

Title: Updating the Immigration Health Surcharge, 2020 IA No: HO0367 RPC Reference No: N/A Lead department or agency: The Home Office Other departments or agencies: Department of Health and Social Care	Impact Assessment (IA)			
	Date: 12 March 2020			
	Stage: Final			
	Source of intervention: Domestic			
	Type of measure: Secondary legislation			
Contact for enquiries: Borders, Immigration and Citizenship Policy, Home Office				

Summary: Intervention and Options	RPC Opinion: N/A
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Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2014 prices)	One-In, Three-Out N/A	Business Impact Target Status N/A
£1,163m	£30m	N/A		

What is the problem under consideration? Why is government intervention necessary?
 The Immigration Health Surcharge (the surcharge) was implemented in 2015, ensuring that non-European Economic Area (non-EEA) migrants coming to the UK for more than six-months pay towards the cost of the NHS services available to them.
 The Government is committed to increasing the surcharge to ensure that temporary migrants cover the costs of the NHS services provided to them. The Government needs legislation to increase the surcharge from £400 to £624 per person per year, with the discounted rate for students and those on the Youth Mobility Scheme increasing from £300 to £470 per year. In a change to existing policy, the surcharge will also be set at £470 for all children under the age of 18 years, at the point of application. The uplift will apply to relevant immigration applications made on or after the date the new increase comes into force.

What are the policy objectives and the intended effects?
 The policy objective is to increase the surcharge to a level that reflects broadly the full cost of NHS services provided to those that pay it. This will help ensure the long-term sustainability of the NHS.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
Option 0 – Do nothing. No changes are introduced. The surcharge remains at the current level.
Option 1 – Increasing the Immigration Health Surcharge: surcharge liable non-EEA migrants would pay £624 each for temporary migrants and their dependants, a discounted rate of £470 each for students and their dependants, those on the Youth Mobility Scheme and all other applicants aged 17 and below.
Option 1 is the Government’s preferred option as it better meets the policy objective.

Will the policy be reviewed? Yes		If applicable, set review date: 2025		
Does implementation go beyond minimum EU requirements?		N/A		
Is this measure likely to impact on trade and investment?		No		
Are any of these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: N/A		Non-traded: N/A

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by the responsible Minister: Kevin Foster Date: 18th March 2020

Summary: Analysis & Evidence

Policy Option 1

Description: Full Implementation - Increasing the Immigration Health Surcharge

FULL ECONOMIC ASSESSMENT

Price Base Year 19/20	PV Base Year 20/21	Time Period yr 5	Net Benefit (Present Value (PV)) (£m)		
			Low: 1,001	High: 1,327	Best Estimate: 1,163

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low (Elasticity)	0	0	0
High (Elasticity)	0	112	506
Best Estimate	0	55	251

Description and scale of key monetised costs by 'main affected groups'

The identified direct costs, PV over 5 years, of the surcharge increase are **£251 million** including:

- 1) Education sector: Lower tuition fee income, **£106 million**.
- 2) UK Exchequer: Lost tax contribution from reduction in migrants entering the UK, **£124 million**.
- 3) Surcharge revenue: Lower revenue due to lower application volumes, **£12 million**.
- 4) Home Office: Lower visa fee revenue due to lower application volumes, **£9 million**.

Other key non-monetised costs by 'main affected groups'

The monetised cost of migrant spending modelled in this IA covers the proportion of spending that accrues to the Government. There may be wider indirect costs to businesses, that are not monetised but are considered qualitatively.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low (Elasticity)	0	290	1,327
High (Elasticity)	0	330	1,507
Best Estimate	0	309	1,414

Description and scale of key monetised benefits by 'main affected groups'

The identified direct benefits, PV over 5 years, of the surcharge increase are **£1,414 million**:

- 1) Surcharge revenue: Increased revenue from those who continue to migrate to or remain in the UK, including both standard and premium routes, **£1,255 million** and **£73 million** respectively.
- 2) UK Exchequer: Savings from lower public service provision, **£85 million**.
- 3) Home Office: Savings from processing fewer visa applications, **£2 million**.

Other key non-monetised benefits by 'main affected groups'

Lower immigration to the UK may result in some wider benefits (better social cohesion and reduced, housing/transport congestion). These impacts are expected to be small. Ensuring the surcharge is set at a level that reflects the full cost of NHS services provided to those that pay it may increase public confidence in the immigration system. Revenue collected from the surcharge will be re-invested in the health service, ensuring its sustainability.

Key assumptions/sensitivities/risks/uncertainties

Discount rate (%)

3.5

This analysis looks at the impact on the health costs of migration, without considering the scope to offset these costs with fiscal revenue raised from migrants (e.g. income tax). Baseline volumes for 2020/21 are based on Home Office internal planning assumptions. Volumes in this IA may not match future actual outturns. The impact of increases in the surcharge on volumes is based on assumptions on price elasticity of demand for visas (see Annex 3). Exchequer effects are based on assumed income and direct and indirect tax contributions; unit costs of public service provision are estimated for migrants based on available evidence. See Annex 4 for the fiscal analysis methodology.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	Benefits:	Net:	
			N/A

Evidence Base (for summary sheets)

A. Problem under consideration

The Immigration (Health Charge) Order 2015, made under section 38 of the Immigration Act 2014 and implemented in April 2015, requires that non-EEA temporary migrants who make an immigration application to come to the UK for more than six months, or who apply to extend their stay in the UK, make a direct contribution to the NHS via payment of an immigration health charge (often referred to as the immigration health surcharge or IHS).

Following a review by the Department of Health and Social Care in 2018 of the cost to the NHS in England of treating those who pay the surcharge, the surcharge level was set at £400 per year (£300 for students, their dependants and Youth Mobility Scheme applicants). This figure was set at below full cost recovery in line with the policy intent of ensuring non-EEA migrants make a 'fair contribution' towards the cost of the NHS services available to them.

In its 2019 Manifesto, the Government committed to increasing the surcharge to a level that reflects broadly the full cost of NHS use by non-EEA temporary migrants. This would mean an increase from £400 to £624 for most applicants, with the discounted rate rising from £300 to £470 for students, their dependents and those on the Youth Mobility Scheme (YMS). The Government is committed to ensuring that the health charge remains affordable for family groups. Consequently, the Government has decided to set the amount of the charge for children under the age of 18 years at the date of their application at £470, bringing them into line with the existing discount for students and the YMS. The surcharge increase will apply to immigration applications made on or after the date the new increase comes into force.

B. Rationale for intervention

The rationale for the introduction of the immigration health charge is set out in the impact assessment dated 28 January 2015 which was laid with the draft Immigration (Health Charge) Order 2015. It can be viewed here:

<http://www.legislation.gov.uk/ukdsi/2015/9780111128473/impacts>.

Since implementation of the Immigration (Health Charge) Order 2015, non-EEA temporary migrants who make an immigration application to come to the UK for more than six months, or who apply to extend their stay in the UK, subject to certain exemptions, have made a direct contribution to the NHS via payment of an immigration health surcharge. Payment of the surcharge is mandatory for those affected and failure to pay it, when required to do so, will mean that permission to enter or remain in the UK will not be granted. Exemptions from the requirement to pay the surcharge are set out in Schedule 2 to the Immigration (Health Charge) Order 2015, as amended by the Immigration (Health Charge) (Amendment) Order 2016, and the Immigration (Health Charge) (Amendment) Order 2017 – these include exemptions for vulnerable groups including individuals who apply for asylum or humanitarian protection, victims of trafficking and modern slavery, and individuals who make an application under the Home Office policy known as the "Destitution Domestic Violence Concession".

In January 2019, the surcharge was increased to £400 per person per year for temporary migrants and their dependants, with a discounted rate of £300 per person per year for students and their dependants, and for YMS applicants. The surcharge is collected as part of the immigration application process, and the total amount for the whole period of leave, is payable upfront and in full.

Those who pay the surcharge can access NHS services generally free of charge whilst their leave remains valid, subject to those charges UK residents must pay for, such as prescriptions and dental treatment in England. Those who pay the surcharge are also subject to NHS charges for assisted conception services in England under the National Health Service (Charges to Overseas Visitors) (Amendment) Regulations 2017. Income from the surcharge, minus an amount the Home

Office retains to cover its costs, is distributed between the devolved health administrations for health spending purposes under the Barnett Formula. NHS revenue for the UK from the surcharge was £290 million in 2018/19.

In April 2019, the Department of Health and Social Care (DHSC) reviewed the cost to the NHS using 2017/18 NHS England data, of treating those who pay the surcharge and estimated that the NHS spent on average £625 (rounded down to £624 for operational reasons), per surcharge payer per year¹.

