are sought by the Fast Stream, i.e. the definition of "talent". Many applicants from lower SEB backgrounds seem to be unaware of the Fast Stream definition of talent, and may be making assumptions based on their view of a "typical Fast Streamer" that deters them from applying.
 - The recruitment process being significantly longer than the average length amongst peer employers (public sector average is 11.5 weeks; Fast Stream is 18-31 weeks). The dual effect is that many lower SEB students are put off applying, and those who do apply are less likely to take the risk of not accepting job offers elsewhere during the process.
 - The assessment centre venue, 100 Parliament Street, creates a sense of mystique amongst some students, which contributes to the experience of intimidation.

- The geographical focus on London is a deterrent: research indicates that lower SEB students are less likely to move to the area.
- The publication of success rates by institution, which is commendable in its transparency, is also likely deterring students who already feel less confident about applying.
- Salary does not appear to be a significant factor in deterring lower SEB candidates.
- A high proportion of applicants to the Fast Stream are from academic subjects (such as history and literature) that are among the least diverse with regards to SEB. This is especially true in relation to the Generalist Fast Stream, which accounts for the highest proportion of applicants and appointees.
- Targeting of campus activity is currently directed, in part, by university diversity indicators (and is a feature of good practice), but the use of data to inform this could be more robust.
- There is an opportunity to invest in the diversity internship programme. The SEB diversity of the internship population has improved in the last two years although, unlike most other employers, candidates who have successfully completed an internship are made no allowances in the selection process.
- There is an opportunity to invest in school outreach programmes, and to achieve greater coordination with the school outreach activities of the wider Civil Service. Fast Stream school outreach is making a minimal contribution to changing perceptions of the Civil Service. There is no operational budget to support this critical work; at present it is modest in scale and there is no monitoring and tracking of participants. It is therefore hard to discern its overall impact on promoting awareness of, and access to, the Fast Stream.

38. One way in which to evaluate SEB diversity within the applicant population is to compare it against the wider higher education population, since this is the main pool from which candidates are drawn. We recognise that a modest, but increasing, proportion of Fast Stream applicants are not UK students / very recent graduates, but the main analysis here focuses on universities as the major source for candidates. The graph below compares the SEB profile of the Fast Stream applicant population (five year aggregated data) to the wider UK university population, and to the Oxbridge population. Only students achieving a 2:2 or higher are included in the latter two populations, since this is the minimum entry requirement for most Fast Stream posts. Here, as with much of the analysis, we use NS-SEC²² to define SEB, since it is also the data collected by the Higher Education Statistics Agency (HESA) on university populations.



Figure 10: SEB of UK university population (2:2 or higher, three year data) against FS applicants 2011-2015 (HESA: 2015)

²² www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html

39. Analysis of the profile of Fast Stream applicants against university populations is outlined overleaf. The SEB profile of applicants to the Fast Stream is much closer to the profile of students from Oxbridge than the wider student population (when considering students who achieve a 2:2 or higher). Within each university group, including those which are most selective (e.g. Oxbridge, ST13²³), students from higher SEB backgrounds are more likely to apply. Analysis of the factors behind these findings can be found below.

²³ Defined above in the section on scope, methodology and terms



Figure 11: Comparing institutional populations with Fast Stream applicants (ST 13 and ST 30 are defined above)



40. Research from Trendence provides invaluable insights into students' views on employers and motivations for applying. Recently, the organisation has segmented these data by the socioeconomic background of respondents. These marketing insights reveal that the Fast Stream ranks more favourably amongst students from higher SEB backgrounds, and this supports our findings on the profile of applicants.

Figure 12: The most popular employer brands amongst high and lower SEB student populations
(Trendence)

	Most popular for lower SEB	Most popular for higher SEB
1	Google	Google
2	MI6 Secret Intelligence Service	Goldman Sachs
3	Amazon	J.P. Morgan
4	John Lewis Partnership	MI6 Secret Intelligence Service
5	Microsoft	PwC
6	Teach First	Fast Stream
7	NHS Graduate Schemes	Deloitte
8	MI5 Security Service	John Lewis Partnership
9	PwC	MI5 Security Service
10	L'Oreal	L'Oreal
14	Fast Stream	

41. This finding, as backed up by our own qualitative research, is disappointing, as many of the attributes that students associate with the Fast Stream are aligned with the main drivers of employer attractiveness expressed by lower SEB students. The figure below illustrates the main differences in the drivers of employer attractiveness between these two groups. These findings are supported by other research on this topic.²⁴ The higher SEB group prioritise drivers such as salary, personal responsibility, status and prestige, whereas the lower SEB group prioritise work-life balance, leadership style, and job security. We should be careful to note that each SEB group is not homogenous, and that candidates within each will not have the same

²⁴ www.hecsu.ac.uk/assets/assets/documents/Working_class.pdf

attitudes towards employers; this is also likely to vary by university type. However, the sample size is large (n=44,070) and therefore sufficient to draw solid conclusions.





- **42.** Comparing the interests of lower SEB students with students' image of the Fast Stream, we observe a good match from the Trendence insights above. Over 40,000 students were asked to give an indication of how they rated the Fast Stream against a number of statements; the four that were given highest ranking were:
 - Job security
 - Equal opportunity
 - Good career prospects
 - Personal development
- **43.** We conclude, in the analysis that follows, that while perceptions on the nature of the Fast Stream roles could be improved, it is not a significant deterrent amongst lower SEB students, rather it is a combination of:
 - a lack of awareness about the Fast Stream; and
 - perceptions that the Fast Stream is concurrently "attractive and intimidating", which is due to a number of factors.

Low levels of awareness about the Fast Stream

44. The 2015 High Fliers report²⁵ on the Fast Stream outlines that lower SEB groups have less awareness of the scheme compared to those from higher SEB backgrounds. This is illustrated in the figure below, as reinforces our own qualitative research.



Figure 14: Awareness of the Fast Stream amongst students (Trendence)

45. This finding indicates that raising awareness amongst lower SEB students would be a priority. The Fast Stream is less active at universities than most peer employers. This lack of physical presence on campus – which is the most impactful way to influence students' decisions to apply – is due to limited resource. The staffing and operational budget of the Fast Stream for attraction activity is considerably lower than most peer employers. For illustrative purposes, the Teach First campus recruitment team is approximately ten times larger than the team driving campus activities at the Fast Stream.

²⁵ Referenced above
46. This modest campus presence is likely to have a stronger negative effect on students from lower SEB backgrounds who are less likely to know about the Fast Stream through more informal routes. However, where students do have contact with a serving member of the Fast Stream, the positive impact on encouraging applications is felt more strongly amongst lower SEB students.

Figure 15: Effects on students who have had contact with a serving member of the Fast Stream – the percentage of students not included had no contact (source: High Fliers)



"There are two types [of students]: either they've pursued [the Fast Stream] with vigour since they were a child, or they just stumbled across it by chance."

(Successful candidate interviewee, lower SEB)

"I only heard about [the Fast Stream] through word of mouth. I've never seen it advertised through the University. I know it's at the careers fair, but I don't remember it from when I attended last year. There are so many employers [attending]."

(Student focus group, lower SEB)

47. More generally, there are currently no systems in place for monitoring the SEB characteristics of students who are engaged by the FS on campus who might benefit from insights and advice to support their chances of success during the selection process. Correspondingly, there are also no systems in place for measuring the effectiveness of campus attraction activities and, in particular, their impact on student applications. Without these data, it is not possible for the attraction team to gauge the effectiveness of their approaches in relation to supporting SEB diversity.

Perceptions of the Fast Stream amongst lower SEB students

48. Lack of visibility of the Fast Stream amongst lower SEB students is contributing to lower application rates amongst this group. Our analysis also indicates that many lower SEB students find the FS both attractive and intimidating. This perception is the construct of a number of factors, outlined below.

"It's attractive: the work looks interesting...important and rewarding. The whole thing is just so intimidating, the buildings, the stats about success, the investment you have to make, I mean emotionally...And going against all those [students from more selective universities]."

(Student focus group, lower SEB)

- 49. Our Focus Groups with students showed that they were generally unclear about the selection process. This related both to the process (how will my talent be assessed?) and to the specific competencies and behaviours sought by the Fast Stream (what do they mean by talent?). Without clarity on the latter, many students from lower SEB backgrounds made assumptions based on their view of a "typical" successful FS candidate reinforced by the transparency of recruitment data, noted below, and wider perceptions of the Civil Service.
- **50.** Throughout our interviews, the perception of the wider Civil Service as bureaucratic and "white, male and Oxbridge"²⁶ was predominant. These views are shaped long before candidates enter university, and are impacting negatively on applications from lower SEB students. In recent market analysis undertaken by High Fliers, student finalists who were familiar with the Fast Stream were asked to choose six words from a closed list of 23 adjectives. Comparing their choices to the wider group, the lower SEB group did not choose "diverse" but they did choose "prestigious".

²⁶ Phrasing used across student and candidate focus groups

Figure 16: Which words or phrases do finalist students think are most appropriate to describe the Fast Steam (High Fliers) n= 2000

Full list of adjectives shown to students

Arrogant, badly run, bureaucratic, diverse, dull, dynamic, elitist, exciting, glamorous, great place to work, innovative, international, long working hours, low pay, people-oriented, prestigious, professional, secure, struggling, trusted, uninspiring, well paid.

All respondents

Bureaucratic, Professional, Fast-paced, People-oriented, Diverse, Long working hours.

Lower SEB group

Bureaucratic, Professional, Fast-paced, Secure, People-oriented, Prestigious.

- 51. This view of the Civil Service as bureaucratic is not necessarily a view that is more, or less, prevalent amongst lower SEB students. We explored this in our candidate interviews and observe that these perceptions are broadly held, and especially amongst those for whom most perceptions about the Civil Service are generated from media and "word of mouth", as opposed to direct contact with serving Fast Streamers.
- **52.** The Fast Stream recruitment process is significantly longer than that of other peer employers. The dual effects of this are: that many students are put off from applying; and that candidates from lower SEB backgrounds who do apply are less likely to take the risk of not accepting job offers elsewhere during the process. The average time between an applicant applying for a graduate position and receiving an offer is eleven weeks. The figure below shows that on average the Public Sector has the longest time from application to offer (15.5 weeks) whilst the IT and Telecommunications sector has the shortest (6.8 weeks). The Fast Stream time from application to offer is from 18 to 31 weeks.



Figure 17: Average (mean) length of time from application to offer, (source: AGR)

"I definitely considered other graduate options whilst I was waiting for a decision on a certain step. I turned down a job that was offered as I really wanted the Fast Stream, but I had to take a big risk doing that. I had my dad's support in doing that, but other applicants may not be as fortunate."

(Successful candidate focus group, higher SEB)

53. The assessment centre venue (100 Parliament St, London) typifies the idea that the Fast Stream is concurrently attractive and intimidating. Interviewed students expressed a sense of mystique associated with the venue, and cited the single London location as a deterring factor.

"It is absurd that at my final year of University in Scotland I have to take a day off to travel down to London, another day for the assessment day, and then take the next day off to travel back. We argue that [the Civil Service] has regional centres; we argue that we're trying to move out [of being London centric] but you still have to come all the way to London for them to test if you're good enough for the job."

(Successful candidate focus group, lower SEB)

54. The London-based nature of the role, emphasised by much of the Fast Stream literature featuring London landmarks, is a deterrent for many lower SEB students. Higher SEB students are more willing to move to London, and less inclined to move to their region of origin (following graduation); conversely the lower SEB group are less willing to move to London and more inclined to move back to their original home region.²⁷

"I very nearly turned the job down due to not being able to afford to move to London. The actual moving here, where you don't get any support up front at all. You have to pay out first and then claim back. I don't have savings or family that I could ask for money. I had to get a credit card to move here. It's one of those things that very nearly meant I couldn't do it.

(Successful candidate focus group, lower SEB)

55. Competition for the Fast Stream is fierce, and the Civil Service is the only employer we can identify that publishes success rates by individual university. While transparency of information is generally good practice, in this instance, it has a detrimental effect upon potential applicants from lower SEB students. Our evidence from focus groups suggests that they had accessed such data and it had subsequently deterred them from applying. The majority of colleagues in careers services at the selected institutions were also aware of these data and had shared it with the student body. The publication of the 2014 Annual Report positions the Fast Stream ahead of most employers for collecting SEB data, and unparalleled amongst its peers for publishing this information. Without appropriate accompanying messages, this is serving to perpetuate the problem of low application and success rates from some institutions, because students (and colleagues in careers services) from institutions where success rates are low may be discouraged by these data.

"I got interested and did look up that information about how many people get through from [my university]. I haven't looked across all years, but it doesn't look good. That's just the reality I guess, but it needs some more information. Basically it makes us think why bother [if] there's no chance of success?"

(Student focus group, lower SEB)

²⁷ Trendence insights (2015)

56. Applicants to the Fast Stream are more likely to have taken courses in academic subjects such as history, literature and languages; this is especially true of the Generalist Fast Stream, which accounts for the greatest proportion of applicants and appointees. These courses are amongst the least diverse with regards to SEB. The figure below shows the subject areas studied by applicants to the Fast Stream during 2011-2015. We have removed subject areas that account for <.05% of applications.</p>



Figure 18: Proportion of applicants by HESA subject code, aggregated data total

57. This patterning of applications by academic subject is impacting on the SEB diversity of applicants; the Fast Stream recruits heavily from some of the least diverse subject areas. Below we have analysed the social patterning in particular subject areas for high achieving undergraduate entrants (those achieving ≥ABB at A-Level or equivalent). Humanities, languages, and social sciences have a less diverse socio-economic population; ~1 in 5 humanities graduates are from lower NS-SEC backgrounds, compared to almost 1 in 3 from mathematical sciences and law.

Figure 19: Percentage of UK domiciled young entrants to full-time first degree courses (achieving ≥ABB A level or equivalent VCE/Advanced Higher grades) from lower NS-SEC Classes 4, 5, 6 and 7 by subject in 2014 (HESA)



58. There is no evidence to suggest that the Fast Stream starting salary is a deterrent for lower SEB students; an increase in salary is very unlikely to impact on diversity. The figure below shows the average graduate starting salaries across different sectors, benchmarked against the Fast Stream salary (upper limit).

"The salary was very competitive in comparison to a lot of the other grad schemes, so it was nice that I could pick it, knowing that it was something I really wanted to do, but I also wasn't losing out on the financial benefit in comparison to other grad schemes."

(Successful candidate interview, lower SEB)



Figure 20: Average graduate starting salaries (source: AGR)

59. Salary may, however, be a stronger attracting factor amongst lower SEB students dependent on Fast Stream programme; potential applicants to some of the more analytical strands (e.g. Economist, Analyst, Digital and Technology) are likely to have higher salary expectations based on the average earnings associated with the subjects they are likely to have studied. We also know that subjects such as mathematics and computer science are more diverse in terms of SEB, such that a higher number of candidates from lower SEB backgrounds are drawn from these subjects.



Figure 21: Average graduate earnings by subject area, sample selected for illustrative purposes (HESA)

60. The Fast Stream Summer Diversity Internship Programme (SDIP) is exclusively for under-represented groups: SEB; BAME; and those identifying as disabled. There are very few schemes of this nature in the UK (The Metropolitan Police²⁸ is the only other example we have observed). To date, however, the programme appears to have had a weak effect on SEB diversity in the Fast Stream, though data are unavailable on rates of progression to application. The SEB diversity of the internship population has historically been weak (focused more on BAME candidates) and, unlike most other employers, candidates who have successfully completed an internship are made no allowances in the selection process. The figure below shows the historical SEB make-up of the internship programme.

²⁸ http://content.met.police.uk/Article/The-Met-Diversity-Internship/1400030015511/1400032830436



Figure 22: SEB make-up of the Summer Diversity Internship Programme

61. Paid internships are a route through which many employers are promoting social mobility. Some employers are more willing to take 'risks' with internship routes, and candidates are afforded an opportunity to demonstrate potential in a way that might not be possible in the traditional recruitment and selection process. An average of 44.5% of interns were converted into graduate hires in 2015. Colleagues in the Fast Stream estimate that the conversion for the Summer Diversity Internship Programme is 10-20%.

Figure 23: Percentage of interns converted into graduate hires by sector (AGR)



62. The eligibility criteria for those from lower SEB are not clear in the marketing, and this ambiguity can deter eligible candidates from applying. Candidates who have successfully completed an internship are made no allowances in the selection process (primarily because this could conflict with the Civil Service Commission principle of merit, noting that the SDIP pass mark is lower than that for the Fast Stream).

"Internships are to encourage diversity. With many internships at different companies, they offer the student a chance to take on the role. But with the internships the Civil Service offer, you have to go through the whole application process again. I don't get that. You want to encourage diversity by offering internships, but then you don't offer any opportunities after."

(Student focus group, lower SEB, and former SDIP participant)

63. Schools outreach work is potentially significant as preconceptions about the Civil Service that might deter applicants are shaped early on. It is even more important in relation to lower SEB candidates, since they are less likely to come into contact with engaging role models from the Fast Stream to challenge preconceptions.

"People from where I live would never dream of going into the Civil Service, because they've never even heard of it, or don't realise that it's open to them. They don't go to the 'stereotypical' schools. They don't realise they have these opportunities."

(Successful candidate interview, lower SEB)

"[People's] views on the Civil Service, they are established early on. It's hard to combat that further down the line...These things get stuck and they are hard to move."

(Successful candidate focus group, higher SEB)

64. The Whitehall Internship Two-Week Year 12 Programme (WIP) has provided around 300 students from disadvantaged backgrounds the opportunity to complete work experience in government since 2011. The ambition is to expand the 2016 programme to 200 16-18 year-old students, with scope for further expansion in subsequent years. Events working with younger students have focused on providing them with an insight into what the Civil Service is, what it does, and what job roles are available. In 2015, the events were held in five locations around the country (Birmingham, Bristol, Liverpool, London and Newcastle) and targeted at schools that drew a significant proportion of pupils from lower SEB. Over 400 students from 33 schools took part. Our analysis revealed that the majority of the schools the Fast Stream engaged with

were in the top quartile nationally for disadvantage. The activity is well constructed, and effectively targeted, but it is modest in scale.

- **65.** The Fast Stream schools outreach work appears to be making little contribution to changing perceptions of the Civil Service, and having no observable effect on SEB diversity in the Fast Stream. There is no operational budget to support this important work, it is therefore modest in scale, and there is no monitoring and tracking of participants. A fundamental barrier to addressing the SEB diversity of the Fast Stream is the public perception of the Civil Service. There are a number of stereotypes, associations and pre-conceptions as to the type of individual who works in the Civil Service, and in particular the type of individual the Fast Stream programme is looking for. For long-term and sustained transformation of the SEB diversity of the Fast Stream.
- 66. Schools outreach work and engagement with pupils is also important in relation to the Fast Track apprenticeship programme. Effective outreach can combine messages about the Civil Service and the multiple entry routes, appealing to a wide range of pupils who can access employment through different entry routes. Differentiating messaging about the Fast Stream and Fast Track will be critical, since these programmes are likely to appeal to different pupils.