The DHSC did produce a more up-to-date estimate of cost-recovery using 2018/19 NHS England data of £646. This analysis looked at data on surcharge-payers who use the NHS and their length of stay in the UK between April 2015 and September 2019 inclusive, and estimated the NHS costs of treating the average IHS payer (with average length of stay in the UK) was £646 per year. This considered primary care (£180) and secondary care with some other services (£350) across all IHS payers (including those who did not access health services). The largest contributors to the increase in the health surcharge was accounting for increases in health care spending in line with the Long-term Plan (£80), as well as other miscellaneous costs such as admin (£40) that were not previously considered. The surcharge should reflect what IHS payers are expected to use during the years of their stay, and so the increase in health spending means that IHS payers are benefiting from this additional increase, and so should make a higher and fairer contribution.

Mindful of the need to ensure that the surcharge is not set above cost recovery level, the Government has decided to set the surcharge at the £624 rate per person, per year. Students, as well as those on the YMS, and all other children aged 17 years and under will receive a discounted rate, which will be increased to £470. The increased rate of the surcharge is likely to represent a slight under-estimate of the actual cost while better reflecting the costs to the NHS of treating those who pay it.

The level of the Immigration Health Surcharge will remain competitive by international standards. Whilst it is difficult to compare across health care systems, due to the different types of cover they offer, recent internal analysis by DHSC suggests that immigrants travelling to the US and other European countries would be required to pay significantly higher charges per year for healthcare coverage.

C. Policy Objective

The policy objective is to increase the surcharge to a level that reflects broadly the full cost of NHS services provided to those that pay it. This will help ensure the long-term sustainability of the NHS.

D. Options

Option 0: Do Nothing

Surcharge liable non-EEA migrants would continue to pay the surcharge at the current annual rate; £400 each for temporary migrants and their dependants, a discounted rate of £300 each for students and their dependant as well as those on the YMS.

Option 1: Increasing the IHS

Under option 1, surcharge liable non-EEA migrants would pay £624 each for temporary migrants and their dependants, a discounted rate of £470 each for students and their dependants as well as those on the YMS, and all other children aged 17 years and under. This is **the Government's preferred option** as it meets the policy objectives.

Other options for the level of the IHS including full cost recovery were considered but were discounted to avoid the risk of setting the surcharge above cost recovery level.

¹ The estimate is a weighted average across all surcharge payers, including those who use and those who do not use the healthcare services.

E. Appraisal (Costs and Benefits)

General Assumptions & Data

Objective function

In line with previous Home Office analysis and following recommendations by the Migration Advisory Committee (MAC)², this IA considers the impact of the options on the welfare of the UK resident population. Besides the effect on government revenue and processing costs due to changes in the surcharge level, the NPV calculation includes the effect of changes in contributions to direct and indirect taxes, the effect on consumption of public services, on tuition fees paid by international students, and the effect on the labour market for the resident population where possible. Foregone migrant wages are not included in the NPV calculations in line with MAC recommendations, as the IA does not consider the impact on overall GDP.

This IA is based on the current immigration system, which applies the IHS and visa fees to non-EEA applicants under current immigration rules. It does not attempt to quantify the impact from any change to the immigration system from January 2021, nor does it quantify the impact of extending the IHS to EEA migrants.

Volumes

Future volume of applications for each surcharge liable visa product is based on Home Office internal planning assumptions for 2020/21. These volumes are used as the baseline against which the impact of proposed changes in the surcharge level is assessed. It should be noted that analysis of some impacts considers volumes of granted applications, as it is changes in granted applications that drive the impact. These volumes are calculated by applying the estimated grant rates³ to Home Office internal estimates of visa applications. As mentioned above, these volumes reflect the forecasted number of non-EEA applicants under current immigration rules.

As the figures are based on Home Office internal estimates, they should be considered as indicative only due to the uncertainty around estimates of future visa applicants' behaviour. This IA assumes that volumes remain constant at the 2020/21 estimated level throughout the appraisal period of the policy, see Table 1.

Table 1: Estimated granted visa application volumes for 2020/21

Visa type	Baseline granted applications 2020/21 (planning assumption)
Out of Country	
PBS Tier 1	3,700
PBS Tier 2	114,200
PBS Tier 4	315,600
PBS Tier 5	42,900
Family	47,600
In Country	
PBS Tier 1	7,700
PBS Tier 2	87,700
PBS Tier 4	43,100
PBS Tier 5	1,800
Family	96,900

Source: Home Office internal analysis

² MAC; "Analysis of the Impact of Migration"; January 2012. <https://www.gov.uk/government/publications/analysis-of-the-impacts-of-migration>

³ Home office analysis based on: <https://www.gov.uk/government/publications/immigration-statistics-april-to-june-2017/list-of-tables>

Table 2 shows the estimated number of visa applications for premium service visas for 2020/21. This data is usually omitted from Home Office analysis on the impact of changes to visa fees as the service is optional for applicants. However, although the premium service is optional, the surcharge is mandatory at a fixed rate on all eligible visas and therefore these volumes are considered in this IA. The total volumes in Table 1 include the premium services in Table 2.

Table 2: Estimated granted premium service visa application volumes for 2020/21.

Visa type	Baseline granted applications 2020/21 (planning assumption)
PSC Tier 1	2,000
PSC Tier 2	21,000
PSC Tier 4	4,000
PSC Tier 5	1,000
Family	9,000

Source: Home Office internal analysis

Surcharge level

This IA assesses the impact of increasing the surcharge level as set out in Annex 1. The total amount that surcharge payers are charged depends on their length of stay in the UK. The total amount surcharge payers are liable for over the duration of their visa is paid upfront as part of the visa application, although unsuccessful applications receive a refund⁴. The analysis developed in this IA uses internal Home Office data on the average length of stay per visa category in 2018/19, and applies the costs associated with the surcharge to granted applications.

Fee levels

The Government laid secondary legislation, the Immigration and Nationality (Fees) Regulations 2018⁵, outlining visa fee levels implemented at the beginning of the financial year 2018/19. Further secondary legislation, the Immigration and Nationality (Fees) Regulations 2019⁶ implemented in March 2019 made changes to the cost of visitor visas. As the policy is scheduled to be implemented in October 2020, this IA applies the level of visa fees as set out in these Regulations in its analysis of impacts.

Annex 2 details the visa fee level for surcharge eligible visa categories and also shows the most recent estimates of unit costs for each visa category.

Appraisal period

The estimates presented in this IA assume that the surcharge level and visa fee levels remain at these levels for the following years and the policy is appraised for the following five years, in line with standard appraisal practice. This should not however be interpreted as an indication of future surcharge or visa fee levels beyond 2020/21, as visa fees will be set year-on-year in future Fee Regulations and the surcharge level will be kept under review. The appraisal is conducted in accordance with HM Treasury (2018) Green Book guidance and a social discount rate of 3.5 per cent is applied.

The surcharge increase is expected to be implemented in October 2020. The IA assumes that the policy will be implemented in Q3 2020/21 and appraises it over a period of five years to Q2 2025/26. It should be noted that this may not reflect the exact implementation date.

⁴ <https://www.gov.uk/healthcare-immigration-application/refunds>

⁵ <http://www.legislation.gov.uk/uksi/2018/330/impacts>

⁶ https://www.legislation.gov.uk/uksi/2019/475/pdfs/uksiem_20190475_en.pdf

Price elasticity of demand for visas

An increase in the surcharge level could deter some potential migrants from applying to enter or remain in the UK. The increase in the surcharge level could therefore have an impact on the number of visa applications received each year. While it is difficult to isolate the impact of any one particular factor driving visa demand, evidence from visa applications over the period following the introduction of the surcharge in 2015 does not suggest any significant change in applications.

The Home Office has developed a methodology to estimate the impact of changes in fees on application volumes. This methodology has been used for previous IAs on the impact of changes in visa fees⁷ and on the immigration health surcharge⁸. The analysis treats the increase in surcharge as an increase in the cost of moving to the UK and estimates the effect that this increase may have on volumes of visa applications by applying estimates of the responsiveness of demand for visa to changes in fees (price elasticity of demand for visa products).

While this is considered a cautious approach when considering small increases in visa fees, the impact of substantial increases in fees (such as a 50% increase in the surcharge) is more uncertain – this is considered in section G.

The range of elasticities identified for each visa category has been used to produce a range of the NPV impact of the policy. The central scenario uses the elasticity estimates based on the academic literature; the low scenario assumes no response to the price increase and therefore that volumes remain unaffected; the high scenario assumes the elasticity estimates are higher than the central scenario.

The elasticities used to estimate this behavioural response have been updated since the previous IA on doubling the surcharge in January 2019. Sections E.1 to E.5 and Annex 3 provide a high-level summary of the available literature and elasticity estimates used. Further detail can be found in the publication “A review of evidence relating to the elasticity of demand for visas in the UK” published in March 2020.⁹

E.1 Workers’ visas (Supply of Labour)

The reduction in visa applications and therefore volumes of individuals entering or remaining in the UK for work-related reasons as a result of an increase in immigration costs has been estimated by applying estimates of the wage elasticity of labour supply, which measures the responsiveness of the supply of labour to changes in wages, to the expected earnings over the duration of the visa. An increase in immigration costs is treated as equivalent to a reduction in the expected earnings over the duration of the visa period. The central scenario assumes a small reduction in the willingness to supply labour as a result of changes in immigration costs, applying an elasticity of -0.3. The low scenario assumes a zero response to the change in wage and the high scenario uses an elasticity of -0.6. The wide range used as sensitivity reflects the available evidence and the uncertainty around the central estimates.

E.2 Family visa

For family visas, price sensitivity is assumed to be similar to that of migrants supplying labour in all scenarios as it is possible that applying for a family visa may be associated with work opportunities in the UK at a household level. However, evidence is limited and therefore these should be considered indicative assumptions. For example, while the central scenario assumes an elasticity of -0.3, it is possible that the true elasticity for these applicants is closer to zero. Applicants to a family visa may have less flexibility in choosing whether to come or remain in the UK for a given change in the cost of immigration where the decision is based on family ties rather than economic grounds, particularly for in country applications. Therefore, it is important to note here that the elasticity of -0.3 may overstate the responsiveness of an applicant to a fee change. Section F.5

⁷ <http://www.legislation.gov.uk/ukxi/2016/177/impacts> and <http://www.legislation.gov.uk/ukxi/2018/330/impacts>

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/251972/Health_impact_assessment.pdf

⁹ <https://www.gov.uk/government/publications/a-review-of-evidence-relating-to-the-elasticity-of-demand-for-visas-in-the-uk>

explores in further details the risks and sensitivity around the central estimates for family visa applications.

E.3 Dependant visa

For out-of-country applicants, the elasticity estimates are assumed to be the same as for the main applicant to the visa. For in-country dependant applications, the central scenario assumes no price sensitivity of visa demand; this is to capture the fact that migrants who are already in the country with family members may be less sensitive to changes in immigration costs. The assumption is applied only on dependants and not on main applicants because the analysis does not separate main applicants with and without dependants. The high scenario assumes an elasticity of -0.3 based upon the central estimates for worker's visa, to reflect the chance that some applications could potentially be deterred.

For the two categories above (work visa; respective dependant visa) the proposed increase in surcharge level is applied to the expected earnings over the duration of the visa less the current surcharge, giving the proportional reduction in expected earnings. The elasticity estimates are then applied to this proportional reduction and the baseline volumes, giving the estimated reduction in application volumes due to the increase in surcharge level. Expected earnings are assumed to grow in line with the OBR's forecast for growth in wages and salaries over the appraisal period. Historic rates at which applications are granted are used to estimate the impact on grant volumes. For dependants, the elasticity is applied to the potential earnings of the main applicant over their expected duration of stay as the main applicant is expected to pay for the cost of the dependant's immigration.

E.4 Student visas (demand for Higher Education)

Demand for student visas is driven by demand to access UK education. The reduction in applications to student's visa and therefore volumes of students entering the UK has been estimated using estimates of the price elasticity of demand for higher education, which measures the responsiveness of the demand for higher education due to changes in the cost of higher education. These estimates have been applied to the estimated overall costs of undertaking higher education in the UK. Estimates in the academic literature for the price elasticity of demand for higher education typically suggest a central estimate of around -0.4.

There is limited evidence on the responsiveness of international students to changes in visa fees specifically, although some evidence suggests that the ease of obtaining visa to study ranks fairly high among the factors that influence international students' decisions¹⁰. Therefore, in the central scenario, it is assumed that a central elasticity estimate of -0.4 is associated to increases in student immigration costs, while the high scenario applies an elasticity of -0.8, and the low scenario applies an elasticity of zero.

E.5 Premium service visa

This analysis assumes no behavioural response by premium service applicants to increases in immigration costs, assuming a price elasticity of demand for premium services of 0 in all scenarios. The willingness to pay the additional costs associated with premium services is interpreted as a strong signal of applicants' intent to migrate to the UK. Thus, the IA assumes that these applicants are unlikely to be deterred from remaining in or migrating to the UK due to changes in immigration costs. Sensitivity Analysis: section E.21 Premium services substitution, considers the effect of these users switching to the standard visa application route, rather than using premium services.

¹⁰ https://www.hobsons.com/res/Whitepapers/23_Beyond_The_Data_Influencing_International_Student_Decision_Making.pdf

Costs and benefits

The first direct impact of changes in the surcharge level and the application of central behavioural assumptions is a reduction in visa applications and therefore visas granted. Most of the costs and benefits of the proposed policy arise as a consequence of this effect on volumes.

As can be inferred from the Tables 3 and 4, the proposed changes in the surcharge level are expected to have relatively small impacts on visa applications and visas granted. This is largely because the cost of the surcharge is a relatively small proportion of the expected cost, or value, of coming to or remaining in the UK

Table 3: Estimated reduction in visa applications

		Baseline applications	Estimated change in applications vs baseline					
		2020/21	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26*
Out of Country	PBS Tier 1	4,000	-10	-20	-20	-20	-20	-10
Out of Country	PBS Tier 2	115,000	-180	-350	-340	-330	-320	-150
Out of Country	PBS Tier 4	325,000	-250	-950	-920	-900	-870	-660
Out of Country	PBS Tier 5	45,000	-60	-120	-110	-110	-110	-50
Out of Country	Family	59,000	-220	-430	-420	-410	-390	-190
In Country	PBS Tier 1	7,000	-10	-10	-10	-10	-10	-
In Country	PBS Tier 2	68,000	-60	-120	-120	-120	-110	-50
In Country	PBS Tier 4	40,000	-20	-90	-90	-80	-80	-80
In Country	PBS Tier 5	2,000	-	-	-	-	-	-
In Country	Family	122,000	-340	-660	-640	-620	-600	-290

Source: Home Office Analysis. Rounding: volumes rounded to the nearest 1,000.

* Includes estimates for two quarters of the year.

Table 4: Estimated reduction in visa grants

		Baseline applications granted	Estimated change in grants vs baseline					
		2020/21	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26*
Out of Country	PBS Tier 1	4,000	-8	-20	-20	-20	-10	-10
Out of Country	PBS Tier 2	114,000	-180	-340	-330	-320	-310	-150
Out of Country	PBS Tier 4	316,000	-230	-900	-880	-850	-820	-620
Out of Country	PBS Tier 5	43,000	-60	-110	-110	-110	-100	-50
Out of Country	Family	48,000	-150	-290	-280	-270	-260	-130
In Country	PBS Tier 1	6,000	-	-10	-10	-10	-10	-
In Country	PBS Tier 2	67,000	-60	-120	-110	-110	-110	-50
In Country	PBS Tier 4	39,000	-20	-90	-80	-80	-80	-80
In Country	PBS Tier 5	1,000	-	-	-	-	-	-
In Country	Family	88,000	-180	-350	-340	-320	-310	-150

Source: Home Office Analysis. Rounding: granted volumes rounded to the nearest 10.

* Includes estimates for two quarters of the year.

Direct Costs

The main direct cost of changes in the surcharge level is a consequence of the reduction in visa applications by surcharge eligible applicants and therefore visas granted, due to the impact of the

price elasticity of demand for visa assumptions. The value of costs and benefits described in the following paragraphs are based on central assumptions on price elasticity demand for visa.

E.6 Loss of surcharge revenue

A reduction in visa applications would result in a loss of surcharge revenue, due to a reduction in visas granted, on which surcharge is paid, resulting from the reduction in visa applications. Under the central case, the **lost surcharge revenue is estimated to be £12.0 million** (PV, 2020/21 prices) over the five-year appraisal period.

E.7 Loss of Home Office revenue

A reduction in visa applications would also result in a loss of Home Office revenue due to lost revenue from visa fees paid by applicants. Under the central case, the **lost revenue to the Home Office is estimated to be £9.3 million** (PV, 2020/21 prices) over the five-year appraisal period.

E.8 Loss in tuition fee income

In the central scenario, the analysis also assumes that visa applications by international students are also affected, resulting in a loss in tuition fee income for the education sector. Under the central case, the **lost tuition fee revenue is estimated to be £105.9 million** (PV, 2020/21 prices) over the five-year appraisal period. The IA assumes that tuition fees are paid by students evenly throughout the year, therefore the final year of the appraisal period accounts for two quarters of a year's loss of tuition fees.

This result is highly uncertain and likely to be a worst-case scenario. This is because the analysis does not make any assumption on the extent to which higher education institution may respond to a small reduction in applications by offering university places to other students, either from the UK, EEA or non-EEA countries. Therefore, the estimated loss may be mitigated by the replacement of deterred non-EEA students with other non-EEA, EEA or UK students - this is considered in more detail in section E.20 of the Sensitivity Analysis.