Approach to the Analysis of Recruitment Data

- **67.** Analysis of the Fast Stream recruitment data from 2011-2015 has been undertaken applying a broad analytical strategy. To the best of our knowledge, the detail and level of analysis conducted here has not been undertaken previously for any recruiter, employer or sector.
 - We examined data on application, overall success, and success at each stage of the selection process, and explored how these may be affected by a number of SEB and other factors.
 - Descriptive analysis was conducted to understand the distribution of data within each variable, and decisions were made to group and recode the data.
 - We anticipated that underlying interaction effects between the variables were likely to be present and therefore conducted a number of correlation analyses (including Pearson and Spearman's rho), based on aggregated data across five years, by year, programme (where possible), and recruitment stage.
 - Two forms of regression analysis were carried out: binary regression was conducted to explore which variables were most predictive for candidate outcome (acceptance to scheme, or not); and multinomial regression to explore which variables were most predictive at different stages of the recruitment process. These were replicated on the aggregated data, by year and by programme (where possible).
 - We subsequently explored candidate variables against their performance in specific recruitment tests and types/groups of tests. This was undertaken using a combination of correlation analysis and means comparison analysis (e.g. chi-square ANOVA etc.).
- **68.** We anticipated controlling for specific variables, however the early analysis revealed correlations, and therefore interactions between variables, for almost all of the candidate variables. This suggests that no key variable was having an underlying effect that should be controlled for. Therefore, we undertook the regression analyses without controlling for specific variables, but continued to carefully explore interactions between the variables. This is a common approach, as it provides a more realistic picture of the interactions and variables that are having the greatest effect.²⁹ Moreover, where practical and realistic recommendations are a

²⁹ Asthana, S. & Gibson, A. (2008). Deprivation, demography and the distribution of general practice: challenging the conventional

focus, controlling variables may not be appropriate. For, in real scenarios, interactions and underlying effects cannot be controlled. However, for a sample of the regression analyses we did re-run analysis controlling for certain variables, based on strong interaction effects, to ensure a more robust and comprehensive analysis, and found that it did not have a significant impact on findings.³⁰

- **69.** Throughout the course of this analysis a number of challenges have required considerable work to resolve to ensure robust analysis could take place. A detailed overview of these points is available in <u>Appendix F</u>.
- 70. These challenges related to the transfer of data for analysis and its format; the data in our analyses also vary from the Fast Stream annual reports in some important ways. Recommendations for future data collection, coding, storage and reporting to enable this analysis to occur in future years more easily will be provided through the two-year action plan.
- **71.** The purpose of the analysis is to explore the effect of SEB (primary variables) on candidate outcomes. However, we also include a wider range of secondary variables in the analysis to explore the relative effect of these, and their interactions with the primary variables. A list of the variables is outlined below, with further detail on each and an outline of the way in which they have been coded for analysis being available in <u>Appendix G</u>.

Primary variables

- Socio economic classification of parental occupation (NS-SEC)
- Free School Meal
- Father and mother education status

wisdom of inverse care. British journal of general practice. http://bjgp.org/content/bjgp/58/555/720.full.pdf Hansen, A., Halvoprsen, P., Ringberg, U. & Forde, O. (2012). Socio-economic inequalities in health care utilisation in Norway: a population based cross-sectional survey. BMC health services research. http://www.biomedcentral.com/1472-6963/12/336 ³⁰ As a result of identifying correlations between variables (evidenced through both Pearson and Spearman findings), binary regression analysis was undertaken in relation to overall outcomes (accepted vs not accepted to Fast Stream), which included all variables. Subsequently, a multinomial regression analysis was undertaken for the analysis of all variables against each recruitment stage in the first instance and, to deliver more robust findings, individual regression analyses for each stage were conducted to account for the changes in group dynamics as candidates exit at each stage. Regression analyses were then repeated with only significant and select variables included to check findings and observe potential significant changes in outcomes (of which there were none).

Secondary variables

- University attended
- UCAS points
- Degree class
- Age
- Gender
- Ethnic origin
- Disability indicated
- School Type
- **72.** It is acknowledged that missing data may not relate to a random sample of applicants, for example, missing data for UCAS scores is most likely explained by certain overseas applicants and applicants who did not attend university, but meet employment related eligibility. There is the potential that this may introduce some bias within certain groups, however where possible the level of missing data was kept to a minimum or acknowledgements and further discussion is made against the specific analysis. The following variables had missing data:
 - Indication of whether a candidate who did not progress in a selection stage failed or withdrew themselves (58%)
 - UCAS points (25%)
 - NS-SEC (9%)
 - Date of birth (5%)
 - Degree class (3%)
 - FSM also had missing data. However, this variable was not recorded in years 2011 and 2012; the % of missing data was 6.1% (2013), 6.9% (2014) and 7.4% (2015)
- **73.** We would expect a number of these variables to be correlated, through recognised association from previous research. For example, a high number of UCAS points is required for access to more selective universities, and we know that candidates who are eligible for free school meals are more likely to have parents with lower NS-SEC occupations. Pearson correlation analysis was carried out on the aggregated data for all key and secondary candidate background variables;³¹ all results were found to have statistically significant correlations (p<0.05).³²
- **74.** Alongside the Pearson r correlation the analysis was also conducted using the Spearman rho method. This dual approach is the most appropriate given the range and variation between the

³¹ The Pearson correlation coefficient is a measure of the strength of the linear relationship between two variables. The correlation measure (r) can range from -1 to 1. An r of -1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive linear relationship between variables. ³² Analysis was conducted using SPSS v20 which uses a significance testing method similar to a t-test. The formula is as follows:

t= r*sqrt(N-2)/sqrt(1-r^2) and this formula along with a wider explanation can be found in Field, A. (2009). Discovering statistics using SPSS. Sage, London:UK.

type and structure of variables, noting specifically the mixture of categorical, ordinal and dichotomised variables, with variation in their distributions and proportions. This approach is consistent with practice from the wider academic community, and from a wide range of leading studies; the predominant use of the Pearson method in this report is informed by a range of statistical texts³³ and by previous research.³⁴

- 75. The findings of this dual analysis approach corroborated, with little or no variation between the Pearson r and the Spearman rho values. Appendix H illustrates the Spearman values, including a comparison against Pearson.
- 76. These tests help to understand better the patterning of the data, and to check if expected correlations, such as those outlined above, are present. A measure of the strength and direction of the relationship between variables is the 'r' value. We would expect to see an 'r' value of >.1 to indicate a small effect size; values >.3 would be a medium effect size, and >.5 a large effect size. The pairs of variables that show the strongest correlation are the number of UCAS points and the type of university candidates graduated from, with candidates who attended a more selective university having gained more UCAS points (r= .521). A number of the variables had a medium strength correlation, including candidates from higher NS-SEC backgrounds being more likely to have parents with degrees. The effect size for mother's degree status was r= -.340, father's was r= -.372, and either parents was r= -.441. 35
- 77. Focusing on the primary variables for this work, we observe a number of significant small strength correlations between the primary variables and the other background variables. The matrix is shown below, excluding disability which did not correlate significantly with the three primary variables. All other variables correlated significantly with at least one of either parental education status or parents' socio-economic status. In the context of the forthcoming analysis, the correlation between the SEB variables and university / UCAS points is noteworthy. In addition to using the NS-SEC binary, we checked how the NS-SEC scale (1-5) faired in selected analysis and these findings supported the positive association found with the binary

³³ Blaikie, N (2004). Analyzing quantitative data. Sage, London:UK.

Field, A. (2009). Discovering statistics using SPSS. Sage, London:UK. ³⁴ Weintraub, M., Fernald, L., Adler, N., Bertozzi, S. & Syme, S. (2015). Perceptions of social mobility: development of a new psychosocial indicator associated with adolescent risk behaviours. Frontiers in Public Health,

Grimes, C., Riddell, L., Campbell, K., & Nowson, C. (2013). Dietary salt intake, sugar-sweetened beverage consumption and obesity risk, Pediatrics, 131, 14-21.

Ram, R. (2013). Income, inequality, and social welfare: a study of the U.S. states. International advances in economic research, 19(1), 65-67.

Belojevic, G., Evans, G. W., Paunovic, K. & Jakovljevic, B. (2012). Traffic noise and executive functioning in urban primary school children: The moderating role of gender, Journal of Environmental Psychology, 32(4), 337-34

As previously stated all r values reported in this paragraph were found to be significant (p<.01).

variable. All results reported have statistical significance, unless otherwise noted.

All correlations are significant at the 0.01 level (2-tailed).		NS-SEC binary	Free School Meals	Either Parent with degree	Mother with degree	Father with degree
More selective university	Pearson (r)	123	119	.209	.200	.208
group	Ν	127013	82845	138795	138794	138795
Higher UCAS points	Pearson (r)	121	128	.221	.216	.221
grouped	Ν	95503	62206	103767	103766	103767
Ethnic Origin binary	Pearson (r)	.098	.196	054	071	030
	Ν	127013	82845	138795	138794	138795
Higher Degree Class	Pearson (r)	074	074	.166	.206	.137
	Ν	123241	79863	134661	134660	134661
Higher Age grouped	Pearson (r)	.054	.056	051	052	040
	N	121442	78570	132179	132178	132179
School Type grouped	Pearson (r)	090	107	.137	.117	.129
	Ν	127013	82845	138795	138794	138795

The Recruitment Pipeline (Overview of Selection)

Key findings:

- A lack of SEB diversity at the application stage is compounded in the selection process, with a higher proportion of candidates from higher SEB backgrounds progressing at every stage of the process.
- One of the main findings from the regression is that the primary SEB variables do not have a significant effect on overall success of appointment. The one variable that is consistently significant across each of the recruitment stages is the type of University attended; we see that candidates graduating from more selective universities have higher odds of passing each recruitment stage. There is a relationship between SEB and university attended, evidenced from the Fast Stream data and from wider research.
- A larger proportion of lower SEB candidates do not proceed beyond the registration stage (44.4%) compared to higher SEB candidates (36.2%). Relative to the number of Fast Stream appointments made annually, there are a high number of lower SEB candidates who do not progress beyond registration, and who also have the characteristics of candidates who perform well in later stages. These candidates represent up to a fifth of the population of lower SEB candidates not progressing beyond the registration stage.
- There is a strong linear relationship between 'UCAS points' and performance in all test scores, though this is less strong for the online competency test (which is most closely linked to the Civil Service Competency Framework; candidates can practice the online verbal and numerical tests, but not the online competency tests). We know from the Fast Stream data and from wider research that there is a relationship between SEB and UCAS points.
- Candidates who identified as 'white' are more likely to achieve higher scores in the online tests. This is more pronounced in the verbal online test compared to the numerical online test.
- At the FSAC, candidates with lower SEB were found to have lower overall candidate scores. In relation to individual competencies, "communicating with impact / leading and communicating" is the only competency against which SEB has a statistically significant effect.
- At the FSAC, the effect of being an Oxbridge graduate is particularly strong. When comparing different university groups, Oxbridge candidates on average perform over a point better than candidates who graduated from other highly selective universities.
- Our interviews suggest that the ordering of the FSAC exercises (i.e. starting with the Group Exercise) and the limited diversity of assessors could be having a negative impact on the success of lower SEB candidates.

78. The Lack of SEB diversity at application is compounded within the selection process. The analysis below looks at the percentage of candidates within each stage who succeed from low and higher SEB groups (defined by NS-SEC). We can see from the graph below that a higher proportion of candidates from higher SEB backgrounds progress at every stage of the process, with the greatest differences in progression rates between low and higher SEB observed at Registration and Online Test stages.



Figure 25: Proportion of candidate population by NS-SEC group (within each stage) who progress from each stage

■Low NS-SEC ■Higher NS-SEC ■Difference

79. These descriptive observations provide a useful overview and begin to indicate specific aspects of the selection process where progression rates differ. However, this analysis does not reveal the underlying causes of these observations. Regression analysis is a statistical tool to investigate relationships between variables to quantify the causal effect of one or more variables on an outcome. This also involves assessing the statistical significance of the estimated relationships, i.e. the probability that the findings are not likely to be due to chance. This analysis has been applied to explore if the primary variables (NS-SEC, FSM, and parental degree status) have a significant effect (and the size of this effect) on candidates' appointment to the Fast Stream.

- **80.** In the recoding of variables which are categorical, a rank ordering was applied where possible for comparison and inclusion within the various analysis forms. This means that conceptually the variables are linear, but their distributions within this dataset may not demonstrate a perfect linear relationship; this is further explained and limitations acknowledged in <u>Appendix F</u>. In relation to some variables, specifically UCAS points, we took a subset of the data eliminating 'noise' at the extreme ends of the scales and re-ran a selection of analyses to determine if there was an impact or change in findings. The original findings remained. Examples of this can be found in Appendix H.
- 81. In analysing the recruitment pipeline, the first stage of analysis repeated correlation analyses to look at the relationship between primary and secondary variables, and candidates' overall outcome on the scheme (accepted or not accepted). We found that none of the primary variables had an observable effect.
- **82.** This analysis has also been conducted exploring the secondary variables and their potential effect upon acceptance to the scheme; only university attended (attending a more selective university) was correlated with acceptance on to the scheme but this was a borderline small effect size (r= .106). These findings need to be treated cautiously, because of the large imbalance in the sample sizes; however, it does not suggest that there is no effect.
- **83.** This main finding is the basis for more detailed interrogation of these data. The graph below shows the correlation between the key SEB variables against progression through recruitment stage. This analysis does not distinguish between individual stages, rather it reflects the correlation at the stage a candidate reaches in the selection process. The scale on the y-axis is small and demonstrates that while the key SEB variables achieve a standard level of significance (p<.05) they have low 'r' values, below 0.1, indicating that they do not have an observable effect.
- **84.** In the case of parental degree status (we have combined father and mother degree to create a single variable), this produces 'r' value just above 0.1 and so there is a small positive effect size of having a parent who has a degree on candidates progressing further through the recruitment process. Note that some of the variables have been reversed so that they can be compared against each other; for example, here we are exploring the effect of higher NS-SEC and the effect of not having FSM status.



Figure 26: Effect size (Pearson r) of key SEB variable on progression through selection stages³⁶

Either parent having a degree
 NS-SEC binary (reversed)
 FSM status (reversed)

- **85.** These findings appear to contradict the earlier descriptive findings on the proportion of candidates progressing by SEB. However, an investigation of the correlation between secondary variables and progression in the selection stages reveals a group of these variables which are consistently correlated with progression in the selection stages.
- **86.** Turning to the secondary variables, we found a small positive effect size between candidates who have more UCAS points, a better degree class, and attended a more selective university and progression, and this is relatively stable over time. In 2015 the school type candidates attended achieves a small effect size (r= .110) which is significant (p<.01) and indicates that candidates who attended a selective or independent school tended to progress to a later stage of the recruitment process, though the effect size is small.

³⁶ Correlations reported here are significant at the 0.05 level (2-tailed).



*Figure 27:Effect size (Pearson r) of secondary candidate background variables on progression through selection stages.*³⁷

- **87.** This analysis shows that there is an association between candidate background variables and their likelihood of progressing to later selection stages. However, it does not enable us to determine the specific effects at each stage. Using a combination of binary and multinomial regression models,³⁸ we can investigate the effect of each of the key SEB variables at each of the recruitment stages.
- **88.** The analysis was conducted on the aggregated data (2011-2015). The results presented here are from a number of binary logistic regression analyses where the outcome variable was univariate. All variables were put into a regression model, which reveals variables that are

³⁷ Correlations reported here are significant at the 0.05 level (2-tailed).

³⁸ Shiner. M. & Noden, P. (2014). 'Why are you applying here?': 'race', class and the construction of higher education 'choice' in the UK

Chowdry, H. et al. (2012). Widening participation in higher education: analysis

found to have an effect on outcomes. A subsequent analysis was run to identify which of the variables produces a significant effect. Using regression analyses there are a number of statistical values that are examined to interpret the results; we primarily observe the odds ratios that are produced. Looking at the output table, below, there are four values that we present:

- 'B' is the estimated regression coefficient and indicates the direction of the relationship, whether the variable has had a positive or negative effect upon the outcome. The coefficient, if found to be significant, can be used to determine whether a particular variable has an effect on an outcome, and to compare the relative magnitude of effects of the variables included in the regression, on that outcome.
- **'Exp(B)'** is the odds ratio value. This is used to compare the relative odds of the success at particular stage of the recruitment process, given exposure to a variable of interest (e.g. higher UCAS points, lower NS-SEC).
- We also look at the level of statistical significance that each of the variables achieve and the level of significance that the regression model achieves (for this we have used Cox & Snell's R²).
- **89.** The table below outline this analysis, detailing the variables that have a significant effect on recruitment stage outcomes. The scale is for an odds ratio value (the ratio of the odds of an event occurring). When we are interpreting odds ratios:

OR=1:	This variable does not affect odds of outcome
OR>1:	This variable is associated with higher odds of outcome
OR<1:	This variable is associated with lower odds of outcome

90. In the table below, variables are included that have a significant predictive effect on candidates' success at a particular stage. The direction of variables and their ranking has been indicated, but a more detailed breakdown can be found in <u>Appendix G</u>.

*Figure 28: Outputs from the regression analysis. Those variables that have a predictive effect on candidate's success at a particular stage*³⁹

Selection Stage and variable (Cox & Snell R ² =<.05, all below variables p=<.05)		(B)		95% C.I. for Odds Ratio	
			Odds Ratio	Lower	Upper
Registration	More selective university (towards ST13 and Oxbridge)	0.295	1.343	1.313	1.374
Online tests	More selective university (towards ST13 and Oxbridge)	0.291	1.337	1.303	1.373
	Higher UCAS points	0.129	1.138	1.118	1.158
	Identifying as having a disability	0.772	2.165	1.996	2.348
E-tray	More selective university (towards ST13 and Oxbridge)	0.048	1.05	1.006	1.095
	Higher UCAS points	0.036	1.037	1.008	1.067
	Higher degree class (towards a 1 st)	0.159	1.172	1.098	1.25
	Being female	-0.155	0.857	0.795	0.924
	Older age group (towards mature applicants)	0.179	1.196	1.123	1.274
FSAC	More selective university (towards ST13 and Oxbridge)	0.295	1.343	1.238	1.457
	Higher UCAS points	0.154	1.167	1.108	1.23
	Identifying as "not white" ethnicity	-0.343	0.71	0.574	0.878
	Older age group (towards mature applicants)	0.269	1.309	1.159	1.477

³⁹ To generate these outputs, we started with all primary and secondary variables as explanatory variables. and then removed those with non-significance (P=<0.05). The analysis is a combination of 4 separate regressions.

- **91.** Whilst descriptive analysis showed that a lower proportion of individuals with low NS-SEC were accepted to the scheme, none of the primary SEB variables (NS-SEC, FSM, and parental degree status) have a statistically significant effect upon overall acceptance to the scheme.
- **92.** As the correlation analyses suggested, secondary background variables have a more significant effect upon candidates' outcomes. In particular, the one variable that is consistently significant across each of the recruitment stages is the type of University attended; we see that candidates graduating from more selective universities have higher odds of passing each recruitment stage.
- 93. Gender and ethnicity binaries, when significant, have been marked as having a negative relationship (there is a minus for the B value, and the odds ratio is below 1). This shows us the odds of male candidates being successful at the e-tray stage are higher than females. Specifically, (remembering that 0=male and 1=female) we see that the coefficient indicates a negative relationship (-.155) and combined with the odds ratio of 0.857 tells us that the odds of male candidates are 1.17 that of females having success at the e-tray stage.
- **94.** Candidates with a disability are found to have higher odds of having success at the online test stage compared to those who did not identify as having a disability, however this is likely explained by a matter of protocol within the recruitment process: candidates who indicate certain disabilities may potentially by-pass components of the online tests or the tests completely.
- **95.** Across the aggregated and annual analysis, we observe that university group and UCAS points are significant factors in selection outcomes, whilst the key SEB variables of NS-SEC, parental degree status and FSM consistently have no observable effect. However, there are a number of interactions occurring between the background variables. We have already established that NS-SEC, FSM, and parents' degree status have a significant interaction with the type of university that candidates attend. This is the primary rationale for not controlling for certain variables, because there are myriad layered interactions occurring that need to be acknowledged and unpicked, rather than simply controlling for them.
- **96.** University attended is a function of a number of variables. This includes variables observed within this analysis (such as SEB, UCAS tariff), and a range of unobserved variables, including some related to pre-university entry (such as confidence, good careers support, access to private tutoring) and those related to time spent at university (such as networks, being exposed to employers, access to advice and role models). These unobserved variables are important to consider, though quantifying their effects are not within the scope of this study.

97. Previous research has looked to conceptualise and measure the impact of these effects not just at university but also at earlier stages of education.⁴⁰ Further analysis could be undertaken to attempt to record and measure these effects, through the creation of latent variables for these effects, and then suitable analysis undertaken to understand better the composition and interaction of these unobserved variables on recruitment outcomes and the background of candidates.

"I think, somehow, during the selection process, anyone who is diverse is slowly weeded out. One explanation might be that some universities run long training schemes to help their students get into the Civil Service, but in lower tier universities those things don't exist... I don't think [the Fast Stream] is good at penetrating the 'gloss'. People come in with interview training, with great personal confidence, and it must be hard to get under that for a true assessment."

(Unsuccessful applicant interviewee, lower SEB)

"I felt that at every stage, especially the last one, the assessment centre, that the process was very meritocratic. So, the fact that our Assessors had no knowledge of the university we'd been to and our socio-economic background and our age meant that I had confidence that it was a meritocratic process. But, on the other hand, the types of skills that we were required to demonstrate at the assessment centre, mean that you need quite a high level of confidence and ability to speak and express yourself, and to do so in a way that's suited to what the Civil Service is looking for. I think all of that's a lot easier if you come from a social, cultural, economic background that encourages you to engage, or allows you to engage in activities that will nurture those skills.

(Successful applicant interviewee, lower SEB)

⁴⁰ Green, F. et al., (2012). The changing economic advantage from private schools.

http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0335.2011.00908.x/full

Machin, S. et al. (2001). Basic skills, soft skills and labour market outcomes: secondary analysis of the National Child Development Study. DfEE research centre, report number 250.

MacMillan, L. et al. (2015). Who gets the top jobs? The role of family background and networks in recent graduates' access to highstatus professions.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9748675&fileId=S0047279414000634

The Recruitment Pipeline (Registration)

The first stage in the recruitment process is registration on the Fast Stream website: students input their details and they are then eligible to complete the online tests at the next stage.

Key findings:

- Regression analysis reveals that attending a more selective university has a significant effect on whether candidates progress beyond registration.
- Over the five years of data, a larger proportion of lower SEB candidates do not proceed beyond the registration stage (44.4%) compared to higher SEB candidates (36.2%).
- A large number of lower SEB candidates who do not progress beyond registration have the characteristics of candidates who perform well in later stages (as defined in the earlier regression analysis). Within the lower SEB population of candidates who do not progress beyond registration (n=5,423), 22% (n=1212) achieve UCAS points greater than 360, 9.5% (n=516) have attended Oxbridge or a ST13 institution, and 5.6% (n=305) of lower SEB candidates who withdraw at registration have achieved both and therefore have background characteristics that indicate they have a high possibility they will succeed in future selection stages (high UCAS tariff and attendance at ST13 or Oxbridge).

98. We know from earlier analysis that a high proportion of candidates do not progress beyond the registration stage, i.e. they register on the website but do not make an application. Over the five years of data, a higher percentage of low NS-SEC candidates do not proceed beyond this stage (44.4%) than high NS-SEC candidates (36.2%). We also see a similar trend for FSM and parental degree status; candidates who have been in receipt of FSM and those whose parents do not have degrees have a higher proportion (between 7-9 percentage points) of drop-out at the registration stage. The regression analysis also revealed that university attended has a significant effect on success of passing this stage.

Figure 29: Proportion of candidate population by NS-SEC group (within each stage) who progress from each stage



- **99.** This group is an important population, because of its size and, from a practical perspective, because it is possible to communicate directly with these candidates to encourage application. In order to predict the effect of an intervention of this nature, we estimate how many of the lower SEB candidates who did not progress beyond registration have the characteristics of applicants who are successful in later stages i.e. how many potentially successful candidates from lower SEB backgrounds are lost at this first stage?
- 100. Relative to the number of candidates appointed, a large number of lower SEB candidates who do not progress beyond registration have the characteristics of candidates who perform well in later stages (as defined in the earlier regression analysis). Within the lower SEB population of candidates who do not progress beyond registration (n=5,423), 22% (n=1212) achieve UCAS points greater than 360, 9.5% (n=516) have attended Oxbridge or a ST13 institution, and 5.6% (n=305) of lower SEB candidates who withdraw at registration have achieved both and therefore have background characteristics that are positively associated with success in future selection stages (high UCAS tariff and attendance at ST13 or Oxbridge).



Figure 30: Lower SEB candidates who drop out at the registration stage by their background variables

The Recruitment Pipeline (Online Tests and E-Tray)

After registration, candidates complete an online verbal numerical test, an online verbal reasoning test, and an online competency questionnaire. Passing these tests means that candidates progress to the online e-tray test.

Key findings:

- Regression analysis shows that the following candidate variables have a significant positive effect at the online test stage:
 - o Attending a more selective university
 - Higher UCAS points
 - o Identifying as having a disability
- Regression analysis shows that the following candidate variables have a significant positive effect at the online E-tray stage:
 - o Attending a more selective university
 - Higher UCAS points
 - Higher degree class
 - o Being male
 - o Being an older candidate
- There is a small correlation between primary SEB variables and background variables (including university attended and UCAS points) and online verbal and numerical reasoning test scores, and a very small (almost zero) correlation with the online competency questionnaire score. The online competency test is most closely linked to the Civil Service Competency Framework. Candidates can practice the online verbal and numerical tests, but not the online competency test.

- The online competency questionnaire is also a strong predictor for scores at the assessment centre. Correlation analysis shows that candidates achieving higher scores in the online tests and e-tray are significantly more likely to achieve higher scores at the assessment centre.
- Candidates who identified as 'white' were more likely to achieve higher scores; this is more
 pronounced in the verbal online test (r=.216) compared to the numerical online test (r=.107).
 This latter effect should be investigated in more detail, since the correlation size is greater than
 any of the primary SEB variables.
- There is a significant linear relationship between 'UCAS points' and performance in all test scores (though this is weaker for the online competency test). This challenges some recent thinking amongst employers who claim that prior school attainment is not a good predictor for performance in selection processes, and we include detailed analysis in <u>Appendix I</u>.

101. The figure below shows how the primary background variables are associated with outcomes on the online tests using aggregated data from the five years (2011-2015). For verbal and numerical scores there is a small correlation with SEB but for the online competency questionnaire, no observable effect size was reached.



Figure 31:Effect size (Pearson r) of key variables on the online test scores

102. For the secondary variables we observe similar patterns to previous analysis: candidates' UCAS points and university have a stronger correlation with scores achieved. In the case of university group this achieved a medium effect size for the numerical (r=.357) and verbal (r=.39) online tests, showing that more candidates achieve a higher score in these two tests when they are from a more selective university. As with the key SEB variables we see that the other background variables do not achieve an observable effect size with the online competency questionnaire scores, only gender shows a small link (r=.15). We also see a small link for ethnicity on the verbal and numerical online test, where more candidates who identified as 'white' achieve higher scores, this is more pronounced in the verbal online test (r=.216) compared to the numerical online test (r=.107). This latter association should be

investigated in more detail, since the correlation is greater than any of the primary SEB variables.



Figure 32: Effect size (Pearson r) for secondary background variables against online test scores.

- ■Online Competency Questionnare Normalised Score
- ETray Normalised Score
- **103.** We have also investigated the correlation between the online test scores and e-tray and their association with candidates' scores at the FSAC. The graph below shows these correlations across the years and aggregated. This indicates that candidates who score highly on the online tests and e-tray tend to consistently score highly at the assessment centre.

Figure 33: Correlation (Pearson r) effect size between online and e-tray tests against the Assessment Centre	
(FSAC) score	

	Online Numerical Normalised Score *FSAC	Online Verbal Normalised Score *FSAC	Online Competency Questionnaire Normalised Score*FSAC	E-Tray Normalised Score*FSAC
2011	0.155	0.221	0.107	0.221
2012	0.224	0.299	0.174	0.36
2013	0.23	0.285	0.203	0.194
2014	0.238	0.309	0.2	0.363
2015	0.22	0.307	0.211	0.226
Aggregated total	0.227	0.294	0.2	0.27

- **104.** There is a significant linear relationship between UCAS points and performance in all test scores, though this is weaker for the online competency test. We provide detail on this analysis in <u>Appendix I</u>, given the recent debates in the sector about the predictive validity of UCAS points to success in graduate selection processes.
- **105.** Many graduate recruiters use online tests to filter candidates in the early stages of recruitment, particularly when there are high volumes of applicants. A critical approach to whether these tools should be used is required, as research has shown that some online methods of assessment disadvantage candidates from lower SEB backgrounds. Typically, adverse impact is much greater for reasoning tests than it is for situational or competency tests in the selection process. Situational tests, as introduced by the Fast Stream for this coming recruitment cycle, can reduce the level of adverse impact although are not completely free of bias.

The Recruitment Pipeline (Assessment Centre)

If candidates pass the online e-tray exercise, they are invited to attend the one-day assessment centre (FSAC) at 100 Parliament St, London.

Key findings:

- Regression analysis shows that the following candidate variables have a significant positive effect on success at FSAC (securing a job):
 - Attending a more selective university
 - Higher UCAS points
 - o Identifying as 'White' ethnicity
 - Candidates from older age groups
- Candidates from lower SEB backgrounds were generally positive about the assessment centre, though there were numerous comments identified through our research about the purpose and validity of the one-to-one interview.
- The order of the FSAC exercises may be affecting the performance of lower SEB candidates. Given the profile of candidates at this stage (5.5% of candidates are from lower SEB backgrounds aggregated over five years), beginning with the group exercise may be a more intimidating start to the centre.
- At this stage the effect of being an Oxbridge graduate appears to be strongest: comparing different university groups, Oxbridge candidates on average perform over a point better on the FSAC than candidates who graduated from selective ST30 institutions.
- A number of the key SEB variables are associated with individual competencies. SEB has the strongest association with "communicating with impact / leading and communicating".
- Analysis of the effect of candidate variables on assessment modes (e.g. group exercise, interview) is problematic because of both methodological considerations and the way in which the data are reported.
- **106.** The earlier regression analysis demonstrated that attending a more selective university, possession of higher UCAS points, identifying as 'white', and being an older candidate, have a significantly positive influence on success at the assessment centre.
 - 107. The analysis below focuses initially on how different groups of candidates perform at FSAC. When comparing the mean outcome scores for different groups, there is noticeable variation. This analysis includes aggregated data (2011-2015), noting that for some of these comparison groups there is an uneven distribution in size. The figure below shows that candidates with a lower SEB (classified by the NS-SEC binary), who have been in receipt of FSM, and whose parents do not have a degree, have lower mean scores. However, viewing the y-axis we can see that these differences are not large.



Figure 34: Mean of FSAC normalized score by key variables (2011 – 2015)

108. Looking at the secondary variables we see that certain groups perform marginally below comparators. It is noteworthy that when comparing different university groups, candidates who graduated from Oxbridge on average perform over a point better on the FSAC than candidates who graduated from ST30 institutions.





109. UCAS points are presented separately due to the larger grouping scale. We observe a trend: candidates who report higher UCAS points have slight increases in FSAC mean scores (with a slight dip in the two uppermost bands). However, the increases are, once again, marginal and we have to be cautious of the small number in the groups at each extreme of the scale.



Figure 36: FSAC mean by UCAS points

110. Correlation analysis shows that all variables have a statistically significant effect upon the FSAC score, but the magnitude of the size varies. An r value >.1 and <.3 was achieved by university attended (attending a more selective institution) and UCAS points achieved (achieving more UCAS points), with the remaining variables not achieving an r value >.1.



Figure 37: Effect size (Pearson r) for key and secondary background variables against FSAC normalised score

111. Further exploring the assessment centre scores, we look at the individual competencies which make up the overall FSAC score. Additional details of the competencies can be found under the figure.



Figure 38: Effect size (Pearson r) of key variables on the assessment centre competency scores and Assessment Centre total (see key below)

Previous fast stream competency framework heading	New competency heading (from 2014)	Variable label within this report and dataset
Constructive Thinking	Seeing the Big Picture/Changing and Improving (CAI)	CT (CAI 2014-15)
Decision-Making	Making Effective Decisions (MED)	DM (MED 2014-15)
Communicating with Impact	Leading and Communicating (LAC)	CWI (LAC 2014-15)
Building Productive Relationships – this merged with Learning and Improving to form Collaborating and Partnering/Building Capability for All (CAP) in 2014.		BPR (2011- 2013 only)
Learning and Improving – this merged with Building Productive Relationships to form Collaborating and Partnering/Building Capability for All (CAP) in 2014.		LAI (2011- 2013 only)
	Collaborating and Partnering/Building Capability for All (CAP) – this was previously two competencies which are merged together, Building Productive Relationships and Learning and Improving.	CAP (2014- 15 only)
Drive for Results	Managing a Quality Service/Delivering at Pace (MQS)	DFR (MQS 2014-15)
	Delivering Value for Money/Achieving Commercial Outcomes (DVM) – this was a new competency from 2014 onwards.	DVM (2014- 15)

112. We can see variation in the competencies (the final weighted totals) and a number of the key SEB variables are associated with individual competencies. Whilst SEB has the strongest

association with "communicating with impact / leading and communicating", the correlation size is small.

- **113.** Exploring the different modes of assessment used in the FSAC presents challenges. There are challenges with the data because there is variation between each of the five years relating to which competencies and modes are used; some are re-named, new ones are added, and some are merged together. The analysis would also have to assume that the scoring criteria is consistent and comparable across the years. These methodological challenges mean that we must proceed cautiously with any analysis of these data. We grouped certain sub-competencies based on the mode of assessment that had been indicated by the data field name, and through basic information provided by the Fast Stream. There were four clear groups/modes of assessment to trial this analysis on:
 - Policy Recommendation
 - Briefing
 - Group exercise
 - Interview
- 114. The number of sub-competencies included in each group varied between years, and the competencies they came from also varied by year. We generated mean values for each of the sub-competencies and averaged these together to provide an indication of overall performance within a particular mode of assessment. The graph below shows these averaged means over the course of the five years of data and by the four modes of assessment. We observe little variation between the assessment modes over the years, with many changing <.5 of a points over the timescale. The standard deviations of the sub-competencies also show that there is little variation between the modes of assessment.</p>



Figure 39: Assessment centre modes of assessment grouped and by year with averaged means

115. We repeated this analysis by candidate NS-SEC binary and again we see little variation between the groups. Close visual inspection may suggest the presence of modest trends, but when we look at the scale of the graph, we see that any differences between groups are often very small: .05 points or smaller.





116. Candidates from lower SEB backgrounds were generally positive about the FSAC, though there were numerous comments from different SEB candidates about the purpose and validity of the one-to-one interview.

"[The interview] is being able to say the right phrases and the right words and they stop you once they've got enough evidence and I find that a bit bizarre. I didn't feel like they wanted to know about me and that's what I've traditionally thought an interview is. It felt more like being in an exam [testing] whether I could rabbit the right thing."

(Successful candidate interviewee, higher SEB)

117. These comments, which are indicative of broader views, question the validity and the reliability of the one-to-one interview. A particular challenge of using a single interviewer is that it is difficult to ensure consistency of assessment; this is not to suggest that any single

interviewer is purposefully distorting the result, but there is a greater risk of unconscious bias being applied in the absence of an interview panel.

- **118.** It is also possible that these one-to-one interviews may not be assessing what the recruitment team believe they are assessing. It is clear from the interviewee and focus group comments that the interview is in some way exploring a candidate's experience. But without triangulated verification, it is not possible for an interviewer to objectively assess this. A number of the candidates in our Focus Groups suggested that what is actually being assessed is a candidate's ability to identify and repeat "the right phrases", irrespective of their actual experience. In essence, the candidates are being assessed on their ability to perform well in interview (i.e. their 'gloss') rather than on their actual experiences and/or reflections.
- 119. The order of the assessment centre exercises may be affecting the performance of lower SEB candidates; given the profile of candidates at this stage (5.5% of candidates are from lower SEB backgrounds; aggregated over five years), beginning with the group exercise is unlikely to help with candidates' confidence.

"The Assessment Centre here, in comparison [to other graduate ACs], felt very relaxed and at ease and friendlier. I don't know how or why it worked, but it was a much nicer environment. The online tests are far more straightforward and open than any others. The fact that they actually tell you what they're looking for at the Assessment Centre is a big improvement on anything else I've been to. They explicitly state what they're looking for, which exercise that is tested in, and you have no idea what they're looking for at a lot of the other private firms."