E.9 One-off implementation costs for the Home Office:

The Home Office will incur the additional cost of updating the visa application form and updating information available to prospective applicants around the new proposals. In addition, IT systems would need to be updated. **These costs are estimated to be minimal and therefore negligible.**

Indirect Costs

E.10 Loss to the Exchequer

A reduction in visas granted and therefore the number of migrants working and studying in the UK would result in a loss to the exchequer from fiscal contributions via direct and indirect taxes. Annex 4 provides further details on how estimates of fiscal contributions are derived. Under the central case, the **loss to the Exchequer is estimated to be £123.8 million** (PV, 2020/21 prices) over the five-year appraisal period.

Direct Benefits

E.11 Increase in surcharge revenue for non-premium applicants

The increase in the surcharge level is expected to generate an increase in surcharge revenue. As the surcharge is charged annually, this benefit is calculated as the change in surcharge level times average visa length times the volume of granted applications. The **increase surcharge revenue is estimated to be £1,254.6 million** (PV, 2020/21 prices) over the five-year appraisal period.

E.12 Increase in surcharge revenue from premium services

The increase in the surcharge level is expected to generate an increase surcharge revenue from premium service users. As above, this benefit is calculated as the change in surcharge level times average visa length times the volume of granted applications. The **increase surcharge revenue is estimated to be £72.7 million** (PV, 2020/21 prices) over the five-year appraisal period.

E.13 Reduction in Home Office processing costs

A reduction in visa applications is expected to result in administrative savings to the Home Office, therefore reducing processing costs. The **saving to the Home Office is estimated to be £2.3 million** (PV, 2020/21 prices) over the five-year appraisal period. Unit costs of processing a visa application for 2019/20 are outlined in Annex 1. Unit costs are assumed to stay flat in nominal terms over the appraisal period as these costs are reviewed year-on-year and do not necessarily grow in line with inflation.

Indirect Benefits

E.14 Reduction in public expenditure

The reduction in the volume of migrants entering the UK or extending their visa, as a result of the elasticity effect on visa applications is expected to result in a reduction in public expenditure on public services as fewer people would use such services. The **savings in expenditure on public services are estimated to be £84.5 million** (PV, 2020/21 prices) over the five-year appraisal period. Results are calculated by applying the unit cost on expenditure for public services for different types of migrant groups to the expected reduction in grant volumes due to the elasticity effect. Section E.19 provides further details on the methodology and assumptions used to estimate public expenditure costs per head.

Summary of results

The results for the central scenario are summarised in Table 5.

Table 5: Cost and benefits of Option 1 under central assumptions, £ million.

Present Values (2020/21 prices)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	NPV
Benefits							
Revenue raised from IHS changes	54.9	263.8	254.9	246.3	238.0	142.0	1,254.6
Revenue raised from IHS changes (premium service visa)	4.0	15.3	14.8	14.3	13.8	6.7	72.7
Saving to UKBA from processing fewer visa applications	0.1	0.5	0.5	0.5	0.4	0.2	2.3
Savings to UK due to lower public service provision	0.5	13.4	19.9	19.9	18.6	10.7	84.5
Total benefits	119.9	293.0	290.0	280.9	270.8	159.6	1,414.2
Costs							
Loss of IHS revenue from fewer granted applications as a result of the IHS change	-1.2	-2.6	-2.5	-2.3	-2.2	-1.2	-12.0
Exchequer loss from reduction in migrants coming to and remaining in the UK	-3.2	-19.4	-29.5	-29.0	-27.9	-14.9	-123.8
Loss of visa fee revenue from fewer applications as a result of the IHS change	-1.0	-2.0	-1.9	-1.8	-1.7	-0.9	-9.3
Lower tuition fee income	-1.9	-1801	-25.1	-22.5	-21.1	-17.3	-105.9
Total costs	-7.3	-42.0	-58.9	-55.7	-52.9	-34.2	-250.9
Net benefit	112.7	251.0	231.1	225.3	217.9	125.4	1,163.3

Under central assumptions the estimated total costs and total benefits are £251 million and £1,414 million respectively, resulting in an estimated NPV of £1,163 million (5-year PV, 2020/21 prices).

Changes to the assumptions on price elasticity of demand for a visa, keeping all other assumptions constant, produces a range around the NPV result for the central case of £1,001 million to £1,327 million (5-year PV, 2020/21 prices).

Under the low elasticity scenario, where applicants do not have any behavioural response to the surcharge level increases, the NPV of the policy increases to £1,327 million over the five-year appraisal period. An increase of £164 million compared to the central case. Under the high scenario, where applicants have a stronger behavioural response to the increase in the surcharge level, compared to the central scenario, the NPV the policy reduces to £1,001 million. A decrease of £162 million compared to the central case.

Table 6 summarises the impact of changes in elasticity assumptions on the NPV of the policy, broken down by cost and benefit.

Table 6: NPV range under different elasticity assumptions

Present Values – Five-year appraisal period (2019/20 prices) Price elasticity of visa demand assumptions	High elasticity / Low NPV	Central NPV	Low elasticity / High NPV
Benefits			
Revenue raised from IHS changes	1,254.6	1,254.6	1254.6
Revenue raised from IHS changes (premium service visa)	72.7	72.7	72.7
Saving to UKBA from processing fewer visa applications	4.8	2.3	-
Savings to UK due to lower public service provision	174.5	84.5	-
Total benefits (PV)	1,506.7	1,414.2	1,327.3
Costs			
Loss of IHS revenue from fewer granted applications as a result of the IHS change	-24.6	-12.0	-
Exchequer loss from reduction in migrants coming to and remaining in the UK	-250.1	-123.8	-
Loss of visa fee revenue from fewer applications as a result of the IHS change	-19.2	-9.3	-
Lower tuition fee income	-211.7	-105.9	-
Total costs (PV)	-505.7	-250.9	-
Net Present Value (NPV)	1,001.0	1,163.3	1,327.3

Source: Home Office internal analysis. Figures may not sum exactly due to rounding.

In Country Transfers

The IA measures the economic costs and benefits of changes in the surcharge level to the UK economy and UK residents.

E.16 Immigration Skills Charge

As a consequence of the increase in the surcharge level there is expected to be a small reduction in the number of Tier 2 visa applications, a number of which fall within the scope of the Immigration Skill Charge (ISC). The ISC was implemented in April 2017 as part of a package of wider government reforms to Tier 2 and is designed to ensure that employers invest in skills training for the domestic workforce. The obligation to pay the ISC sits with the migrant's sponsor, an employer operating in the UK. The ISC is collected by the Home Office as part of the visa sponsorship process and the income is transferred by the Home Office to HM Treasury Consolidated Fund, less

an amount to cover collection and administrative costs. The population percentages underlying the Barnett formula are used by HM Treasury to determine the split of funding between the Department for Education and each of the Devolved Administrations.

The reduction in the ISC payable by UK operating employers is regarded as a transfer payment between UK employers and the UK Government; this is because the reduction in ISC payable represents a decrease in revenue for the Government and a saving to UK operating employers. Transfer payments may change income or wealth distribution of the resident population, but do not give rise to direct economic costs and benefits, thus they are not counted in the NPV of the option considered. Keeping all assumptions at their central scenario level, the estimated saving to employers and therefore the fall in government revenue associated with the increase in the surcharge is **estimated to be £5.3 million** (PV, 2020/21 prices)

E.17 Third party payment processing costs

The surcharge is collected via a third-party private company who charge a percentage of the value of surcharge income handled. The surcharge increase is expected to result in an increase in the volume of surcharge revenue collected on which a fee is levied, this is expected to **cost the Home Office an additional £25.2 million (5 year PV, 2020/21 prices) and result in an equivalent increase in revenue for the private company contracted to collect the surcharge from eligible migrants**. This is deemed to be a transfer between the Home Office and a UK based business.

As considered for the Immigration Skill Charge, transfer payments may change income or wealth distribution of the resident population, but do not give rise to direct economic costs and benefits, thus they are not counted in the NPV of the option considered.

Sensitivity Analysis

This IA further builds on results for the central scenario to present sensitivity analysis. The assumptions below are varied while holding all others constant, allowing the assessment of the impact that different assumptions have on the results in the central scenario.

E.18 Employment opportunities for UK residents

The reduction in the volume of migrants entering the UK could have an impact on the labour market by affecting the employment opportunities of UK residents where the migrants deterred from entering the country for employment reasons are replaced by UK residents. In previous Impact Assessments, the Home Office has included an assessment of this displacement effect in the central scenario. However, given that the latest evidence¹¹ suggests a high degree of uncertainty around the extent of displacement/ replacement effects on low skilled workers, **this IA has not attempted to capture such effects as part of the central Net Present Value (NPV) estimates.**

Estimates do not take account of the labour market impact of the future immigration system, and the arrangements set out in the policy statement published in February 2020¹².