(Successful candidate interviewee, higher SEB)

Conclusions

- **120.** Attending a more selective university significantly increases candidates' chances of success and there is a linear relationship between UCAS tariff and scores attained in online tests. The only test where we do not observe significant background variable effect sizes is the online competency questionnaire. This is the only online test candidates cannot practice, and is most directly linked to the behaviours outlined in the Civil Service Competency Framework.
- 121. On one hand, this is not surprising: one might assume that the candidates who will demonstrate best performance in role are mainly found at the most selective institutions. However, the 'university attended' variable is a function of a wide range of other variables. Students from the most selective universities, on average, have greater access to social capital, are given more support on their journey to university, have wider social networks, and more careers support.⁴¹ Based on previous research, we can make a reasonable assumption that by favouring pupils who had disproportionate access to these advantages, the Fast Stream is losing out on many other talented individuals, who would flourish if given the opportunity.
- **122.** A crucial data point that is absent from this discussion, and outside of the scope of this study, is the quantitative analysis of candidate characteristics against performance in role. High performance on the job is the ultimate objective of effective attraction and selection. This investigation is possible in principle (the Bridge Group has delivered this quantitative analysis with other employers), but the sample size of successful Fast Stream candidates from lower SEB backgrounds may be too small to draw any statistically significant conclusions to influence policy. This is both an analytical obstacle and indicative of the extent of the challenge.
- **123.** Effective graduate recruitment programmes prioritise access to the best talent, and must deliver inclusivity with efficiency. Recruiters can manage potential risk in the recruitment process by depending on conventional indicators for potential performance, such as socio-economic background and educational achievements, or familiar speech, "...personal style, accent and mannerisms..."⁴² Employers can adopt these approaches out of pragmatism and risk averseness (especially in high volume recruitment) and the negative effects on lower SEB

^{41 &#}x27;National strategy for access and student success' (OFFA: 2015)

⁴² Non-educational barriers to the elite professions evaluation (Ashley et al: 2015, p25)

candidates are typically considered to be an unintended outcome. It is also the case that this risk aversion can manifest in unconscious bias, applied by the individuals making selection decisions.

- **124.** Selection tools in recruitment are fair when they are constructed on objective evidence and are as free as possible from biases that affect the precision of decision-making. However, as long as selection approaches are tightly focused on competencies that are most closely associated with candidates from more affluent backgrounds, the prospect of a more diverse SEB workforce is likely to be limited. There is nothing to be gained from encouraging lower SEB applicants into a system of selection where the probability of their success is so limited. Indeed, it is likely to exacerbate the lack of diversity and, within the literature, there is some challenge about the ethics of this practice.⁴³ Similarly, it is in nobody's interests, least of all the candidate's, to employ someone to undertake a job that they cannot perform effectively.
- **125.** Significant action needs to be taken on a number of fronts if the Fast Stream is to succeed in its aspiration to recruit a workforce that is both highly effective and also diverse. For significant and lasting change to be achieved there are clear implications for strategic leadership, resourcing, the nature and extent of outreach, data collection, the development and application of equitable selection practices, and ongoing monitoring and tracking. In order to drive this process, it is essential that leadership is shown within the highest levels of the Civil Service, to underline the importance of ensuring diversity and attracting top talent to the Fast Stream and senior Civil Service. By tapping into the existing Fast Stream community to drive this work on-campus, the Civil Service could become a role model for ensuring that the workforce genuinely draws on the people best placed to do an effective job. This would not only lead to a more diverse Civil Service, it promises to lead to better levels of performance, higher long term retention, improved perceptions of the Civil Service, and to realise the importance of social mobility which is currently heard, but not seen, in the Fast Stream.
- 126. It is clear that there is a strong will from within the Civil Service and the Fast Stream team to consolidate the gains already made, to build on the good practice already established, and to be bold in the further pursuit of lasting change. There is also a significant opportunity for the Civil Service to take a leadership position in this regard amongst employers across the professions. The Bridge Group looks forward to supporting the Fast Stream wherever possible in adopting the recommendations that follow, and in leading the field in the recruitment of a highly effective and truly diverse workforce.

⁴³ Non-educational barriers to the elite professions evaluation (Ashley et al: 2015)

Section Three: Recommendations and Learning from other Employers

In this section we provide more detail about the recommendations that were presented in summary form on page five. These build on the interim recommendations made to the Fast Stream in September 2015, many of which colleagues have already begun to implement. These recommendations have also been translated into a validated two-year operational plan, that has been developed in collaboration with those leading the Fast Stream.

Recommendations focus on four interrelated areas:

- Accountability and Measuring Success
- Attracting Applicants
- Selecting Candidates
- Lessons for the wider Civil Service

Accountability and Measuring Success

RECOMMENDATION (A)

Introduce the approach outlined to measuring and monitoring socio-economic diversity from the 2016/17 application cycle for the Fast Stream, and make improvements to the way data are collated, coded and reported within the new Applicant Tracking System.

Starting from the spring 2016 application cycle, the Fast Stream should adopt a new approach to measuring and monitoring socio-economic diversity that reflects the best practice approach described earlier. Specific guidance, including wording of questions, and the methodology for constructing a composite measure based on this, will be delivered as part of the two-year action plan.

There is no consensus on how to most accurately and efficiently measure SEB, and practices amongst employers are varied. The purpose of measuring and monitoring SEB is to identify those candidates who have faced social, cultural, economic and educational disadvantages that, based on research, we know are restricting factors to university entrance and access to the professions. There is much evidence and research on these barriers, and the specific ways in which lower SEB groups have much lower levels of progress to university and to the professions.⁴⁴

As well as considering the possibility of benchmarking SEB diversity with other employers, it is also important to consider the comparability of SEB information against the eligible candidate pool, i.e. the higher education population. The higher education sector has also been tackling the question of how best to measure SEB for decades: institutional benchmarks and the allocation of public funds are partly informed by these indicators.

The approach to measuring SEB in the higher education sector is also currently under review: an indepth review process of the performance indicators relating to widening the higher education participation of under-represented groups is currently underway. The reviewers have recently confirmed the discontinuation of the indicator based on NS-SEC 4 to 7. The indicator will appear for the last time in

⁴⁴ http://webarchive.nationalarchives.gov.uk/+/http:/www.cabinetoffice.gov.uk/media/227102/fair-access.pdf www.gov.uk/government/uploads/system/uploads/attachment_data/file/61090/IR_FairAccess_acc2.pdf

the 2016 publication of the widening participation indicators; it will not be published in 2017 and in subsequent publications. The main concerns about this indicator are that it is "a self-reported measure and thus open to misreporting, prone to inaccurate coding and has a relatively high volume of missing data."⁴⁵

The development of indicators in higher education based on the following measures and priorities will be explored in the second half of 2015 by the UK Performance Indicators Technical Group, with the ambition of publishing them as 'experimental statistics' in 2016:

- Schools with low numbers of pupils progressing to further study
- Pupils in receipt of free school meals (with particular consideration of the extent to which variations in eligibility criteria for free school meals across the UK nations may be considered fundamental)
- Household residual income of entrants to higher education, likely drawn directly from the Student Loans Company

The Fast Stream should stay up to date with the development of this review, and continue to ensure alignment with the key measures used to identify SEB within university populations.

In selecting the specific indicators for measuring and monitoring SEB, we have considered: the characteristics of effective measurement outlined on page 18; pertinent research in this area⁴⁶; and established practices within the employer and higher education sectors.⁴⁷ The following data should be collected in order to assess applicants' SEB:

- School attended at KS4 (typically GCSE) and KS5 (typically A-Level). This indicator enables
 us to reveal the average performance at the school or college attended, which can be assessed
 against the relative national performance in the given year. Lower SEB pupils tend to be
 overrepresented in schools that add least value to their performance, in terms of both formal
 attainment and progression to higher education.⁴⁸
- Home postcode at age 14, which can be assessed against three well established socioeconomic indices (Indices of Multiple Deprivation, IDACI and POLAR3). We know that progression rates to university and into the professions are lower amongst those candidates whose postcodes are ranked lower in these indices. These indices are used extensively by the

⁴⁵ www.hefce.ac.uk/media/hefce/content/pubs/indirreports/2013/Fundamental,review,of,the,UKPls/2013_ukpireview1.pdf 46 For example: https://nces.ed.gov/nationsreportcard/pdf/researchcenter/Socioeconomic_Factors.pdf

⁴⁷ For example: www.hesa.ac.uk/content/view/2379/

⁴⁸ https://www.offa.org.uk/wp-content/uploads/2015/03/OFFA-Strategic-Plan-2015-2020.pdf

Higher Education Funding Council to identify SEB and by universities to identify pupils to target for widening participation activities and contextual recruitment.⁴⁹

- Parental NS-SEC using the self-coding methodology, for the highest earning parent / carer
- Parental experience of higher education
- Receipt of free school meals

The net effect of collecting these data is a reduction in the number of questions to candidates from thirteen to nine. The additional questions are not likely to be considered intrusive; they ask for parental postcode and school(s) attended. This is important considering that, historically, the volume of questions put to candidates in relation to SEB has been perceived by the Fast Stream team to affect response rates negatively. We will include specific wording for each of these questions within the two-year action plan, and will also offer advice on how these responses can be most helpfully coded through the applicant tracking system to enable analysis and reporting of these data in future years.

For the purposes of consistency and comparability with previous years, and with the higher education sector, NS-SEC should remain the key indicator in this cycle and in the forthcoming Fast Stream Annual Report. In collecting this wider range of data, the Fast Stream will be well equipped to adapt to the new approach in the higher education sector.

Ultimately, a composite measure should be aimed for, as this represents good practice and acknowledges that no single indicator can sufficiently reveal the multiple forms of social, economic, cultural and educational disadvantage that affect access to university and the professions. Such a measure can be generated via a flagging system (i.e. an applicant reaches one, or more, criteria against a number of indicators) or a composite score that accounts for each indicator. Most selective universities have used SEB indicators in this way for many years and, more recently, some employers have also started to adopt this more sophisticated approach, including through commercial products developed specifically for this purpose.

As an example, **a large insurance firm** have worked with a commercial provider to implement a system that develops a composite score for SEB, using an algorithm that assesses postcode data, relative performance in school, and a number of other measures. The score is added to a candidate's record on the Applicant Tracking System, and can be used to monitor SEB diversity, and to explore progress within the selection. A number of commercial products have become available over the last two years and the Fast Stream should explore whether these are likely to be effective (how aligned are they to the

⁴⁹ For example, http://www.manchester.ac.uk/study/undergraduate/applications/after-you-apply/contextual-data/

recommendations outlined here?) and efficient (is purchasing a solution better value than developing a system in-house?) in delivering this monitoring activity.

This approach should also be adopted to monitor candidates for the Fast Track apprenticeship scheme, and there is a separate recommendation relating to a wider Civil Service workforce survey.

These recommendations are set against the backdrop of the wider measurement used in the Civil Service (outlined in <u>Appendix J</u>). There are also proposals to adopt a UK-wide student identifier; this could feasibly follow students into employment, meaning a candidate would simply have to submit their Unique Learner Number (ULN) on application to reveal social mobility characteristics.⁵⁰ There is an opportunity for the Fast Stream to provide leadership to other employers by advocating the adoption of this ULN.

In order to enable the FS to deliver this monitoring and repeat the types of analyses undertaken here, it needs to refine the way in which SEB data are collected, coded and reported. The tendering process for a new provider of these services in the coming year, to replace the services currently provided, offers an opportunity to put these things in place. We will work with the FS to detail exactly how this can be achieved as part of the action plan.

The information communicated to candidates associated with data collection should also be reviewed. Fast Stream insight surveys⁵¹ have indicated that some candidates felt that the gathering of socioeconomic data was a means for screening out applicants from lower socio-economic backgrounds. There is evidence in the sector that "...there is some reluctance amongst current and aspirant professionals to respond to surveys aiming to collect these data, because they do not know why it is needed and how it will be used"⁵². This is also pertinent in the collection of social mobility data within the wider workforce. We will include specific advice on wording questions and the associated messages, and strategies for increasing response rates, in the two-year action plan.

51 Referenced by interviewees

⁵⁰ http://hediip.ac.uk/the-uln-in-he/

⁵² A Qualitative Evaluation of Non-educational Barriers to the Elite Professions' (2015, Ashely et al), p17

RECOMMENDATION (B)

Establish clearer senior leadership accountability for SEB diversity in the Fast Stream, underpinned by the proposed measures of success / targets within the Action Plan.

The recommendations outlined within this report should be translated into specific performance indicators and measures of success that will feature in the two-year action plan, including:

- socio-economic patterning in the Fast Stream intake over time;
- this patterning and progress compared to similar employers;
- the applicant and intake population compared to the eligible candidate pool; and
- specific programme related outputs in relation to initiatives designed to promote socioeconomic diversity (e.g. schools outreach, involvement of Fast Streamers).

These measures of success should feature in reporting and responsibility should rest with the Fast Stream team. However, senior leadership support (including from the Minister for the Cabinet Office, the Cabinet Secretary and Head of the Civil Service, the Chief Executive of the Civil Service and the recently appointed Chief People Officer) will be essential to effect the increased involvement of Fast Streamers in attraction activity, reform to the selection process, and improvements in the way in which SEB diversity is measured.

While the current economic context is understood, it is nevertheless critical that longer-term commitment is made to the adequate resourcing of the outreach and attraction process. In many ways, the Civil Service has higher hurdles to overcome than many of its competitors in redressing the negative preconceptions of many of those it wishes to attract, and the comparatively low levels of resource currently committed to attraction will remain a serious brake on progress.

Attracting Applicants

RECOMMENDATION (C)

Mobilise those already on the Fast Stream programme to be involved in attraction activities to a greater extent, driven by support from Permanent Secretaries and SCS, and inclusion of specific engagement targets in Fast Streamer corporate objectives.

There are generally low levels of awareness of the Fast Stream amongst students, and this is more acute amongst lower SEB students. This is at least partly a consequence of the limited campus presence afforded by the current budget, which is modest compared with peer employers. Low awareness of the Fast Stream is one reason for the pool of applicants applying being unrepresentative of the potential pool of quality applicants. The evidence also indicates that when serving Fast Streamers do come into contact with students, they have the greatest positive impact upon those from lower SEB backgrounds.

The most immediately impactful solution to this challenge, therefore, is to engage serving Fast Streamers much more actively in recruitment activity. While this is already happening in a modest *ad hoc* manner, senior leaders need to become more involved by both giving momentum and attaching importance to this activity.

Engaging recently recruited Fast Streamers in campus outreach is likely to be effective in persuading lower SEB students that the Fast Stream is a viable and attractive option for them to consider. We know that young people tend to respond most positively to people to whom they can relate. Therefore utilising the Fast Streamers themselves to advocate and communicate the value and openness of the Fast Stream may be the most effective way of shifting these entrenched mind-sets. Not only is this the strategy with the highest likelihood of success, but it also has significant additional benefits. First, it offers scale of reach while requiring modest additional investment. Second, it offers an opportunity to develop the leadership of Fast Streamers themselves; if the structure of the outreach is designed in a way that explicitly builds on desired competencies of Fast Streamers, then this could be a key aspect of a new approach to diversifying the Fast Stream.

The increased engagement of alumni (i.e. Fast Streamers returning to their *alma mater* to promote the programme) as role models would be a powerful tool for engaging students. It is critical, however, that such an alumni driven initiative takes place in alignment with strategic university targeting to ensure that the organisation reaches beyond the existing small pool of universities to diverse regions and to previously untargeted institutions – this will necessarily also involve Fast Streamers visiting institutions that they did not attend. Further, Fast Stream role models should be sought who might challenge

existing presuppositions of employees as male, white, and Oxbridge educated. The Fast Stream has an opportunity to provide leadership to other employers in this area, creating a virtuous cycle whereby those who enter the Fast Stream feel a commitment to diversifying the intake in subsequent years.

Whilst this is a strategy to create significant additional resource, this will not be achieved without some cost. Firstly, there is the immediate cost of taking Fast Streamers away from their work for a period of time; this could be significant factoring in travel time and wide involvement from the cohort. There is also the cost of co-ordination: participants require training and briefing; relationships need to be developed with universities; and the impact of activity needs to be evaluated. We suggest that the programme builds gradually, and that targets are established for the number of Fast Streamers who contribute over the coming two years.

At **Nestle**, responsibility for the strategic planning and delivery of campus attraction activity is 'owned' by those serving on the graduate programme. Every new hire into the Nestle Academy is expected to join a campus team, sometimes attached to their former institution, but often not. This approach is led from the top, with senior colleagues ensuring that sufficient time is available to employees to be engaged in campus activities and, because teams (with an element of competition between each) are developed, there is less risk that commitments to visit an institution will suddenly have to be cancelled due to unexpected workloads or business travel.

The NHS Leadership Academy has a very limited operational budget for campus recruitment. Large numbers of serving graduate employees are involved in driving campus activities. Employees are often keen to return to their own institutions, but colleagues are careful to target widely to guard against visiting the same institutions. Furthermore, these same graduate employees lead the pastoral support and role play activities at the assessment centre, such that students who have met role models on campus are likely to then meet them again during selection.

RECOMMENDATION (D)

Deliver more curriculum-based interactions with universities, and engage actively with widening participation teams.

Engage with carefully targeted academic departments (using the approaches outlined above) to reach a diverse student body to deliver activities that are embedded in the curriculum. This builds on the established guest lecture series, and has multiple advantages:

- Addresses the problem of student self-selection, i.e. reduces the likelihood of only speaking with those already aware of the Fast Stream and intending to apply
- Showcases what is at the heart of the Fast Stream, i.e. what is involved in the job and engages the Fast Stream community in a dynamic way
- Responds to universities' needs for 'real-life' learning within the curriculum
- Develops relationships with academic members of staff, who are key influencers on students' career choices

In order to add scale to the work in this area, it will be especially important for former and present Fast Streamers to engage in delivering more activity that contributes to teaching and learning in specific subject areas. In this way a broad range of relationships can be developed to guard against compromising the Civil Service Commission principles of being open and fair. We recommend preparing an overarching targeting strategy, based on the three complementary approaches outlined above.

Civil servants in the lecture hall

Building on the established programme of 'guest lectures', these sessions contain subject specific content, and are developed in liaison with academic colleagues. Alongside inspiring students to consider a career as a civil servant, they also directly contribute to practical teaching and learning objectives. These contributions are likely to be delivered by those working operationally in relevant areas, and should include:

- traditional lectures on a specific topic, agreed in liaison with academic colleagues;
- practical, interactive masterclasses that require students to complete tasks during the session;
- chairing or co-chairing seminar discussions that require student preparation on a particular topic; and

Work related learning

These sessions involve learning based as closely as possible on real work situations and include methods such as case studies, projects, study visits and simulated work environments.