This IA makes the following assumptions about the impact of migration on the resident population as a sensitivity:

- Native workers are not displaced by skilled migrants entering the country.
- For every 100 low skilled migrants entering the UK labour market, 15 native workers are expected to be displaced, although this effect is expected to dissipate over time and the displaced workers will be fully re-employed within 3 years.

¹¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF

¹²<https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

These assumptions apply under normal economic conditions and during times of economic upturn and are based on a literature review of the impacts of migration on UK native employment published jointly by the Home Office and the Department for Business, Innovation and Skills¹³. The central sensitivity assumes that for every 100 low-skilled migrants deterred from entering the UK each year of the appraisal period, 15 additional UK workers enter employment. Skill levels are inferred from visa application category and while some element of the displacement effect is expected to last from one year to the next, it is expected to diminish over time, having dissipated completely within three years. This impact is monetised by applying the median wage of visa applicants to the number of applicants deterred from entering or remaining in the UK each year of the appraisal period. Annex 5 provides details on the findings regarding displacement effects and their application in this IA.

The **additional benefit from increased employment opportunities to UK residents in the central sensitivity is estimated to be £8.4 million** (PV, 2020/21 prices) over the five-year appraisal period.

Varying the level of the displacement assumption between ‘Low’ and ‘High’ as in Annex 5, gives a narrow range additional benefit between £4.8 million to £21.3 million (PV, 2020/21 prices).

E.19 Public Service Provision

This IA uses various estimates of the value of average public service consumption by migrants. The difference between the low and high scenario is the inclusion of pure public goods and welfare costs in the estimate, while the central case does not include pure public goods it does include half of the estimated welfare cost reflecting that migrants may not be eligible to receive welfare payments.

Keeping all other assumptions at their ‘central scenario’ level:

- **Assuming public spending is at the ‘Low’ level, the NPV of the option falls to £1,111.3 million** (5-year PV, 2020/21 prices). This sensitivity result implies that the Government saves less from the migrants that are deterred from entering or remaining in the UK. This saving reduces from £84.5 million in the central case to £32.6 million (5-year PV, 2020/21 prices) if the low assumptions are used.
- **Assuming public spending is at the ‘High’ level, the net impact of surcharge changes increases to £1,232.1 million** (5-year PV, 2020/21 prices). This sensitivity result implies that the Government saves more from the migrants that are deterred from entering or remaining in the UK. This saving increases from £84.5 million in the central case to £153.3 million (5-year PV, 2020/21 prices) if high assumptions are used.

The difference in NPV between these two public spending levels is relatively small in magnitude compared to the NPV of the policy. This can be attributed to the surcharge level increase having a relatively small effect on the volumes of migrants that are deterred from entering or remaining in the UK, to whom public service costs are applied.

E.20 Student Replacement

The response of UK educational institutions to the estimated reduction in Tier 4 migration is unknown. The extent to which the impact of a reduction in Tier 4 migration can be effectively mitigated likely depends on the volume of excess demand from Non-EEA, EEA and native UK applicants for places at UK educational institutions. Comprehensive cover of data regarding the volume of Non-EEA applicants and applicants to postgraduate study is absent from UCAS data as typically they apply directly to the institution. This makes an estimation of the volume of excess demand a significant challenge and such analysis would be disproportionate to the impacts considered within this IA.

¹³ Occasional Paper 109 *Impacts of migration on UK native employment: an analytical review of the evidence* available at: www.gov.uk/government/publications/impacts-of-migration-on-uk-native-employment-an-analytical-review-of-the-evidence

Consequently, analysis presented in this IA models a worst-case scenario where the deterred applications result in vacant places at UK institutions and none of these places vacated by deterred non-EEA migrants are filled either by another non-EEA, EEA or native UK applicants. In the case where there is excess demand and deterred applicants are replaced by other the impact of the proposed policy on tuition fee revenue would be reduced. The magnitude of such a reduction would be determined the characteristics of those individuals (for example, what tuition fee they pay depending on their status as UK/EEA or non-EEA) and the replacement rate.

E.21 Premium services substitution

The analysis in this IA assumes that the price elasticity of demand for premium services is zero; the sensitivity analysis presented here considers the impact on the NPV of the proposed policy if migrants using premium services do have a behavioural response to increased immigration costs.

Using a premium service signals that a migrant has high motivation to remain in or migrate to the UK. A sensitivity scenario is considered where those using premium services would mitigate the higher costs of migration due to the higher surcharge cost by moving to the standard route rather than being deterred from applying. Holding all other assumptions as per the 'central' scenario, **assuming that all premium service applicants move to the standard channel, results in a reduction in the NPV of the proposed policy to £783.5 million** (5-year PV, 2020/21 prices). This is a result of premium service applicants switching to the standard route where they would no longer pay the supplementary premium fee of £800, which results in a loss of revenue to the Home Office of £379.8 million (5-year PV, 2020/21 prices).

Small and Micro Business Assessment

The analysis presented in this IA does not analyse the composition of the cohort of migrants deterred from migrating to or remaining in the UK beyond the type of visa applied for. Consequently, the type of employers that deterred migrants could have been employed by is unknown. As the volume of migrants deterred from migrating to or remaining in the UK is small relative to the total volumes it is not expected there will be a large impact on business. In addition, since the Tier 2 system requires sponsorship, a relatively complex process, it may be more likely that large businesses act as employers. Therefore, small and micro-businesses may be less likely to be affected by the change in surcharge level.

F. Proportionality

The level of analysis used in this IA was reasonable considering the complexity of the immigration system and the related changes to the surcharge. The best available data has been used along with sensible and proportionate assumption, some of which are taken from the published literature. A considerable effort has been devoted to this analysis but no more than that required given the scale of costs and benefits involved. Similarly, the analysis has been tested with sensitivity analysis and was subject to proportionate analytical quality assurance. The resources devoted to the analysis is proportionate to the complexity of the analysis and the associated risks.

G. Risks

G.1 Adverse Selection

Whilst there is no evidence of this, under the appraised option, there is a risk of adverse selection. By increasing the surcharge there may be a risk that the probability of attracting migrants who are more likely to require healthcare services increases. This could result in higher NHS expenditure on those migrants not deterred from entering or remaining in the UK.

G.2 Perverse Incentives

The high increase in surcharge may create an incentive for migrants who pay the surcharge to use the NHS more than they would otherwise do, if they felt that they would get better value for money by consuming an increased quantity of healthcare. This would result in higher NHS spend.

G.3 Upfront Payment

Within the surcharge modelling, the elasticity assumption is applied to the estimated income of a migrant over the duration of the visa or in the case of students on the tuition fee liability plus living costs over the duration of the visa. Elasticity estimates are used to estimate the volume of migrants deterred from coming to or remaining in the UK. However, the surcharge liability of a migrant over the course of their visa is payable in full prior to entry. Due to differences in timing between when surcharge and visa fees are payable and when expected future income is redeemed it is possible that these fees are paid for with accumulated savings. Therefore, while migration may have a positive NPV to a migrant over the duration of the visa the upfront nature of costs may make it unaffordable.

Due to variation within the incoming migrant population (for example, country of origin, profession, home currency etc.) and ambiguity as to the extent to which employers may contribute to or mitigate these costs, the Home Office does not attempt to estimate the affordability of fees. It should therefore be considered that the impact on visa applications and granted visa applications of the proposed policy indicated by this modelling approach may fail to capture this. Subsequently the estimated NPV of the policy should be treated as indicative and subject to uncertainty.

G.4 Elasticity Assumptions

The application of elasticities in this IA has not been tested in relation to visa fees or the scale of price increases analysed in this IA and is unlikely to reflect the real-world elasticity in the specific circumstances considered, but it is believed that these represent the best available proxy measures. Given the risks posed by using these proxies, break-even analysis has been considered to estimate the percentage decrease in applications across all visa categories that would result in the modelled NPV of the policy over the five-year appraisal period being zero.

With all assumptions, excluding elasticity, held as under the central scenario, applications would have to fall by 2.5 per cent to result in the modelled NPV of the proposed policy being zero. The implied elasticity to generate a 2.5 per cent reduction in applications is significantly higher than the proxy elasticities used in the analysis.

G.5 Family visa fee waiver

Individuals making in country applications or extensions of their family visa may find a substantial increase in the surcharge unaffordable and therefore apply for a waiver of their visa fee on destitution grounds. Therefore, the increase in the surcharge level may result in an increase in destitution waiver applications. Should this result in an increase in the cases where visa fees are waived, the expected increase in surcharge revenue may be lower than estimated. Revenue from the visa fee would also reduce. Also, being granted a visa fee waiver provides applicants with access to the NHS free of charge and removes the restriction on applicants' ability to access public funds. An increase in cases where visa fees are waived would therefore result in lower revenue for the Home Office from the surcharge and visa fee, and higher costs to Government from providing public services and support.