Curriculum and assessment design

This may be delivered *ad hoc* (e.g. advice on a particular topic, or assessment methods associated with a module) or formal membership of a departmental industry advisory board, which are increasingly being established in universities.

Employability modules

Careers advice and guidance is increasingly being embedded in subject areas, and this offers an

opportunity for Fast Streamers to be engaged. Modules typically address employability issues that include e.g. student identity, the nature of the graduate labour market, career choice, skills development, and entrepreneurship.

Mentoring relationships

A relationship between a civil servant and a student, designed to help develop understanding of work. Increasingly, careers services are partnering with alumni relations teams and widening participation teams to develop alumni mentoring initiatives, and our advice is to plug into existing programmes wherever possible.

The recent report from the Department for Business, Innovation and Skills, *Understanding Employers' Graduate Recruitment and Selection Practices*, also presents some useful models for engaging universities in this regard.⁵³

The Fast Stream team should capitalise on the increasing focus within universities for supporting the employability of students from lower socio-economic groups; this trend is partly being provoked by the allocation of funds through universities' Access Agreements to support student progression and employability. As a result, institutions are designing more interventions (such as mentoring and assessment centre support) to support lower SEB students, and we recommend connecting with these initiatives in target institutions wherever possible.

For example, the **University of Manchester** has a strong tradition of welcoming students from widening participation backgrounds. They include students from lower socio-economic groups from areas with traditionally lower participation in higher education, and from schools or colleges that perform below the national average. They welcome initiatives to improve the employability of their lower SEB students and have a suite of schemes of potential interest to employers, including:

- Mentoring a careers mentoring programme, Manchester Gold, which runs twice a year in Autumn and Spring. Students from diverse backgrounds often feedback that developing their professional network is very rewarding.
- Talks and workshops students find that the opportunity to meet recruiters is very valuable in their career planning. So far they have run sessions about: the value of networking; accessing the professions; and confidence-building.

The **University of Leicester** also recognises the importance of social mobility and are working with a number of leading employers and recruiters to devise solutions to support their recruitment aims. To

 $^{53\} https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474251/BIS-15-464-employer-graduate-recruitment.pdf$

further the debate around social mobility, why it matters and what organisations need to do to address it, the Career Development Service holds debates as part of the highly successful Leicester Exchanges Programme. These debates allow academics and industry leaders to work together to discuss the broader issues of social mobility and how these can be addressed.

RECOMMENDATION (E)

Introduce enhanced data insights to direct resource more effectively throughout the attraction process, including, but not limited to:

- targeting universities and academic departments;
- evaluating the impact of campus activity and schools outreach; and
- the iterative use of live recruitment data to inform approaches to promoting SEB diversity.

In order to ensure that resources are effectively targeted to achieve maximum impact, data should be used more effectively to inform the attraction strategy.

Students who are engaged at Fast Stream campus events should be monitored and tracked to assess the diversity of audiences reached through campus events, and to evaluate their effectiveness in converting expressions of interest into applications. This intelligence can be used to gauge where activity is supporting the attraction of lower SEB students and to guard against any activities that might be exacerbating the problem (such as disproportionally offering guidance and support through the application process to applicants who need it least).

Iterative use of application data is required to monitor application rates from specific universities, and this needs to be benchmarked against national datasets and historical recruitment data to identify "cool spots" within the recruitment cycle to inform attraction strategy; it should not serve simply as a retrospective piece of analysis. With the greater flexibility that comes with more effectively engaging the workforce, the Fast Stream should be able to design and deliver its attraction strategy in a more formative way based on live application data.

Targeting of campus activity is currently directed, in part, by university diversity indicators (and is a feature of good practice) but the data are not sufficiently robust and only include analysis at the institutional level, rather than by specific faculties. The Fast Stream university targeting strategy should have three strands:

- \circ $\;$ Feeding existing pipelines that are contributing to SEB diversity.
- o Addressing pipelines that have contributed to SEB diversity in the past, but are in decline.
- Developing new pipelines to contribute to SEB diversity.

The first two approaches should be informed by historical candidate data. In order to identify new pipelines, national datasets can be usefully analysed to identify target institutions and particular faculties (to support the recommendation below), including UniStats data which detail student outcomes and diversity data obtained via the Higher Education Statistics Agency (HESA).

Pupils engaged through schools outreach interventions should also be monitored and tracked to assess the diversity of audiences reached, and to evaluate the impact of the activity on combating perceptions about the Civil Service, generating enthusiasm for working there, and on specifically generating applications to the Fast Stream. This should be done through a standardised pupil feedback form, the data from which can be collated and assessed on an annual basis. Schools outreach work should also be more robustly targeted using national datasets on deprivation (determined through e.g. FSM eligibility, IDACI rankings and progression rates to higher education). The Fast Stream can create a simple composite measure from these indicators and should target schools in the top quintile for disadvantage.

KPMG have developed a data-driven tool to direct their campus attraction to a more diverse population of high achievers than ever before. The firm is also able to closely monitor the impact of its campus activities to build an evidence base about where resource can be most effectively directed.

Teach First collect data to analyse key recruitment trends and ensure they are attracting candidates from diverse backgrounds. This feeds into a tool called a 'Diversity Tracker' and creates a context for their anonymised equal opportunities monitoring – from when candidates take part in campus events to when they apply. The data collected are analysed regularly by the graduate recruitment team to monitor progress. As well as highlighting these groups as soon as they register their interest, the Diversity Tracker helps to identify the shortcomings in the process of attracting from these talent pools. The data populates the Diversity Tracker and individual recruitment reporting tools. Teach First can then regularly extract intelligence to understand how different groups perform at each stage of the process and help them to develop methods to provide support to candidates, enabling them to perform to their full potential.

Members of the leadership team belong to a Diversity panel within graduate recruitment and are accountable for reporting using the Diversity Tracker alongside inputs from across the wider team to create strategic actions for the department. They share best practice across the organisation, through an organisation-wide diversity steering group, with a view to encouraging other departments to adopt it. The management team have embraced such tools as a way of effectively evaluating monitoring methods. In addition, they monitor their target universities, comparing figures against data from the Higher Education Statistics Agency, to identify their reach versus the overall spread of students. These data help individual

recruiters to overcome challenges in attracting candidates and improving success rates at different stages of the selection process.

RECOMMENDATION (F)

Increase the availability and visibility of particular types of information, and push key messages that will support lower SEB applications.

- Increase the availability and visibility of information about the actual application process and practical guidance on approaching it. Develop a short film that outlines the whole process, and helps to break down perceptions of the process being intimidating. The film should feature serving members of the Fast Stream from diverse backgrounds.
- More concise information should be available on the Fast Stream homepage about what the Fast Stream is looking for in candidates, i.e. how it defines "talent". This should be based on the Civil Service Competency Framework, but needs to be more engaging, easier to digest, and encouraging to lower SEB applicants who are particularly unclear about this.
- Create online content that reflects the activities being delivered on university campuses, including skills sessions and information about the application process, in order to make these opportunities available to students who cannot attend events.
- Since SEB is less 'visible' than some other diversity indicators, in promotional content that
 includes a diverse range of Fast Streamers (e.g. video, online case studies) presenters should
 reference their background (such as school, university attended, subject, and/or region of
 residence).
- Introduce a series of news related content that connects the work of Fast Streamers to current
 national events. This will help to broadcast messaging that is relevant and dynamic, and help to
 break down some of the perceptions about the Civil Service. This media can be informal,
 featuring blogs from Fast Streamers, updates on social media channels, and short self-recorded,
 posted messages about how their day at work has connected with national events.
- Emphasise those drivers of employer attractiveness that are typically prioritised by lower SEB students (as detailed below). This can be done to a great extent through existing channels. These aspects may be especially important during communications at registration, above, given the high proportion of lower SEB candidates who drop out at this stage.

- o Equal opportunity
- o Employer leadership style
- o Work/life balance
- o Being appreciated at work
- o Job security

RECOMMENDATION (G)

Regarding the diversity internship programme, clarify and publish the SEB eligibility criteria, and ensure robust systems are in place to track candidate progression from all early engagement activities to the Fast Stream. At the earliest opportunity, explore with the Civil Service Commission the evidence base for allowing interns to pass straight to the assessment centre on the basis of having successfully completed an internship.

Paid internships are a route through which many employers are promoting SEB diversity. Some employers are more willing to take "risks" with internship routes, and many candidates are afforded an opportunity to demonstrate potential in a way that might not be possible in the traditional recruitment and selection process.

The Fast Stream Summer Diversity Internship Programme (SDIP) is exclusively for under-represented groups: SEB; BAME; and those identifying as disabled. There are very few schemes of this nature in the UK (The Metropolitan Police is the only other example we have observed). To date, however, the programme appears to have had a modest effect on SEB diversity in the Fast Stream, though data are unavailable on rates of progression to application. The SEB diversity of the internship population has historically been weak (focused more on BAME candidates) and, unlike most other employers, candidates who have successfully completed an internship are currently made no allowances in the selection process.

As the internship programme increases in size, it will become increasingly important to:

- ensure robust systems are in place to track interns, so that application and success rates amongst this population can assessed; and
- make the SEB eligibility criteria for the programme specific; the current phrasing around socioeconomic eligibility is vague and lower SEB candidates may not be applying on the basis of not knowing if they can do so.

It is important to improve the data collection to make an evidence-based decision about whether interns are required to undergo the full selection process for the Fast Stream. The estimated conversion of interns to successful Fast Stream candidates is 10-20%, which is lower than the sector average. The programme is for under-represented groups and, as such, we might expect a lower success rate at application. However, The Fast Stream offers interns a coaching programme, designed to support their ambitions and potential applications to the graduate programme.

The Fast Stream needs evidence on the number of interns who do not make applications (and why this should be), how many of the candidates who do apply fail to secure a place on the programme, and at which stage these candidates fail in the selection process. If it is the case, for example, that interns who demonstrate high performance in role and apply to the Fast Stream are unsuccessful because of the online numerical and verbal reasoning tests, this could be evidence for suggesting that they bypass this stage, and complete the online competency questionnaire, and situational judgements tests, particularly since we know that these tests have less bias towards higher SEB candidates. We will work with the Civil Service Commission to discuss the evidence base that would be required in order to introduce such policies.

RECOMMENDATION (H)

Undertake further research to understand why there is a high drop-out rate at the registration stage among candidates from under-represented groups.

A large proportion of candidates from lower SEB backgrounds (44%) choose not to progress beyond the registration stage. There are a large number of candidates within this population who also have characteristics that predict success throughout the selection process. Converting greater numbers of registrants into applicants from lower SEB backgrounds is crucial – via strategies such as a digital marketing campaign targeting all registered candidates – and has the potential to make a significant difference.

Other examples could include pro-active video advice and support in relation to the application process, and links to alumni connections via networking websites such as LinkedIN. It is also an opportunity to deliver segmented marketing content, including promoting regional assessment centres, specific campus events, and differentiating the presentation of role models. This will be important in trying to address the fact that many lower SEB students may not have access to the same advice, role models and support as higher SEB students.

RECOMMENDATION (I)

Review existing engagement with schools, working towards even more coordinated efforts, to raise aspirations amongst young people and to combat preconceptions of the Civil Service. Develop resources and outreach modules that can be delivered remotely by teachers, and Fast Streamers, in schools and colleges.

Schools outreach work is potentially significant as preconceptions about the Civil Service that deter applicants can be formed early on. It is even more important in relation to lower SEB candidates, since they are less likely to come into contact with engaging role models from the Fast Stream to challenge negative preconceptions. The Fast Stream schools outreach work is, however, at present making little contribution to changing perceptions of the Civil Service, and having no observable effect on SEB diversity in the Fast Stream; there is no operational budget to support this important work, it is modest in scale, and there is no monitoring and tracking of participants.

A solution to the funding challenge is to develop resources and outreach modules that can be delivered remotely by teachers, and Fast Streamers, in schools and colleges. Fast Streamers should lead on the production of these materials in partnership with teachers and school careers services.

- <u>Resource Pack:</u> Develop a resource pack for schools that would enable teachers to explore the Civil Service in the classroom, for example including information, real life examples, and games to explore the skills needed to succeed in the Civil Service. These resources need to be designed to place the needs and interests of pupils at their centre. They also need to be designed in a way that makes them appealing, easy to use, and relevant for teachers, for example by highlighting how they align with key learning objectives at particular key stages and so reinforce curriculum content and skills.
- <u>Outreach Module:</u> Embed a high quality session (along the line of Dunchester's Millions or the Civil Service Spending Challenge, previous outreach modules designed to engage students) in outreach programmes. Delivering this session to groups of pupils from lower SEB backgrounds could be a requirement for current Fast Streamers, helping to meet both corporate and delivery objectives. There is significant evidence that people closer in age to young people are more relatable and therefore more effective role models.

It is critical that a careful strategy is developed to identify the best route to market for these resources. The Civil Service is uniquely well placed in that the content of the work aligns with issues of politics, citizenship, justice and topics that are immediately relevant to young people. Therefore, finding alignment with learning objectives in the curriculum is relatively easy. From the point of view of resourcefulness, working in partnership with others would enable scale with minimal cost, provided the resources are designed both to engage young people and meet learning objectives. The focus should be on how policy is made and delivered, with promotion of the Fast Stream coming only at the end. In addition, current careers provision in schools is inconsistent and often low quality (as assessed by e.g. Ofsted, Gatsby Foundation); by providing resources to address this issue, both a policy goal and a recruitment need can be addressed. It would also be role modelling best practice in terms of employer engagement in the careers agenda.

This recommendation is expanded further, in the section relating to the wider civil service; it also builds on and complements the Prime Minister's recent announcement about the national mentoring campaign.⁵⁴

Barclays' LifeSkills is a major new programme designed to give young people access to the advice, support and opportunities they need to get ready for the world of work. It aims to improve the confidence, communication skills and employment prospects of young people through educational resources, online content, workshops, events and work experience. Barclays aim to help one million young people get ready for the world of work by 2015. There are already over 500,000 young people already engaged across the UK and over half of all secondary schools in the UK are currently taking part.

The programme includes: school visits and workshops run by Barclays volunteers; classroom-ready resources that teachers can download and use to equip students with a variety of practical skills, knowledge and understanding about the world of work; and online interactive content that students can access and use for independent study.

The activities are targeted with less advantaged schools, and the programme is divided into three modules: People; Work; and Money Skills.

- *People Skills* helps develop the key skills sought by employers, including self-awareness, selfconfidence and personal presentation. This module includes activities that look at communication, body language, workplace behaviour and developing self-motivation.
- *Work Skills* helps students embark on their career journey, developing their knowledge and understanding of career paths open to them. Activities include: CV writing; finding employment; networking skills; interview success; and enterprise.

⁵⁴ www.gov.uk/government/news/prime-minister-to-announce-new-generation-of-mentors-to-help-struggling-teens

• *Money Skills* educates students on how to make effective decisions around spending and saving, as well as planning. Activities include budgeting, managing a bank account, understanding payslips and personal finance terms.

Selecting Candidates

RECOMMENDATION (J)

Deliver a critical review of the way in which the Fast Stream defines and identifies 'talent', working towards more inclusive methods of identifying potential that have a clearer link to the strengths required to perform in the job. This review should account for the additional recommendations outline below.

Strategies aimed at increasing applications from lower SEB candidates could have counter-productive effects if they are not combined with a critical review of the way in which the Fast Stream defines and identifies 'talent'. The Fast Stream is undertaking a review of its selection processes, and specific thought should be given to:

- Reviewing the definition of talent with stakeholders. Selection tools in recruitment are fair when they are constructed on objective evidence and are as free as possible from biases that affect the precision of decision-making. However, as long as selection approaches are tightly focused on competencies that are most closely associated with candidates from more affluent backgrounds, the prospect of a more diverse SEB workforce is likely to be limited. There is nothing to be gained from encouraging lower SEB applicants into a system of selection where the probability of their success is so limited. Indeed, it is likely to exacerbate the lack of diversity and, within the literature, there is some challenge about the ethics of this practice⁵⁵. Similarly, it is in nobody's interests, least of all the candidate's, to employ someone to undertake a job that they cannot perform effectively.
- Shortening the length of the recruitment process. The Fast Stream recruitment process is significantly longer than the average length amongst peer employers (mean in the public sector is 11.5 weeks; Fast Stream is 18-31 weeks as a result of ensuring total meritocracy and ensuring that the last applicant has the same opportunity in the process as the first). This is likely having a disproportionally negative effect on lower SEB candidates; the dual effect is that many students are put off applying, and that candidates from lower SEB backgrounds who do apply are less likely to take the risk of not accepting job offers elsewhere during the process.

⁵⁵ A Qualitative Evaluation of Non-educational Barriers to the Elite Professions' (Ashely et al, 2015)

- Introducing at least one regional assessment centre for the 2016/17 cycle, and moving to a
 greater number of regional assessment centres in future years. The focus in the selection
 process on London is likely deterring some lower SEB candidates. Regional assessment centres
 would help to combat this, and also support in shortening the duration of the recruitment process,
 since putting candidates through the FSAC is one of the causes of the current duration. The NHS
 Leadership Academy recruitment programme, for example, has one assessment centre in
 London and one in Leeds.
- Adjusting or removing those aspects of the selection process that deliver significant adverse impact for those lower SEB applicants, as evidenced by the data analysis herein. This should include exploring the removal of the online verbal and numerical reasoning tests in their current form or, at least, place increased weighting on the online competency questionnaire, and the situational judgement tests. These have been shown in the analysis to have a less adverse effect on candidates from under-represented groups, including lower SEB. The primary objective is to deliver a focus on potential to perform, over previous experiences.
- Analysis of the impact of newly introduced assessment tools, including the situational judgement test and the move towards more strengths based interviewing.
- Exploring greater use of strengths based assessment⁵⁶ throughout the selection process, which has been shown to deliver a focus on potential over previous experiences. There is much evidence to show that candidates from lower SEB groups have less access to the opportunities and experiences from which to draw examples throughout the selection process. Competency interviews typically include a series of enquiries at the interviewer's discretion, which creates opportunities for unconscious bias. There is a building evidence base to show that the combination of capability and motivation, tested through this approach, is a strong predictor of future performance.
- Seeking to enhance candidate experience, and thereby engagement e.g. through gamification techniques, video assessment and the introduction of live acted scenarios. The introduction of interactive role-play exercises has been shown to deliver a focus on potential over previous experiences. The NHS Leadership Academy and Teach First both have positive experiences in this regard, allowing candidates to show their strengths in simulated exercises, typically using serving employees within the exercises to give it authenticity.
- Consideration of the diversity of the Fast Stream assessors, including SEB, age and occupational background; and

⁵⁶ https://jobs.theguardian.com/article/strengths-based-job-interviews-what-are-they-and-how-do-they-work-/ and see CAPP, for example: http://www.cappeu.com/482743

 Re-ordering the assessment centre exercises, primarily to ensure that the group exercise is not the opening assessment.

Nestlé have used strengths-based recruitment to remove their academic screening criteria and focus on assessment outcomes alone. As a result, 21% of the people they hired in the last cycle would not have been eligible under their old criteria. In 2015, Nestlé won three of seven AGR awards for 2015: Best School Leaver Strategy; Best Diversity and Inclusion Strategy; and the Best of the Best Award. The firm's vision was to reach out to a diverse talent pool and implement an assessment process that did not prevent talented individuals, regardless of gender, ethnicity, disability or socio-economic background, from progressing through the process. The approach was multi-faceted, and included using assessment data and insights to remove screening criteria which had been used previously (300 UCAS points and a 2.1 degree). This diversified the talent pool and enabled applications from a wider range of individuals, removing the narrow focus on individuals from a specific background.

Nestlé's experience was that candidates from higher SEB groups often out-perform their peers in competency-based assessment methods, as greater access to extra-curricular opportunities and professional networks provides experience to draw upon. They introduced strengths-based assessment tools, which consider the combination of capability and energy, providing better assessment of potential. Nestlé implemented a strengths-based strategy and define the indicators for success, identifying eight core strengths and numerical capability as key criteria. The assessments designed to measure these criteria include a Situational Strengths Test (SST) and Numerical Reasoning Test (NRT). These both use future-focused, hypothetical scenarios to assess a candidate's potential, rather than relying on past experience. Selecting a strengths-based assessment strategy has enabled candidates to demonstrate their potential, regardless of background or previous experience, and has resulted in a more diverse candidate pipeline. It was clearly demonstrated throughout the process that the assessment methods utilised do not favour or advantage any particular demographic group. The SST has supported the diversity and social mobility with no adverse impact shown across the diversity or social mobility measures:

- Free school meals / not = 38.9% / 38.7% pass
- Income support / not = 40.7% / 38.5% pass
- Parent attended university / not = 38.7% / 38.8% pass
- Fee paying school / state school = 38.5% / 41.2% pass

The NRT has supported diversity and social mobility with no adverse impact shown across the diversity or social mobility measures:

- Free school meals / not = 39.4% / 50.0% pass
- Income support / not = 43.3% / 49.6% pass
- Parent attended university / not = 50.4% / 47.0% pass
- Fee paying school / state school = 55.2% / 50.7% pass

Lessons for the Wider Civil Service

127. There are a number of lessons that the wider Civil Service can take from this report, and from our wider work in this area. Although the diversity issues faced by the Fast Stream are not as stark across the wider Civil Service, we also make recommendations that would also enhance practice more widely, and where there might be economies of scale to be realised in joining up practice across the Civil Service.

RECOMMENDATIONS FOR THE WIDER CIVIL SERVICE (K)

- Introduce the approach for monitoring SEB diversity for entry to Future Leaders Scheme, Senior Leaders Scheme, High Potential Development Scheme and Senior Civil Service (in 2016).
- ii. Ensure each department has a strategy and target for improving socio-economic diversity, with accountability at Permanent Secretary level (in 2016).
- Work towards a Civil Service wide SEB workforce census, using the approach outlined below, likely developing this in phases on the basis of the findings from (i) above (from 2017).
- iv. Dependent on the findings of (i), investigate the effect of SEB on progression within the Civil Service, including into the programmes outlined in (i) and, most significantly, the Senior Civil Service (from 2017).
- **128.** Effective data collection and analysis is critical to designing evidence-based responses to diversity challenges. As this research has demonstrated, it is vital that an employer has a sufficient understanding about the social patterning within its existing workforce, and understands possible barriers in the pipeline, order to generate an evidence base for possible policy interventions. Whilst an investigation of SEB at all levels of the Civil Service may be too ambitious in the short term, colleagues should monitor SEB diversity for entry to Future Leaders Scheme, Senior Leaders Scheme, High Potential Development Scheme and Senior Civil Service. In this way the Civil Service can assess the extent to which it is representative of the communities it serves, and how this representation might vary against a number of variables, such as band, location, role type, and government department. Since this analysis is dependent on collating data that can be compared with the wider population and, for parity, with

some other employer approaches (e.g. KPMG, Grant Thornton), we advise the collection of the following data points. These should be mapped against wider Human Resources data, including entry point, banding and against the following:

- Parental NS-SEC at age 14, using the reduced or self-coded method as outlined by the Office for National Statistics.⁵⁷
- Parental experiences of higher education.
- Type of school attended between the ages of 11-18.
- Receipt of free school meals.
- Highest qualification achieved.
- **129.** This is not to recommend that the Civil Service should not work towards implementing a workforce census, aimed at understanding better the social patterning of all of its staff. There are some recent examples of organisations that have delivered such work, including the **Royal Society**⁵⁸ and **Creative Skillset**.⁵⁹ We recognise that testing will need to be carried out to estimate response rates, and that the methodology for collection and analysis of data may be refined. Ultimately, though, these data will enable colleagues to explore the wider social patterning of the Civil Service, constructing the basis on which to design potential interventions, alternative entry routes, and further investigations around progression within the Civil Service a key part of which is access and progression beyond the Fast Stream.
- **130.** In many of our interviews, the broader issue of progression within the Civil Service was raised (getting ahead, once you've got in). There were a number of comments about a culture that can create barriers to progression for candidates from lower SEB backgrounds. Some of these comments were specific to the Fast Stream, but it was not described as a challenge unique to this programme. We have identified the need to collect progression data relating to Fast Stream candidates, but it would be extremely beneficial for the Civil Service to investigate the effect of socio-economic background on progression across all its staff, particularly into the Senior Civil Service. If the Civil Service is to increase its commitments to widening the SEB intake, and to nurturing talent, it needs to identify how these candidates perform and progress once in post, and foster ways of ensuring that they can excel.

⁵⁷ http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html#13

⁵⁸ https://royalsociety.org/~/media/Royal_Society_Content/policy/projects/leading-way-diversity/picture-uk-scientific-workforce/070314-diversity-report.pdf

⁵⁹ http://creativeskillset.org/assets/0001/0465/Creative_Skillset_Creative_Media_Workforce_Survey_2014.pdf

"I'm embarrassed to say I'm a Fast Streamer because of what the other people are like. So I don't say I'm a Fast Streamer. If you're straight from uni and in charge of ten or so people, [those staff] have probably spent a good few years to get up to the level that they are. The 'over-lording', "I'm a Fast Streamer so I'm better than you", breeds a lot of tension. I just say I'm here on a 6-month placement and don't say I'm a Fast Streamer."

(Successful candidate focus group, lower SEB)

- **131.** It is clear that a key issue that is deterring potential applicants from applying for the Fast Stream is a perception that the Civil Service is skewed towards those from more privileged backgrounds. Moreover, our investigations clearly showed that within the Civil Service itself, this perception is applied to those on the Fast Stream. This has a deterrent effect at different stages of progression and suggests that those both within and outside the Civil Service believe that application processes are likely to favour those from particular backgrounds. This potentially toxic perception needs to be addressed at all levels in order to unlock the full potential quality applicant pool, ensuring that the Civil Service both is, and is seen to be, meritocratic.
- **132.** Our investigations highlighted the importance of combating these negative perceptions of the Civil Service, which are established early. We make a recommendation about how the Fast Stream can contribute more significantly to this, by developing resources and outreach modules to be delivered in schools, and also by involving Fast Streamers themselves in outreach and attraction activities. However, there is a wider opportunity for the Civil Service to increase the ambition of this work, especially with the expected rise in Fast Track apprenticeship placements. Designing these sort of resources and activities with a wider focus on the Civil Service which includes specific insight into the Fast Stream will: increase visibility and understanding of the service *per se*; widen the pool of staff members available to undertake outreach work; and hopefully drive a greater number of high-quality applications from lower SEB candidates into the Service at every level.
- 133. In addition to Civil Service wide analysis and action, steps will also need to be taken at a departmental level. The particular culture, perceptions and challenges of driving a more diverse workforce differ from department to department. The perception of a Fast Streamer who runs a Job Centre in DWP is different from that of a Fast Streamer working in a Cabinet Office secretariat role; the challenges of diversifying SEB in the Treasury are different from those in HM's Courts and Tribunals Service. As a result, an approach that looks only at the Civil Service as a whole, and which is not rooted in the particular experiences and issues of departments, is unlikely to succeed. It is therefore essential that accountability for improving the diversity of the Civil Service sits not only with the Cabinet Office, but also with the permanent secretary of each

department. Each department should be required to understand the barriers that obstruct career progression, both perceived and actual, and to put in place action plans to address these barriers. Departmental targets and accountability would need to be carefully calibrated to ensure a balance between urgency and incentivising long term progress. In order to share lessons and challenges, to benchmark progress, and to explore the complexity of cross-departmental perceptions, we would encourage a forum for knowledge exchange between departments, led by the Cabinet Office. As part of the two -year action plan, we will explore with colleagues whether a new forum needs to be established, or if an existing group can provide this function.

134. The Fast Track apprenticeship programme has not featured as part of this research, though we have made some specific recommendations in relation to this – specifically around monitoring SEB amongst candidates, and ensuring that there is a joined up, targeted approach to school outreach work that breaks down perceptions of the Civil Service and also promotes the various entry routes available. Fast Track should also become a feasible entry route into the Fast Stream (we understand that this has already taken place in at least one instance), building opportunities to access the development programme for talented candidates who may have not chosen to attend university.

Closing Remarks

- **135.** There is a strong level of support for the work the Fast Stream has already undertaken to support diversity, and wide recognition that its recruitment processes are well developed. This report will help to shed light on where further development is needed and can have greatest impact, and will pave the way for the Fast Stream to diversify its workforce successfully. There has already been significant progress in some areas, and the leadership and sense of purpose in the Fast Stream suggests that this progress can be sustained if resource is directed effectively.
- **136.** In any report of this kind there are likely to be important points for discussion and clarification. We understand the complexities of introducing change in an organisation as large as the Civil Service, and particularly in the area of diversity. However, we are excited by the enormous potential for wider gains that can be enjoyed if that change is successful. We view this report as a starting point for discussion and debate which will ultimately result in the design and implementation of programmes that will have a positive, and lasting, impact on the recruitment of talent not just for the Fast Stream, but for the Civil Service more widely. Furthermore, we are confident that there is an opportunity for the Fast Stream, and the Civil Service, to become a leader in employment practices to promote SEB diversity. If the Civil Service is able to provide dynamic, innovative and evidence-informed direction that other employers can, and will want to, follow, then the potential gains for the social mobility of the professional workforce of the UK would be considerable.
- 137. The production of this report is therefore not the end of the process; the Bridge Group has also worked with Fast Stream colleagues to translate these recommendations into a two-year action plan. This plan includes an operational scheme detailing specific actions plotted against a practicable timeline, with resource implications (both staff and finance) at each stage and a framework for evaluating success. We also hope that, where we are able to share elements of this report more widely, its insights will help further the national debate about social mobility. The findings of this report and also the gaps identified in the data and the issues highlighted for further research have implications for the way all professional firms could recruit for diversity and excellence, and have the potential to help us to move towards a more sophisticated understanding of what a diverse and socially mobile workforce might look like, and the path to making this a reality.
- 138. In undertaking this work we have required the engagement and support of a wide range of internal and external Fast Stream stakeholders. In recognition of their invaluable contributions we offer our sincere thanks to all of those individuals who have generously provided their time, their thoughts and insights. Without their help it would not have been possible to draw together our research, or this report.
Appendices

Appendix A:	Research specification
Appendix B:	Interview protocol and topic guides
Appendix C:	Glossary of acronyms
Appendix D:	Trendence market insights methodology
Appendix E:	High Fliers market insights methodology
Appendix F:	Notes on data challenges related to the transfer of data for analysis and its format, and on variation from the annual Fast Stream reports
Appendix G:	Variables analysed
Appendix H:	Spearmen rho correlation tables
Appendix I:	Correlation between previous attainment and test scores
Appendix J:	SEB measures currently used within the Civil Service
Appendix K:	Summary of figures

Appendix A: Research Specification

Outlined below is the specification for the research

Methodology

- **A.** A literature review of research in this area, and an audit of notable practice being undertaken amongst graduate recruiters to drive positive changes in relation to social mobility. This will include detailed analysis of publications from the Social Mobility and Child Poverty Commission and previous works led by Alan Milburn. This work will ensure that our research focus is situated within the context of the wider policy and practice in this area. This review will build on the work undertaken by Durham University in relation to the Sutton Trust Evaluation Framework, and the Sutton Trust review by Durham University on the research supporting widening university access for more disadvantaged pupils.⁶⁰ As a result of the review, we will draw out key aspects of the evidence base and relevant learning to provide intelligence in the final report, and to inform our research. We will provide insights into good practice from other graduate employers, including where they apply this good practice to their wider workforce.
- B. Desktop research to assess existing policies and practices of the Civil Service Fast Stream, in relation to marketing, assessment and recruitment. This research will contextualise our interviews and data analysis, and will enable us to deliver an assessment of the metrics currently used by the Civil Service to measure socioeconomic background.
- **C.** Quantitative analysis (carried out by CEM) of the Fast Stream recruitment data, to interrogate the potential effect that applicants' characteristics (specifically socioeconomic factors) have upon applicant outcome at each stage of the recruitment process (where socio-economic data is collected, i.e. from online tests). Secondary aims of the analysis will be to explore variation between applicants from different socioeconomic backgrounds and their measured competencies at different stages of the recruitment process, and where variations are found, exploring these further in terms of interaction with other factors and intersectionality. The work will include a statistical review, potential further exploration of relevant findings where necessary, and a report of the methodology used and interpretation of findings. The review will include a descriptive overview of the data and suitable analyses. Analysis methodology will be determined once the data are received; we anticipate that regression-based models will be the key analysis in determining the effects of multiple characteristics on applicant outcomes.

⁶⁰ www.suttontrust.com/researcharchive/evaluating-access/

D. Qualitative analysis to provide a richness of data that is hard to obtain through quantitative research alone. Through semi-structured in-depth interviewing, set within a humanist framework, we will drill down into the perceptions and understanding of key stakeholders and draw out deeper learning. By cross-referencing these data against the outputs of targeted focus groups, we will establish a sharper focus on the differential impact of the Fast Stream recruitment stages on social mobility.

The interviewee set, identified through a purposive sample, will comprise: up to four senior civil servants who are invested in the success of the Fast Stream recruitment process; up to three members of the Fast Stream recruitment team; and up to fourteen recent recruits. All interviewees will complete a pre-interview standardised questionnaire before taking part in their individual conversation with the researcher.

Each interview will be carried out in a private room on the site of the interviewee's employment, and digitally recorded for transcription purposes. A company specialising in this service will transcribe each digital audio file verbatim, and then data will be cleansed and anonymised by the researcher. The data will then be coded within QSR Nvivo analysis software, and an initial analysis will be undertaken.

We will also ensure that the views and experiences of colleagues across the Fast Stream team are accounted for in our analysis. We will liaise with the Head of the Civil Service Fast Stream to identify the most appropriate approach.

The findings of this initial qualitative analysis will inform the construction of discussion topics for up to five focus groups with recent recruits. Each focus group will consist of up to 6 recent recruits, selected through purposive sample, and expressly excluding those who took part in an in-depth interview. The focus groups will be managed by a single facilitator. Final qualitative analysis will cross reference data collated through the in-depth interview and the focus groups, and will then be used to triangulate findings with the quantitative analysis and desk research.

We will also run three focus groups with eligible people from lower socio-economic groups (i.e. university students in the later parts of their studies). These groups will be identified by working with partner universities, and we will explore perceptions of the branding of the Civil Service Fast Stream and levels of awareness among eligible people from lower socio-economic groups.

Project Timeline and Deliverables

- Regular updates (format to be agreed) to Civil Service Resourcing that will outline progress, key milestones, risks and issues, and including an interim report on 1 September 2015.
- **A substantive report** providing a challenging and insightful diagnosis of why eligible people from a lower socio-economic background continue to be underrepresented in the

Fast Stream, detailing observations, analysis and specific recommendations in connection to the research questions outlined above. The report will cover the areas outlined in the research questions and approaches outlined above, with the recommendations underpinned by robust intelligence to help ensure that recruitment to the Fast Stream is on the basis of merit, fairness and openness from the broadest pool of potential applicants available, regardless of background. We will highlight where the Civil Service is already adopting best practice, and advise on other measures the Civil Service could adopt in the future.

- **Presentation of the report to the Fast Stream recruitment team**, with an opportunity for questions, clarification and discussion of key areas.
- **A resulting two-year action plan** to enable increased representation whilst still meeting the Civil Service Commissioners' recruitment principles, which will include:
 - An operational scheme detailing specific actions plotted against a practicable timeline, outlining dependencies and resource implications (staff time and finance) at each stage. This will include specific interventions to generate increased applications from people from lower socio-economic backgrounds, based on our assessment of 'influencers' of young people from lower socio-economic backgrounds and the value of the schools and universities outreach work currently being delivered by the Civil Service
 - A framework for evaluating the success of the action plan, including enhanced monitoring of relevant socio-economic indicators and ongoing evaluation of the impact of specific actions within the plan, including successful progression within the Fast Track scheme and retention within the Civil Service
 - A formal presentation to the Head of the Civil Service, Chief Executive of the Civil Service, and the Head of the Fast Stream on our findings and recommendations once the work is completed and approved. This will also include insights into how particular findings from this research may be applicable to the wider Civil Service.

Appendix B: Interview Protocol and Topic Guides

Interview purpose and protocol

The interviews are aimed at generating data to inform our research in the following areas:

- What are the perceptions of university students from lower socio-economic groups (applicants and non-applicants) in relation to the Fast Stream programme; what, if any, are the barriers to application amongst this group?
- What are the perceptions about the possible differential impact, and the size of the effect, for applicants from lower socio-economic groups at each recruitment stage (i.e. to add qualitative information to better understand our findings from the quantitative analysis)?
- What practicable adjustments could be made to branding, marketing, assessment and recruitment in relation to the Fast Stream programme, in response to this evidence base?

The purpose of the interviews and focus groups is to generate data which offer a deeper insight into the perceptions, thoughts and experiences of Civil Service Fast Stream (the FS) stakeholders. The interviews steer clear of standardised questions in order to create a framework that can accommodate personal narratives and tangential stories within the data collection. In this way the data gathered are rich, personal and offer a level of insight that will help to contextualise our analysis of the quantitative data.

A wide range of literature regarding the Fast Stream programme, and wider employer practices, have been studied to underpin the interviews and, in the case of prospective applicants, we will set students' views in the context of the marketing insight from High Fliers and Trendence.