It is considered that only a proportion of the in-country family visa applications may be eligible for visa fee waiver on destitution grounds.

H. Summary and Recommendations

Table 7 outlines the costs and benefits of the proposed policy in the central scenario. **The Government's preferred option is option 1** as it better meets its policy objectives.

Table 7: Cost and benefits of proposed policy, £ million.

Option	Present Values – Five-year appraisal period (2020/21 prices) £ million		
	Benefit	Cost	NPV
1	1,414.2	250.9	1,163.3

Source: Home Office internal analysis

The business net present value (BNPV) of the proposed policy reflects an increase in revenue for the private company contracted to collect the surcharge from eligible migrants and is estimated to be £30.4 million (5-Year PV, 2020/21 prices). It should be noted that the proposed policy is not associated with a monetised cost to business.

I. Wider impacts

Given the relatively small change in the estimated volume of applications over the appraisal period resulting from the policy, no wider impacts are considered in this IA.

J. Trade

This policy is unlikely to have any significant impact on trade.

K. Implementation, monitoring, feedback, enforcement and evaluation

The policy is expected to be implemented from October 2020, following the introduction of secondary legislation.

The impact of the increase will be monitored by the Home Office, with support, as appropriate, from the Department of Health and Social Care and the devolved health ministries.

The Home Office will continue to work closely with the Department of Health and Social Care and will engage with other Government departments as required. The Home Office will maintain open lines of communication with migrants via a dedicated email address and may also receive feedback as part of its normal visa issuing processes, through its public enquiry lines, and through formal correspondence with interested parties.

This policy does not introduce any new enforcement powers. The surcharge will continue to be paid on application, before permission to enter or remain in the UK is granted. Failure to pay the surcharge will result in an application being refused. Where a migrant seeking NHS care and is found to be in the UK legally, but who has not paid the surcharge (and is not otherwise exempt from doing so), the relevant NHS trust will remain responsible for recovering any treatment costs as appropriate. NHS trusts will inform the Home Office of any chargeable migrant (for example, one who has not paid the surcharge) that has failed to pay treatment charges of £500 or more that are outstanding for more than two months. The Home Office may, under existing powers, refuse any further immigration applications from that migrant until the debt is repaid.

Where the migrant is found to be in the UK illegally, Home Office Immigration Enforcement officers will take appropriate action as part of existing operational procedures.

After five years there will be an evaluation of this policy.

ANNEX 1 – Proposed surcharge level

Table A1.1 – Out of country surcharge level by visa products, £.

OUT OF COUNTRY - Visa Products	Current surcharge per six months (£)	Proposed surcharge per six months (£)
Family route to settlement	200	312
Tier 1 – Innovator, standard – Main	200	312
Tier 1 – Innovator, standard –Dependant	200	312
Tier 1 – Investor, standard – Main	200	312
Tier 1 – Investor, standard – Dependant	200	312
Tier 1 - Global Talent Postal - Main	200	312
Tier 1 - Global & Exceptional Talent Postal - Dependant	200	312
Tier 1 - Graduate Entrepreneur Route - Main & Dependants	200	312
Tier 1 – General – Dependants	200	312
Tier 2 - General, ICT – Long-Term Staff, Sport & MOR – main applicant	200	312
Tier 2 - General, ICT – Long-Term Staff, Sport & MOR – dependants	200	312
Tier 2 - General, ICT over 3 years EC – Long term staff – main applicant	200	312
Tier 2 - General, ICT over 3 years EC – Long term staff – dependants	200	312
Tier 2 – Shortage Occupations: Up to 3 years EC – main applicant	200	312
Tier 2 – Shortage Occupations: Up to 3 years EC – dependants	200	312
Tier 2 – Shortage Occupations: over 3 years EC – main applicant	200	312
Tier 2 – Shortage Occupations: over 3 years EC – dependants	200	312
Tier 4 - Main Apps	150	235
Tier 4 – Dependants	150	235
Short Term Student <12 Months Visa	150	235
Tier 5 Temp Work	200	312
Tier 5 Youth Mobility	150	235
Tier 5 Dependants	200	312

Source: Home Office internal analysis

Table A1.2 – In country surcharge level by visa products, £.

IN COUNTRY - Visa Products	Current surcharge per six months (£)	Proposed surcharge per six months (£)
LTR Non Student Postal Main	200	312
LTR Non Student Postal Deps	200	312
Employment LTR outside PBS Postal - Main	200	312
Employment LTR outside PBS Postal - Dependants	200	312
Tier 1 – Innovator, standard – Main	200	312
Tier 1 – Innovator, standard –Dependant	200	312
Tier 1 – Investor, standard – Main	200	312
Tier 1 – Investor, standard – Dependant	200	312
Tier 1 – Global / Exceptional Talent Postal - Main	200	312
Tier 1 – Global / Exceptional Talent Postal - Dependant	200	312
Tier 1 - Graduate Entrepreneur Postal - Main	200	312
Tier 1 - Graduate Entrepreneur Postal - Dependant	200	312
Tier 1 – Dependant	200	312
Tier 2 - Sport & MOR (In-UK) - main applicant	200	312
Tier 2 - Sport & MOR (In-UK) - dependants	200	312
Tier 2 - General (In-UK) - main applicant	200	312
Tier 2 - General (In-UK) - dependants	200	312
Tier 2 - ICT (In-UK) - main applicant	200	312
Tier 2 - ICT (In-UK) - dependants	200	312
Tier 2 General, ICT over 3 years leave to remain – Long-Term Staff – main applicant	200	312
Tier 2 General, ICT over 3 years leave to remain – Long-Term Staff – dependants	200	312
Tier 2 – Shortage Occupations: Up to 3 years leave to remain – main applicant	200	312
Tier 2 – Shortage Occupations: Up to 3 years leave to remain – dependants	200	312
Tier 2 – Shortage Occupations: Over 3 years leave to remain – main applicant	200	312
Tier 2 – Shortage Occupations: Over 3 years leave to remain – dependants	200	312
Tier 4 - Postal Main	150	235
Tier 4 - Postal Deps	150	235
Tier 5 - Postal Main	200	312
Tier 5 - Postal Deps	200	312

Source: Home Office internal analysis

ANNEX 2 – Visa fee and Unit Costs

Table A1.1 – Out of country surcharge liable visa products, £.

OUT OF COUNTRY - Visa Products	Estimated 2019/20 Unit Cost (£)	2019/20 Fee (£)
Family route to settlement	388	1,523
Tier 1 – Innovator, standard – Main	184	1,021
Tier 1 – Innovator, standard –Dependant	184	1,021
Tier 1 – Investor, standard – Main	184	1,623
Tier 1 – Investor, standard – Dependant	184	1,623
Tier 1 - Global Talent Postal - Main	184	608
Tier 1 - Global & Exceptional Talent Postal - Dependant	184	608
Tier 1 - Graduate Entrepreneur Route - Main & Dependants	184	363
Tier 1 – General – Dependants	184	1,021
Tier 2 - General, ICT – Long-Term Staff, Sport & MOR – main applicant	127	610
Tier 2 - General, ICT – Long-Term Staff, Sport & MOR – dependants	127	610
Tier 2 - General, ICT over 3 years EC – Long term staff – main applicant	127	1,220
Tier 2 - General, ICT over 3 years EC – Long term staff – dependants	127	1,220
Tier 2 – Shortage Occupations: Up to 3 years EC – main applicant	127	464
Tier 2 – Shortage Occupations: Up to 3 years EC – dependants	127	464
Tier 2 – Shortage Occupations: over 3 years EC – main applicant	127	928
Tier 2 – Shortage Occupations: over 3 years EC – dependants	127	928
Tier 4 - Main Apps	153	348
Tier 4 – Dependants	153	348
Short Term Student <12 Months Visa	130	186
Tier 5 Temp Work	115	244
Tier 5 Youth Mobility	115	244
Tier 5 Dependants	115	244

Source: Home Office internal analysis

Table A1.2 – In country surcharge level by visa products, £.