Inviting and selecting participants

<u>Recent hires</u> (joiners in 2014 and 2015) will be contacted by the FS team directly, using the proposed communication below. We will aim to undertake 8-10 of the 14 individual interviews with recent hires from lower (i.e. Routine/Manual or Intermediate) NS-SEC groups; three of the five focus groups will exclusively comprise hires from lower NS-SEC groups. On the basis of the information here, PW will circulate a message to all 2015 and 2014 hires inviting volunteer participants. These volunteers will then be matched against their NS-SEC group and a purposive sample (i.e. achieving a balance of NS-SEC background, gender and university attended) will be selected for focus groups and individual interviews.

Invitees for 1-1 interviews will have the option to accept or decline the invite. Volunteer interviewees will be able to use an online form to select a preferred slot. Focus group invitees will have the option to accept or decline the invite.

<u>Unsuccessful candidates</u> from 2015 (who did not withdraw their application) will be contacted by the FS team directly, using the proposed communication below. On the basis of the information here, PW will send a message out to last year's unsuccessful candidates, who are in lower NS-SEC groups. We will select a purposive sample from volunteers. We will then be in contact directly with candidates to arrange 30-minute phone calls, which will be coded, but not transcribed.

<u>Prospective applicants</u> will be invited directly by the Director of Careers and/or Director of Widening Participation in each of the chosen universities, using the proposed communication below.

Running interviews/focus groups

Joining instructions will be sent to all participants ahead of their participation date/time. These instructions will include a reminder of the context of the research, details of their participation (location, date, time etc.) and pre-participation questionnaires to be completed and returned to the researchers (except for unsuccessful applicants who will be asked this information during their interview).

Each interview/focus group will use the interview topics listed below as a framework upon which to build the discussion (refinements may be made to the focus group areas, as a result of the one-to-one interviews). Interviewers will work to ensure each topic area is discussed, though the specific questions used will be determined at the interviewer's discretion in response to the narrative direction chosen by the interviewee. The interviewers are experienced in this methodology and capable of steering the discussion back to the framework structure as necessary.

Confidentiality

All interviews and focus groups will be run by experienced researchers who are independent of the FS. As part of the invitation to participate, the joining instructions, and the context setting at the start of each interview/focus group, participants will be assured that their views, opinions and comments will not be attributed to them as individuals. This assurance forms an important part of the trust relationship between researcher and participant and helps to ensure a greater level of insight and openness in the data.

Coding and analysing data

Collated data will be coded (using QSR Nvivo software in the case of fully transcribed interviews) to identify themes and patterns. As interviews progress, these themes/patterns may be used to shape subsequent interviews as a way of cross-checking and sense-checking potential issues. For example, if a particular interviewee expressed strong views questioning the validity and reliability of a particular element of the assessment/selection process, this can be explored in subsequent interviews within the existing methodology.

Summary of Interviewees

SCS and CSR In depth interviews n=14

Successful FS applicants In depth interviews (higher SEB) n=4 In depth interviews (lower SEB) n=12 2 x Focus Groups (higher SEB) n=12 3 x Focus Groups (lower SEB) n=14

Unsuccessful FS applicants In depth interviews (lower SEB) n=11

<u>Prospective FS applicants</u> 6 x Focus group (lower SEB) (KCL, Leicester, LSE, Westminster, York) n=38

Note that for the latter category, the data collection was placed alongside the large-scale, bespoke marketing insights gathered from Trendence and High Fliers, as referenced in the report.

Interview topic areas

The details listed below indicate the starting points for interview discussion; they do not represent a *complete* list as follow up questions and/or new topic areas may be explored depending on the narrative journey taken by the interviewee. There are no standardised questions within this methodology in order to create a more open and conversational dialogue and, by extension, generating deeper data.

New hires

Context setting

Interviewer to explain the following: independent researchers; anonymised data; seeking free and open views; interested in your story and your opinion (no wrong answers); investigating attraction, application and recruitment in relation to socio-economic diversity. We will also briefly explain the issue and theory around social mobility.

Pre application / Motivation for applying

- How did you become aware of the Civil Service Fast Stream (the FS)?
- What other programmes did you consider (within and outwith the FS)?
- What attracted you to the FS and your chosen programme in particular?
- Were you aware of peers who were also applying?
- (Thinking back to before you applied) describe what you thought a 'typical' FS applicant might be like
- How influential was the salary in your decision-making process?
- Prior to your application, were you in contact with anyone who was currently, or formerly on the FS, or had you undertaken e.g. work experience in the Civil Service?
- Did you have any direct contact with the recruitment team at the FS prior to application? How was this experience?

Application steps

- What support did you receive (if any), and from whom, during the application process?
- Chronological walk through of application flow chart, identifying perceived barriers/concerns/issues at any/each stage
- How did you feel at each stage of the recruitment process?
- Which was the hardest step?

- Did you recognise what was being tested and why?
- Were you tested on anything that you thought was not relevant/important?
- If applicable, how did the process compare with any other graduate recruitment schemes that you were engaged with?
- How did the application process focus on a) your past achievements, and b) your future potential?
- What do you think is the definition of 'talent' within the FS?
- Are there any additional forms of support, or prior experiences, that you think would have helped you be successful in the application process?
- Can you identify one change that you would make to the overall application process (including marketing, assessment, and support) to make it fairer?

Wider views

- To what extent do you think the experiences you are describing are typical for FS applicants?
- During the application process, what interaction(s) did you have with other applicants?
- How would you describe the applicant cohort (socio-cultural-economic-other)
- Describe a 'typical' fast stream applicant

Reflections on first year of work (if applicable)

- How close has your experience matched your expectation?
- What has been different, and how?
- Earlier you described a 'typical' FS applicant looking back now, how accurate was that assumption? What is different?

Final reflections

- What question(s) were you expecting me to ask that I didn't?
- Considering the topic of our interviews, is there anything you'd like to discuss that we haven't covered?

Unsuccessful applicants

Context setting

Interviewer to explain the following: independent researchers; anonymised data; seeking free and open views; interested in your story and your opinion (no wrong answers); investigating attraction, application and recruitment in relation to social mobility.

Background data

(joining instructions to include explanation confirming that these basic questions will be asked at the start)

- Gender
- Age
- Year of application
- Programme of study at University
- Which fast stream programme did you apply for?
- Which other fast stream programmes did you apply for (if any)?

Pre application / Motivation for applying

- How did you become aware of the Civil Service Fast Stream (the FS)?
- What other programmes did you consider (within and outwith the FS)?
- What attracted you to the FS and your chosen programme in particular?
- Describe what you thought a 'typical' fast stream applicant would be like

Application steps

- What support did you receive (if any), and from whom, during the application process?
- Chronological walk through of application flow chart, identifying perceived barriers/concerns/issues at any/each stage
- How did you feel at each stage of the recruitment process?
- Which was the hardest step?
- Did you recognise what was being tested and why?
- Were you tested on anything that you thought was not relevant/important?

- If applicable, how did the process compare with any other graduate recruitment schemes that you were engaged with?
- How did the application process focus on a) your past achievements, and b) your future potential?
- What do you think is the definition of 'talent' within the FS?
- Are there any additional forms of support, or prior experiences, that you think would have helped you in the application process?
- Can you identify one change that you would make to the overall application process (including marketing, assessment, and support) to make it fairer?

Wider views

- To what extent do you think the experiences you are describing are typical for FS applicants?
- During the application process, what interaction(s) did you have with other applicants?
- How would you describe the applicant cohort (socio-cultural-economic-other)
- Describe a 'typical' fast stream applicant

Final reflections

- What question(s) were you expecting me to ask that I didn't?
- Considering the topic of our interviews, is there anything you'd like to discuss that we haven't covered?

Prospective hires

Context setting

Facilitator to explain the following: independent researchers; anonymised data; seeking free and open views; interested in your thoughts and opinion (no wrong answers); investigating promotion, application and recruitment in relation to social mobility.

Perceptions of Fast Stream

- Exploring awareness when did you become aware? How?
- Describe the FS
- Exploring promotion/advertising level of attractiveness what works, what puts you off
- Which other schemes/programmes (non FS) are being considered? Where would the FS 'rank'? What makes the FS/others more/less attractive?
- Is the FS for 'someone like you'? Why/Why not?
- What is it about 'you' that does/doesn't fit with the FS?
- Describe a typical FS applicant what do you think they might be like? What sort of person would be attracted to the FS and why?

Understanding of application process

- How does the application process work? Please describe it to me
- (facilitator to explain flow chart if necessary to prompt discussion and explore comprehension)
- Which would be the hardest step? Why?
- What would be most daunting? What do you think they are assessing at each stage?

Final reflections

- What question were you expecting me to ask that I didn't?
- Considering the topic of our focus group (social mobility), is there anything you'd like to discuss that we haven't covered?

Appendix C: Glossary of acronyms

AGR	Association of Graduate Recruiters
BAME	Black, Asian and Minority Ethnic
BPR	Building Productive Relationships (BPR)
CAI	Changing and Improving (FSAC competency)
CAP	Collaborating And Partnering (FSAC competency)
СТ	Constructive Thinking (FSAC competency)
CWI	Communicating With Impact (FSAC competency)
DFR	Driving For Results (FSAC competency)
DM	Decision Making (FSAC Competency)
DVM	Delivering Value for Money
FSAC	Fast Stream Assessment Centre
FSM	Free School Meals
HESA	Higher Education Statistics Agency
IDACI	Income Deprivation Affecting Children Index
KS4	Key Stage 4 (GCSE and equivalent)
KS5	Key Stage 5 (A level and equivalent)
LAC	Leading And Communicating (FSAC competency)
LAI	Learning And Improving (FSAC competency)
MED	Making Effective Decisions (FSAC competency)
MQS	Managing a Quality Service (FSAC competency)
NRT	Numerical Reasoning Test
NS-SEC	National Statistics Socio-Economic Classification
ONS	Office for National Statistics
POLAR3	Participation of Local Areas classification (third update)
SDIP	Summer Diversity Internship Programme
SEB	Socio-Economic Status
SST	Situational Strengths Test
ST13	Sutton Trust 13 (most highly selective British Universities)
ST30	Sutton Trust 30 (most highly selective British Universities)
ULN	Unique Learner Number
WIP	Whitehall Internship Programme

Appendix D: Trendence Market Insights Methodology

The Trendence Survey is an annual study of UK University students, conducted by the Trendence Institute. The key methodological points are explained below:

- Sample size: 44,070 respondents represented in the 2015 study.
- Coverage: 126 Universities are represented. Respondents come from every year group and every level of study.
- Collection Technique: Online survey.
- Marketing Strategy: sample is collected via University Careers Service partnerships and an in-house marketing campaign.
- Weighting: findings are weighted by University population figures (soured from HESA).
- MRS and ESOMAR Accredited.

The Trendence study collects Diversity information from its respondents. That data have been used to perform strategic analysis for the Civil Service, some parts of which feature in this report. The key points of this Socio-Economic analysis are:

- Variables: three socio-economic variables used:
 - Question 1: Before going to university, were you educated in the state sector or the private/independent sector?
 - Question 2: Did any of your parent(s) or guardians complete a university degree course or equivalent (e.g. BA, BSc or higher?
 - Question 3: Did you receive any means-tested funding (i.e. a maintenance grant) during the course of your education?
- Use of Variables: when performing analysis for the Civil Service **Trend**ence used these variables to construct a 'Higher Socio-Economic Group' and a 'Lower Socio-Economic Group'
 - Construction of Variables: when constructing these Socio-Economic Groups a logical AND operator was used, requiring a respondent to qualify for all 'Higher' socio-economic factors in order to fall into the 'Higher Socio-Economic Group,' and all 'Lower' socio-economic factors to qualify for the 'Lower'.
 - Sizes of Groups: of the 44,070 respondents, the percentages that fell into the Higher and Lower Socio-Economic Groups were as follows:
 - Higher Socio-Economic Group: 4.9%
 - Lower Socio-Economic Group: 20.9%

Appendix E: High Fliers Market Insights Methodology

[Noted in the High Fliers Report]:

The UK Graduate Careers Survey 2015 is the largest and most-comprehensive annual review of graduate recruitment at the UK's thirty leading universities, produced by High Fliers Research.

There are two separate parts to the survey programme – *Employer Research* which is conducted specifically for each of the individual employers participating in the survey and *Graduate Recruitment Research*, which assesses the latest career expectations & aspirations of final year students and provides a definitive record of how finalists from the 'Class of 2015' have conducted their search for a graduate job during their time at university.

This report presents the results from the *Employer Research* completed for the Civil Service Fast Stream during the 2014-2015 graduate recruitment season.

The first section of this research provides in-depth analysis of the Civil Service Fast Stream's graduate recruitment literature, website, advertising and Facebook page, based on feedback from 120 final-year student job hunters from a wide range of different degree disciplines who took part in structured on-campus research groups during November 2014. Similar exercises took place for the sixty other employers participating in the survey programme.

The second part of the report examines student job hunters' views and experiences of the Civil Service Fast Stream, through a series of specially-commissioned questions that were included in online research questionnaires in early December 2014. Finalists who took part in this research were drawn from over 2,000 job hunters from the thirty UK universities featured in the survey programme who were planning to join one of fifteen key career areas after graduation.

Final-year student job hunters who completed commissioned questions about the Civil Service Fast Stream were actively looking for graduate jobs interested in all career sectors, and then cut to show specific results for those interested in working in the public sector, as well as male and female respondents, ethnic minority final year students and finalists of low social mobility.

Appendix F: Notes on data challenges related to the transfer of data for analysis and its format, and on variation from the annual Fast Stream reports.

Throughout the course of this analysis a range of challenges have required considerable work to resolve; it is important to note the limitations of the analyses. The key issues are outlined below, provided to offer colleagues insights for future analysis.

- Key information and candidate records were missing from the original datasets; specifically, FSM status, School Type, and a signifier of acceptance on to the programme. These data were subsequently supplied, matched and checked against the original dataset, which caused significant delays.
- Significant work was required to recode many variables. The supplied datasets contained a wide range of specific variables. These are primarily suited to descriptive analysis, e.g. numbers of candidates and breakdown into categories (as used in the annual reports). However, data in this format are not immediately suitable for the more complex analyses required for this work and most of the variables needed to be recoded for the various regression analyses. One challenge in relation to this is different group sizes within a single variable (e.g. NS-SEC where some sub-groups were very small - making up less than 5% of the data - and others were much larger). This can introduce bias into analysis when variables are disproportionate, because we are comparing the outcomes of a large group of individuals (potentially tens of thousands) against a very small group (potentially hundreds); as a result we may not find any significant or meaningful effect sizes. An additional challenge is that much of the data are categorised (e.g. university attended or school type) and this cannot be easily interpreted by a statistical model such as regression analysis. It is necessary to input a logical order to each variable to compare information. The data in their original form were not presented in a way that could be used for regression analysis and other analysis (correlation, ANOVA, trend etc.). Where possible we recoded data to create clear binaries where they existed, and where necessary with disproportionate and wide ranging variables dichotomised the data into two comparable groups; e.g. in relation to the secondary variable of ethnicity a dichotomised version of this variable was created

which grouped all candidates into either a 'white' or 'non-white' category. This is a common method of recoding with research of this nature as this as it generates two clear comparison groups for analysis, and creates a better distribution of data to observe potential effects^{61 62}.

- The data were supplied without a metadata file which is needed to describe in the necessary detail each of the variable included in the dataset. This caused a number of difficulties, e.g. it was unclear how the missing data from withdrawals at the recruitment stage had been dealt with or how data containing errors were handled. This caused further delays as numerous enquires were made; these issues were clarified and eventually resolved.
- There have been changes over the years to the socio-economic data that is
 collected and the the way in which it is recorded. Most notably, information about
 candidates' receipt of FSM was not introduced until 2013, and a flagging system for
 identifying candidates' SEB (a composite score) was introduced in 2015. Since it was
 not reported distinctly, and for the purposes of consistent analysis across years, we
 were required to deconstruct this output score to identify candidates' NS-SEC status.

Consistency with the Fast Stream Annual Reports

The data in our analyses vary from the annual reports in these specific ways:

- Different methodologies for treating missing data. A number of variables had missing data, or contained data that should be treated as missing data, such as candidates completing sections inaccurately (e.g. year of birth reported as 1900 or 2012). In the case of NS-SEC, it is also not always possible to categorise the information that is provided, particularly where vague job titles are submitted.
- A different definition of applicant. Since it was found to be such a significant group in the early stages of our analysis, we regard candidates who register on the website (and submit all of their background information, including SEB) as applicants; in the Fast

62 Pabayo, R., Janosz, M., Bisset, S. & Kawachi, I. (2014). School Social Fragmentation, Economic Deprivation and Social Cohesion and Adolescent Physical Inactivity: A Longitudinal Study. PLOS one.

⁶¹ Brug, J. et al., (2014). Differences in beliefs and home environments regarding energy balance behaviors according to parental education and ethnicity among schoolchildren in Europe: the ENERGY cross sectional study. BMC public health. http://www.biomedcentral.com/1471-2458/14/610

Stream reporting only candidates who do this and go on to complete the online tests are regarded as such.

- Large amounts of the data have been recoded, so they is presented in different formats and groupings, partly for the purposes of applying regression and correlation analyses.
- Different methodologies for the treatment of duplicate applicants (i.e. candidates who apply to more than one programme in the same year, which is commonplace). We found that between individuals and across different reports there were different methodologies being reported and explained. In one circumstance we were informed that duplicate applications were not excluded and that this was the methodology for the Annual Report⁶³, in a technical note of a report we found that only applicants 'preferred' programme application was included. This inconsistency between reporting and treatment of data is important to note as it reduces the comparability with previous reports but also raises questions around the clarity and quality of data management. The approach we have taken in this report and analysis is that within each programme to treat each application by a candidate as unique but where broader analysis such as by year is being made we have excluded duplicate applications by one candidate where possible. Where candidates have applied in more than one year we have not excluded these, only where they may have made more than one application in the same year. Duplicate applications have been identified through the candidate ID number. The multiple counting of single candidates with multiple applications has the potential to affect analysis, but also has the potential to impact and introduce data errors when a clear methodology is not in place.

The following variables did not have missing data:

- Disability indicated
- Ethnic origin
- Gender
- University 'null' data were included with 'other'
- School
- Father education status and Mother education status

⁶³ Confirmed by CSR by email Sep 2015



Figure 41: Variables with missing data, and the rate of missing data (n= 138,795)

• FSM was another variable that had missing data, however, FSM was not recorded in years 2011 and 2012 so the table below shows the breakdown by the three remaining years along with the total and percentage of missing data.