IN COUNTRY - Visa Products	Estimated 2019/20 Unit Cost (£)	2019/20 Fee (£)
LTR Non Student Postal Main	142	1,033
LTR Non Student Postal Deps	142	1,033
Tier 1 – Innovator, standard – Main	126	1,277
Tier 1 – Innovator, standard –Dependant	126	1,277
Tier 1 – Investor, standard – Main	126	1,623
Tier 1 – Investor, standard – Dependant	126	1,623
Tier 1 – Global / Exceptional Talent Postal - Main	126	608
Tier 1 – Global / Exceptional Talent Postal - Dependant	126	608
Tier 1 - Graduate Entrepreneur Postal - Main	126	493
Tier 1 - Graduate Entrepreneur Postal - Dependant	126	493
Tier 1 – General Dependant	126	1,878
Tier 2 - Sport & MOR (In-UK) - main applicant	317	704
Tier 2 - Sport & MOR (In-UK) - dependants	317	704
Tier 2 - General (In-UK) - main applicant	317	704
Tier 2 - General (In-UK) - dependants	317	704
Tier 2 - ICT (In-UK) - main applicant	317	704
Tier 2 - ICT (In-UK) - dependants	317	704
Tier 2 General, ICT over 3 years leave to remain – Long-Term Staff – main applicant	317	1,408
Tier 2 General, ICT over 3 years leave to remain – Long-Term Staff – dependants	317	1,408
Tier 2 – Shortage Occupations: Up to 3 years leave to remain – main applicant	317	464
Tier 2 – Shortage Occupations: Up to 3 years leave to remain – dependants	317	464
Tier 2 – Shortage Occupations: Over 3 years leave to remain – main applicant	317	928
Tier 2 – Shortage Occupations: Over 3 years leave to remain – dependants	317	928
Tier 4 - Postal Main	252	475
Tier 4 - Postal Deps	252	475
Tier 5 - Postal Main	317	244
Tier 5 - Postal Deps	317	244

Source: Home Office internal analysis

ANNEX 3 – Elasticity Assumptions

The following tables set out the elasticities used to analyse the impact of the changes in fees on different types of products. The following tables set out the academic papers from which these elasticities are taken. Elasticities used for dependent applications are not included in Table A3.1 as these were not derived from academic literature; rather, they were derived from Home Office analysis on the likely response by dependents from changes to dependent fees. Such responses were deemed to yield a best case and central elasticity of zero, and a worst-case value of -0.3.

The term 'elasticity' measures the responsiveness of demand for a product after a change in a product's own price. The elasticity assumption used here should be interpreted as the proportional decrease in visa applications (the demand) for a 1 per cent decrease in expected income over the total duration of the visa due to the increase in visa fee (the price). For example, if the increase in visa fee represents a 2 per cent decrease in total expected income and elasticity is assumed to be -0.5, then volumes would reduce by -0.5×2 per cent = -1 per cent.

Table A3.1: Empirical studies of the price elasticity of demand for visas

Source	Estimate of price elasticity of demand	Measure
Jena, F. & Reilly, B. (2013) 'The determinants of United Kingdom student visa demand from developing countries', <i>IZA Journal of Labor & Development</i> , vol. 2(1), p.6.	Between -0.2 and 0.37 (not statistically significant)	Estimates of price elasticity for visas. UK study that analyses demand for UK educational services by international students from 89 developing countries from 2001 to 2008.
Oxford Economics (2008) <i>Quantifying the impact of increased visa charges</i> . Final report for UKBA, DCMS and Tourism Alliance.	-0.09	UK study of price elasticity of demand for visas, covering 2004 to 2008, which saw two visa fee increases. They tested 19 specifications and visa fees are not usually significant. In the few instances where they were, price elasticity was around -0.09 and generally for the lowest income group (<10% visa applications and issues).

Table A3.2: Empirical studies of the price elasticity of demand for tourism

Source	Estimate of price elasticity of demand	Measure
Deese, W. (2013) <i>Determinants of inbound travel to the United States</i> . US International Trade Commission. No. 2013-02A.	Between -0.316 and -0.391	Travel price elasticity based on travellers to the US from 50 countries from 1990 to 2010.
Pham, T. D., Nghiem, S., & Dwyer, L. (2017) 'The determinants of Chinese visitors to Australia: A dynamic demand analysis', <i>Tourism Management</i> , vol. 63, issue C, pp. 268-276.	Short-run: -4.4 Long-run: -6.4	Price elasticity of demand for Australian tourism from Chinese visitors from 1991 to 2014.
Schiff, A. & Becken, S. (2011) 'Demand elasticity estimates for New Zealand tourism', <i>Tourism Management</i> , Elsevier, vol. 32(3), pp. 564-575.	Between -1.75 and -0.26	Price elasticity of demand estimates for New Zealand tourism from various countries from 1997 to 2007.

Table A3.3: Empirical studies of the wage elasticity of labour supply

Source	Estimate of wage elasticity of labour supply	Measure
Bargain, O., Orsini, K. & Peichl, A. (2012) <i>Comparing Labor Supply Elasticities in Europe and the US: New Results (December 2012)</i> . SOEP paper No. 525.	Men: between 0 and 0.4 Women: between 0.1 and 0.6	Elasticity of labour supply based on total hours in response to changes in tax-benefit policies. Uses data from Europe and the US from 1998 to 2005.

Blundell, R., Bozio, A. & Laroque, G. (2011) <i>Extensive and intensive margins of labour supply: working hours in the US, UK and France</i> , IFS Working Papers W11/01, Institute for Fiscal Studies.	Between 0.3 and 0.44	Aggregate elasticity estimate for total hours of the 30 to 54 age group for UK men and women from 1968 to 2008.
Evers, M., Mooij, R. & Vuuren, D. (2008) 'The Wage Elasticity of Labour Supply: A Synthesis of Empirical Estimates', <i>De Economist</i> , Springer, vol. 156(1), pp. 25-43.	Men: 0.07 Women: 0.43 (0.34 excluding outliers)	Mean estimates for a sample of 209 uncompensated labour supply elasticities in different developed countries. Average year of data sample in each study ranges from 1966 to 2000.
Jääntti, M., Pirttilä, J. & Selin, H. (2015) 'Estimating labour supply elasticities based on cross-country micro data: A bridge between micro and macro estimates?' <i>Journal of Public Economics</i> , vol. 127, pp. 87-99.	Between 0.23 and 0.64	Range is based on point estimates of average 'micro' and 'macro' elasticity estimates. Uses data from 13 countries, including from OECD. Data ranges from early 1970s to 2010s.

Table A3.4: Empirical studies of the price elasticity of demand for education

Source	Estimate of price elasticity of demand	Measure
Conlon, G.P., Ladher, R., Halterbeck, M. (2017). <i>The determinants of international demand for UK higher education</i> . Final report for the Higher Education Policy Institute and Kaplan International Pathways. London Economics.	Undergraduate: -0.33 in first year, -0.22 in second year (lagged effect) Postgraduate: -0.21	Price elasticity of demand for UK higher education from international students in 189 countries from 2000 to 2015.
Dearden, L., Fitzsimons, E. & Wyness, G. (2011) <i>The impact of tuition fees and support on university participation in the UK</i> (No. W11/17). IFS Working Papers.	-0.14	Elasticity estimate for UK higher education participation from 1992 to 2007 for those eligible for their first year of university.
Gallet, C. (2007) 'A comparative analysis of the demand for higher education: results from a meta-analysis of elasticities', <i>Economics Bulletin</i> , vol. 9(7), pp. 1-14.	-0.6	Mean tuition elasticity from a sample of 60 studies published between 1967 and 2004 from the US and rest of the world.
Hemelt, S.W. & Marcotte, D.E. (2011) 'The Impact of Tuition Increases on Enrollment at Public Colleges and Universities', <i>Educational Evaluation and Policy Analysis</i> , vol. 33(4), pp. 435-457.	Between -0.02 and -0.25	Elasticity estimates for total headcount in US higher education from 1991 to 2006.
Leslie, L.L. & Brinkman, P.T. (1987) 'Student price response in higher education: The student demand studies', <i>The Journal of Higher Education</i> , vol. 58(2), pp. 181-204.	-0.73	Corresponding price elasticity estimate for higher education in the US, based on a standardised sample of 25 studies conducted from 1967 to 1982.