FSM	% dataset missing			
2013	6.1%			
2014	6.9%			
2015	7.4%			

The inconsistency in the way missing data has been recorded and treated means it is difficult to distinguish between what is a true non-response, so that non-response or skip rates can be established, and what is missing or erroneous. A recommendation for the future would be a review of what data are being collected and how it is being recorded and the development of a clear and consistent methodology that all future users can adhere to and which outlines how missing data should be recorded and treated. This links to an earlier recommendation regarding the development of a metadata file which would outline how data should be recorded and treated.

Appendix G: Variables Analysed

Although the purpose of the analysis is to explore the effect of socio-economic background (primary variables) on candidate outcomes, we include a wider range of secondary variables in the analysis to explore the relative effect of these, and their interactions with the primary variables.

Figure 42:	Variables analysed and the way in which they are coded

Variable	Coding		
Primary variables			
Socio economic classification of parental occupation (NS-SEC)	 Binary. We have coded the NS-SEC category across the five classifications: Managerial/professional Intermediate occupations Small employers/own account Lower supervisory/technical Semi-routine Where (4 or 5) = low NS-SEC Where (1, 2 or 3) = higher NS-SEC We have also maintained the five categories for some pieces of analysis and for the descriptive analysis. 		
Free School Meal	Binary.		
Father and mother education status	Binary. Details of Father and Mother's levels were provided, these were already coded variable but were recoded as dichotomised variables based on whether parents had or did not have a degree.		
Secondary variables			
School Type	Already a coded variable - the type / fee status of the applicant's last school.		
Degree class	Natural order used		
Age	Grouped. This has been recoded from provided dates of birth and based on the year of application to provide the proxy categories below. Recent graduate – aged 21-22 Early career / mature student – aged 23-27 Mid-career – aged 28+		

Gender	Gender was dichotomised into a binary variable of 0 = male and 1= female, any applicants who responded with "prefer not to say" were excluded from analysis.			
Ethnic origin	Ethnicity was dichotomised into a binary variable of 0 = white and 1 = non-white. Binary, "white" and "non-white"			
Disability indicated	Binary. Where an applicant provides free response information suggesting a disability / special requirement we code this as 'disability indicated'.			
University attended	 Grouped. This has been recoded for analysis, grouping together universities: Oxbridge – Oxford and Cambridge Sutton Trust 13 (minus Oxford and Cambridge)⁶⁴ Sutton Trust 30 (minus Oxford, Cambridge, University of London institutions, and any ST13 universities)⁶⁵ HEI – All other Higher Education Institutions Overseas 			
UCAS points	Grouped. The range was wide, so the variable was recoded into bands.			

⁶⁴ Sutton Trust 13 group includes: University of Birmingham, Bristol, Durham, Edinburgh, Imperial College, London School of Economics, University of Nottingham, St Andrews, University College London, University of Warwick, York. Methodology available here: https://en.wikipedia.org/wiki/Sutton_Trust

here: https://en.wikipedia.org/wiki/Sutton_Trust 65 Sutton Trust 30 group includes: University of Bath, Cardiff, Exeter, Glasgow, King's College London, University of Lancaster, Leeds, Leicester, Liverpool, Manchester, Newcastle, Reading, Royal Holloway, University of Sheffield, Southampton, Strathclyde, Surrey.

Appendix H: Spearman rho correlation tables

Results from the Spearman rho correlation are outlined below for the key figures (the figure numbers relate to those in the body of the text. 66

All correlations are sign	NS-SEC	Free	Either	Mother	Father	
level (2-tailed).	binary	School	Parent	with	with	
			Meals	with	degree	degree
				degree		
More selective university group	Pearson (r)	-0.123	-0.119	0.209	0.2	0.208
	Spearman's rho	-0.129	-0.124	0.211	0.2	0.209
Higher UCAS points grouped	Pearson (r)	-0.121	-0.128	0.221	0.216	0.221
Bioabca	Spearman's rho	-0.13	-0.137	0.228	0.22	0.226
Ethnic Origin binary	Pearson (r)	0.098	0.196	-0.054	-0.071	-0.03
	Spearman's rho	0.098	0.196	-0.054	-0.071	-0.03
Higher Degree Class	Pearson (r)	-0.074	-0.074	0.166	0.206	0.137
	Spearman's rho	-0.073	-0.072	0.163	0.202	0.134
Higher Age grouped	Pearson (r)	0.054	0.056	-0.051	-0.052	-0.04
	Spearman's rho	0.054	0.055	-0.05	-0.051	-0.039
School Type grouped	Pearson (r)	-0.09	-0.107	0.137	0.117	0.129
	Spearman's rho	-0.083	-0.1	0.121	0.103	0.111

Figure 24 (correlation analysis of key variables) with Pearson and Spearman correlation results.

⁶⁶ The wider correlation analyses area available on request.

		2011	2012	2013	2014	2015
Either parent having a degree	Pearson (r)	0.107	0.103	0.107	0.114	0.103
	Spearman's rho	0.106	0.100	0.108	0.112	0.104
NS-SEC binary (reversed)	Pearson (r)	0.071	0.068	0.067	0.067	0.056
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Spearman's rho	0.071	0.067	0.065	0.057	0.110
FSM status (reversed)	Pearson (r)	0.000	0.000	0.069	0.062	0.05
	Spearman's rho	0.000	0.000	0.068	0.061	0.054

Figure 26 (correlation analysis of key SEB variables on progression through selection stages) with Pearson and Spearman correlation results.

Figure 27 (secondary candidate background variables on progression through selection stages) with Pearson and Spearman correlation results.

All correlations significant at the 0.01 level (2-tailed).		2011	2012	2013	2014	2015
Disabled Information binary	Pearson (r)	0.149	0.191	0.14	0.148	0.151
Sinary	Spearman's rho	0.122	0.157	0.15	0.154	0.165
UCAS points grouped	Pearson (r)	0.192	0.199	0.21	0.22	0.218
	Spearman's rho	0.218	0.216	0.226	0.232	0.238
University grouped	Pearson (r)	0.245	0.221	0.233	0.243	0.233
	Spearman's rho	0.241	0.214	0.228	0.237	0.242
Degree Class	Pearson (r)	0.148	0.104	0.097	0.113	0.082
	Spearman's rho	0.145	0.101	0.09	0.105	0.081
School type	Pearson (r)	0.087	0.066	0.066	0.079	0.11
	Spearman's rho	0.079	0.051	0.061	0.068	0.105

Figure 31 and 32 combined (key and secondary background variables on the online test scores) with Pearson and Spearman correlation results.

		Online Numerical Normalised Score	Online Verbal Normalised Score	Online Competency Questionnaire Normalised Score	ETray Normalised Score
NS-SEC binary (reversed)	Pearson (r)	0.1	0.116	0.035	0.045
(reversed)	Spearman's rho	0.103	0.112	0.036	0.04
Free School Meals (reversed)	Pearson (r)	0.126	0.13	-0.003	0.055
(reverseu)	Spearman's rho	0.127	0.124	-0.004	0.047
Either parent	Pearson (r)	0.151	0.181	0.028	0.077
degree	Spearman's rho	0.153	0.181	0.031	0.072
Ethnicity binary	Pearson (r)	-0.107	-0.216	0.023	-0.105
	Spearman's rho	-0.108	-0.199	0.024	-0.088
Gender binary	Pearson (r)	-0.168	-0.101	0.151	-0.023
	Spearman's rho	-0.178	-0.107	0.147	-0.02
University grouped	Pearson (r)	0.357	0.39	0.081	0.173
	Spearman's rho	0.366	0.394	0.085	0.165
Degree Class	Pearson (r)	0.12	0.163	0.045	0.053
	Spearman's rho	0.118	0.156	0.044	0.047
Age grouped	Pearson (r)	-0.048	-0.021	0.013	0.03
	Spearman's rho	-0.047	-0.01	0.013	0.046
UCAS points grouped	Pearson (r)	0.292	0.333	0.086	0.153
Biouben	Spearman's rho	0.32	0.361	0.091	0.156
School type	Pearson (r)	0.156	0.175	0.028	0.085
	Spearman's rho	0.16	0.167	0.027	0.078

Figure 33 (online and e-tray tests against Assessment Centre [FSAC] score) with Pearson and Spearman correlation results.

		Online	Online Verbal	Online	E-Tray
		Numerical	Normalised	Competency	Normalised
		Normalised	Score *FSAC	Questionnaire	Score*FSAC
		Score *FSAC		Normalised	
				Score*FSAC	
2011	Pearson (r)	0.155	0.221	0.107	0.221
	Spearman's rho	0.1155	0.215	0.122	0.195
2012	Pearson (r)	0.224	0.299	0.174	0.36
	Spearman's rho	0.244	0.294	0.163	0.344
2013	Pearson (r)	0.23	0.285	0.203	0.194
	Spearman's rho	0.238	0.280	0.188	0.190
2014	Pearson (r)	0.238	0.309	0.2	0.363
	Spearman's rho	0.245	0.306	0.195	0.356
2015	Pearson (r)	0.22	0.307	0.211	0.226
	Spearman's rho	0.220	0.296	0.194	0.202

Appendix I: Correlations between previous attainment and test scores

This section is included in an appendix, in part because of the current debate about the supposed positive effects of removing, or lessening, UCAS tariff to promote socio-economic diversity for entry to the professions. The analysis shows a linear relationship between UCAS points and test score performance in relation to the Fast Stream.

The graph below shows the proportion of candidates within each UCAS band, and the point at which they left the recruitment process for the aggregated data from 2011-2015. Candidates with fewer UCAS points are less likely to progress past the registration and online tests, while candidates with a higher number of UCAS points are more likely to reach the FSAC stage.



Figure 43: Proportion of candidates within each UCAS band, and the stage of the recruitment process.

We explored further the relationship between UCAS points and candidates' test scores. Increases in UCAS points significantly increase the score on all tests. These were all significant to p <.01, and from the post-hoc tests (Bonferroni and Games-Howell), we observe that there is a significant linear element to the relationship. This linear relationship is present until candidates reach 500 UCAS points, and then this relationship reduces and varies in significance. The graphs below illustrate this trend, showing each band of UCAS points and the mean score of each test. It should be noted that the UCAS point bands are not equal in size with regards to the number of candidates within each band, and the number of candidates is very small in the upper bands.



Figure 44: Means plot of aggregated (2011-2015) data showing the online test mean score achieved based on candidates banded UCAS points.

Figure 45: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates banded UCAS points





Figure 46: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates banded UCAS points.

139. These mean plots were repeated with candidates who reported having between 200-500 UCAS points (n=43904), banded in 20 point increments in order to explore differences between these groupings. There continues to be a significant linear trend, viewed on a more focused scale.







- Online Competency Questionnare Normalised Score



Figure 48: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates banded UCAS points (between 200-500 at 20 point increments).

Figure 49: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates banded UCAS points (between 200-500 at 20 point increments).



The same analysis has been conducted in relation to candidates' university group. We see similar trends, with a linear relationship developing, with the exception of overseas and unclassified universities. All analysis was found to be significant to p <.01. We see that as candidates attend more selective institutions, their mean plot scores on the online tests and FSAC increase. The posthoc tests support this, with the exception of the 'other HEI' and 'overseas/other' groups, where the relationship between these two groups and their test scores was not found to be significant.



Figure 50: Means plot of aggregated (2011-2015) data showing the online test mean score achieved based on candidates grouped university.



Figure 51: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates grouped university

Figure 52: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates grouped university.



Appendix J: SEB measures currently used within the Civil Service

(Submitted by the Cabinet Office in August 2015)

Measure	Rationale	Limitations	Existing use in the Civil Service
Parental education: degree-level qualifications	Recommended by <i>Professions</i> <i>for Good</i> and used in academic studies. Often used as a proxy for social position.	Individuals may not have full knowledge of their parents' backgrounds.	SCS: asked in Top 200 survey in 2009, Basecamp surveys of new entrants 2010- 11, annual new entrants survey 2014- onwards Fast Stream: asked during application process since 2011 Corporate talent schemes: since 2014
Type of school attended at ages 11-16	Recommended by <i>Professions for Good</i> . Used as a proxy for parental income/access to elite networks.	While commonly used by commentators, long-term changes to the education system make it difficult to use as a robust indicator.	SCS: asked in Top 200 survey in 2009, Basecamp surveys of new entrants 2010- 11, annual new entrants survey 2014- onwards Fast Stream: asked during application process since 2011 Corporate talent schemes: since 2014
Qualifications achieved	Recommended by <i>Professions for Good.</i> Used as a proxy for social position.	Changes in education policy (e.g. the range and nature of qualifications, and widening university participation) affect use as a robust indicator.	SCS: not currently collected except for degree subject Fast Stream: has always been asked during application process Corporate talent schemes: since 2014 Civil servants with a Civil Service Learning account are asked to complete this, but is not mandatory
Household eligible for Income Support	Recommended by <i>Professions for Good</i> . Used as a proxy for parental income.	Individuals may not be able to recall accurately as relies on knowledge of parental income and finances. The level at which Income Support has been paid has also varied over time.	SCS: has not been collected to date Fast Stream: not collected to date, will be collected in 2015 application process Corporate talent schemes: since 2014
Household eligible for Free School Meals	Recommended by <i>Professions for Good.</i> Used as a proxy for parental income.	Individuals may not be able to recall accurately, eligibility is connected to receipt of a range of benefits. Policy changes means this only has relevance for those born after 1980. Changes in FSM policy in the last parliament will affect long- term reliability.	SCS: has not been collected to date Fast Stream: collected since 2013 Corporate talent schemes: since 2014
Parental occupation when aged 14	Used in academic studies as the key measure of social mobility over time – compares the position of child with that of their parent.	Individuals may not have full knowledge of their parents' backgrounds	SCS: asked in Top 200 survey in 2009, Basecamp surveys of new entrants 2010- 11, annual new entrants survey 2014- onwards Fast Stream: asked during application process since 2011 Corporate talent schemes: has not been collected to date

Appendix K: Summary of Figures

Figure 1: Analytical Framework10
Figure 2: Civil Service Commission Recruitment Principles12
Figure 3: The % of employers that are monitoring diversity indicators and have active strategies to address them (source: AGR 2015)
Figure 4: The % of employers that are monitoring SEB diversity, and have active strategies to address them by sector (source: AGR 2015)17
Figure 5: Measures of SEB diversity used by employers (source: AGR)
Figure 6: Measures of SEB diversity used by employers by sector; accountancy, law and public sector (source: AGR)
Figure 7: Characteristics of effective measures of socio-economic status20
Figure 8: Initial application screening criteria across all employers (Source: AGR). UCAS data not collected in 2010 and 2011
Figure 9: Initial application screening criteria within the Public Sector (Source: AGR)23
Figure 10: SEB of UK university population (2:2 or higher, three year data) against FS applicants 2011-2015 (HESA: 2015)
Figure 11: Comparing institutional populations with Fast Stream applicants (ST 13 and ST 30 are defined above)
Figure 12: The most popular employer brands amongst high and lower SEB student populations (Trendence)
Figure 13: Differences in drivers of employer attractiveness amongst different SEB groups (Adapted from Trendence, 2015)
Figure 14: Awareness of the Fast Stream amongst students (Trendence)

Figure 15: Effects on students who have had contact with a serving member of the Fast Stream – the percentage of students not included had no contact (source: High Fliers)
Figure 16: Which words or phrases do finalist students think are most appropriate to describe the Fast Steam (High Fliers) n= 2000
Figure 17: Average (mean) length of time from application to offer, (source: AGR)
Figure 18: Proportion of applicants by HESA subject code, aggregated data total
Figure 19: Percentage of UK domiciled young entrants to full-time first degree courses (achieving ≥ABB A level or equivalent VCE/Advanced Higher grades) from lower NS-SEC Classes 4, 5, 6 and 7 by subject in 2014 (HESA)
Figure 20: Average graduate starting salaries (source: AGR)40
Figure 21: Average graduate earnings by subject area, sample selected for illustrative purposes (HESA)41
Figure 22: SEB make-up of the Summer Diversity Internship Programme42
Figure 23: Percentage of interns converted into graduate hires by sector (AGR)42
Figure 24: Correlation analysis of key variables; shaded boxes indicate small effect sizes49
Figure 25: Proportion of candidate population by NS-SEC group (within each stage) who progress from each stage
Figure 26: Effect size (Pearson r) of key SEB variable on progression through selection stages
Figure 27:Effect size (Pearson r) of secondary candidate background variables on progression through selection stages
Figure 28: Outputs from the regression analysis. Those variables that have a predictive effect on candidate's success at a particular stage
Figure 29: Proportion of candidate population by NS-SEC group (within each stage) who progress from each stage60

Figure 30: Lower SEB candidates who drop out at the registration stage by their background variables
Figure 31:Effect size (Pearson r) of key variables on the online test scores
Figure 32: Effect size (Pearson r) for secondary background variables against online test scores
Figure 33: Correlation (Pearson r) effect size between online and e-tray tests against the Assessment Centre (FSAC) score
Figure 34: Mean of FSAC normalized score by key variables (2011 – 2015)69
Figure 35: FSAC mean by secondary background variables70
Figure 36: FSAC mean by UCAS points70
Figure 37: Effect size (Pearson r) for key and secondary <u>background</u> variables against FSAC normalised score
Figure 38: Effect size (Pearson r) of key variables on the assessment centre competency scores and Assessment Centre total (see key below)
Figure 39: Assessment centre modes of assessment grouped and by year with averaged means
Figure 40: Grouped mode of assessment (mean of subscales) by NS-SEC binary and by year
Figure 41: Variables with missing data, and the rate of missing data (n= 138,795)123
Figure 42: Variables analysed and the way in which they are coded
Figure 43: Proportion of candidates within each UCAS band, and the stage of the recruitment process
Figure 44: Means plot of aggregated (2011-2015) data showing the online test mean score achieved based on candidates banded UCAS points
Figure 45: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates banded UCAS points

Figure 46: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates banded UCAS points
Figure 47: Means plot of aggregated (2011-2015) data showing the online test mean score achieved based on candidates banded UCAS points (between 200-500 at 20 point increments)
Figure 48: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates banded UCAS points (between 200-500 at 20 point increments)
Figure 49: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates banded UCAS points (between 200-500 at 20 point increments)
Figure 50: Means plot of aggregated (2011-2015) data showing the online test mean score achieved based on candidates grouped university
Figure 51: Means plot of aggregated (2011-2015) data showing the E-tray mean score achieved based on candidates grouped university
Figure 52: Means plot of aggregated (2011-2015) data showing the FSAC mean score achieved based on candidates grouped university

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The Bridge Group is an independent, charitable policy association researching and promoting social mobility. Since its launch in 2010 at Google UK, the Group has established itself as an authoritative voice on the subject.

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