Table A5: Empirical studies of the wage elasticity of labour demand

Source	Estimate of wage elasticity of labour demand	Measure
Addison, J., Bellmann, L., Schank, T. & Teixeira, P. (2005) <i>The Demand for Labor: An Analysis Using Matched Employer – Employee Data from the German Liab. Will the High Unskilled Worker Own-Wage Elasticity Please Stand Up?</i> IZA Discussion Paper No. 1780.	Manufacturing: -0.5 Service: -2.1	Short-run elasticity estimates for unskilled workers within each sector. Data covers 1993 to 2002 and used information on 1,171 manufacturing plants in Germany.
Bruno, G.S., Falzoni, A.M. & Helg, R. (2004) <i>Measuring the effect of globalization on labour demand elasticity: An empirical application to OECD countries</i> . Università	Short-run: between -0.04 and -0.08 Long-run: between -0.39 and	UK estimates of labour demand elasticity from a study that produced estimates from data covering major industrialised countries from 1970 to

commerciale Luigi Bocconi.	-0.59	1996 and 40 manufacturing industries. Standard deviations are relatively high.
Görg, H. & Hanley, A. (2005) 'Labour demand effects of international outsourcing: Evidence from plant-level data', <i>International Review of Economics & Finance</i> , vol. 14(3), pp. 365-376.	-0.52 or -0.621	Wage elasticity of demand for labour estimates in the Irish electronic industry from 1990 to 1995 in 80 plants. Estimates depend on assumptions made around wages and outsourcing being exogenous or pre-determined.
Hijzen, A. & Swaim, P. (2010) 'Offshoring, labour market institutions and the elasticity of labour demand', <i>European Economic Review</i> , vol. 54(8), pp. 1016-1034.	1980: -0.2 2002: -0.5	Estimated elasticities at the beginning and end of the sample. Data for estimating elasticity covers 1980 to 2002 from 11 OECD countries and 20 industries.
Kölling, A. (2009) <i>Firm size and employment dynamics. Estimations of labour demand elasticities using a fractional panel probit model and establishment data</i> . Hochschule der Bundesagentur für Arbeit (HdBA) Working Paper No. 1.	-0.245	Average labour demand elasticity estimate. Data covers 2000 to 2007 for 16 industries within Germany.
Kölling, A. & Schank, T. (2002) <i>Skill-biased technological change, international trade and the wage structure</i> (No. 14). Diskussionspapiere/Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Arbeitsmarkt-und Regionalpolitik.	Manufacturing: between -0.572 and -0.362 Service: between -2.684 and 1.063 (1.063 was insignificant)	Short-run elasticity estimates which depend on skill levels within each sector, with elasticity generally decreasing with skill levels. Data covers 1994 to 1997, including 880 plants in West Germany.
Lichter, A., Peichl, A. & Siegloch, S. (2013) <i>Labor demand elasticities in Europe: a meta-analysis</i> . In NEUJOBS Working Paper. NEUJOBS.	Mean: -0.559 UK/Ireland Mean: -0.567 UK/Ireland Prediction: -0.529	Mean estimates from a sample of 82 different micro-level studies (containing 784 own-wage elasticity estimates) published from 1993 to 2013 from across all of Europe.
Lichter, A., Peichl, A. & Siegloch, S. (2014) <i>The Own-Wage Elasticity of Labor Demand: A Meta-Regression Analysis</i> . IZA Discussion Papers 7958. Institute for the Study of Labor (IZA).	Mean: -0.508 Median: -0.386	Average estimates from a sample of 105 studies (containing 942 own-wage elasticity estimates) published from 1980 to 2012 for 37 different countries.
Navaretti, G.B., Checchi, D. & Turrini, A. (2003) 'Adjusting labor demand: Multinational versus national firms: A cross-European analysis', <i>Journal of the European Economic Association</i> , vol. 1(2-3), pp. 708-719.	Short-run UK (multi)national enterprises: -0.46 (-0.43) Long-run UK (multi)national enterprises: -3.55 (-0.47)	Estimates are based on firm-level analysis from 11 European countries, including 4,300 firms in the UK (47% multinational).

ANNEX 4 – Fiscal Impact of migration

Changes in the volume of migrants coming to live in the UK can be analysed in terms of their fiscal impacts, by considering the fiscal revenue that one additional migrant contributes to the economy and the portion of government spending on public services that s/he consumes. The Home Office has developed modelling to assess the fiscal impact of migration on fiscal spend and fiscal revenue.

- Fiscal spend is estimated by calculating costs per head for different types of public services accessible by non-UK nationals who visit and live in the UK.
- Fiscal revenue considers the contributions to tax revenue, such as income tax, National Insurance, council tax and indirect tax of foreign nationals.

The following sections outline in more detail the methodology used for the two components of the analysis.

4.1 Fiscal spend analysis

The analysis is largely based on the same methodology used for the IA for the Fee Order 2016¹⁴, although it has been reviewed and updated where relevant. The analysis uses a top down approach to apportion total expenditure on public services at the individual level and derive unit costs per migrant status. The unit costs are then applied to the volume of applicants deterred from applying for a visa due to the price elasticity of demand for visa effect, and ultimately estimate the saving in public expenditure due to fewer people using public services.

Data

Data on expenditure on public services is obtained from Public Expenditure Statistical Analysis (PESA) published by HM Treasury, which provides data on public sector expenditure broken down by functions. The analysis is based on data for 2017/18¹⁵ up rated with inflation and reported in 2019/20 prices¹⁶.

Public sector expenditure in PESA is broken down into the following functions:

- General public services.
- Defence.
- Public order and safety.
- Economic affairs.
- Environment protection.
- Housing and community amenities.
- Health.
- Recreation, culture and religion.
- Education.
- Social protection.
- EU transactions.

Data on migrant population characteristics is obtained from the Annual Population Survey (APS) produced by the Office for National Statistics. APS data for 2017/18 is used to derive population characteristics such as volumes of existing residents by nationality and age distribution. When using estimates of total UK population, the analysis uses ONS 2017¹⁷ data which is considered more accurate than APS data.

¹⁴ <http://www.legislation.gov.uk/ukxi/2016/177/impacts>

¹⁵ See Chapter 5 at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/726871/PESA_2018_Accessible.pdf

¹⁶ Inflation assumptions based on GDP deflator December 2019: <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-december-2019-quarterly-national-accounts>

¹⁷ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

Methodology

There are a number of different approaches to calculating fiscal impacts. The methodology attempts to represent a ‘marginal’ approach to measuring the impact of migration and therefore makes a distinction between costs that do not vary with additional individuals moving to the UK or extending their stay, and costs that do vary when one additional individual decides to move to the UK.

The fiscal impacts included here are also those attributable from migrants – any transfers between for example between UK companies and the Exchequer are excluded, according to Green Book guidance and MAC recommendations on appraisal of migration policies.

Treatment of public goods

Goods and services that do not vary with an additional individual are known as public goods and are defined as ‘non-rival’ and ‘non-excludable’. Non-rival means that the consumption of the good or service by one individual does not exhaust the opportunity for another person to consume the good or service. Non-excludable means that once the good or service is provided, it is impossible to prevent individuals from consuming it. For example, once street lighting is provided, it is impossible to prevent individuals walking past from benefitting from the light provided, regardless of whether they have contributed to that provision of that street lighting.

This IA makes a further distinction between pure and congestible public goods or services. The classification of public goods and services as pure and congestible is uncertain and open to debate. The definition and classification used in this IA is based on Dustman & Frattini 2014¹⁸. Pure public goods are non-rival and non-excludable, and the additional cost of providing such a good or service to an individual is considered to be zero. This category includes for example expenditure on basic research, or on defence. Congestible public goods are to some extent rival in consumption, but the additional cost of providing such goods and services is unknown and expected to be smaller than average costs. This category includes for example expenditure on transport and waste management.

Based on the Dustman and Frattini 2014 classification of pure and congestible public goods, Home Office analysts estimated the unit cost per person of such goods and services using PESA 2017/18 data for public expenditure divided by total population estimates. ONS total population estimates for 2017¹⁹ are used to estimate the total population. Table A4.1 presents the results. In the short term, whilst expenditure on pure public goods is not expected to vary with additional individuals, expenditure on congestible public goods is more likely to vary.

For the scenario analysis, the central and low scenarios include only the unit cost for congestible public goods, to reflect the fact that these costs are more likely to vary in the short term with one additional individual. The high scenario includes estimates of both pure and congestible public goods and services to reflect the possibility that over time a large increase in the population due to migration may lead to an increase in expenditure on these goods and services.

Table A4.1 Public good and services estimates, 2019/20 prices, £.

Public good and services estimates	(2019/20 prices) £
Pure	1,700
Congestible	1,600

Source: Home Office analysis using PESA 2017/18 and APS 2017/18 data. Data updated with inflation. Figures are rounded to the nearest 100.

Treatment of all other public services

For those categories of expenditure where costs would change when one additional individual moves or stays in the country, with costs shared equally across the population, public expenditure is apportioned

¹⁸ <http://www.cream-migration.org/files/FiscalEJ.pdf>

¹⁹ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

to the total UK population to derive a unit cost estimate using ONS 2017 population estimates. Examples include public expenditure on policy or housing development. The Home Office estimate of the unit cost for providing these public services is estimated at £550²⁰ per person in 2019/20 prices.

Treatment of public services: Health, Education and Social Services

In some cases, the consumption of public services is likely to vary by age, gender, family composition and other factors such as income and ethnicity. Migrants and the native population may therefore have different characteristics in relation to the consumption of public services.

APS 2017/18 data shows that around 50 per cent of non-EEA nationals living in the UK are aged between 20 and 44, compared to 25 per cent of UK nationals. Following a similar approach to the one used in the 2016 Fee Order IA²¹, this analysis estimates public service expenditure on health, education and social services by migrant status, adjusting for the age distribution of the migrant group.

Unit costs are calculated by apportioning PESA 2017/18 spend on education, health and social services by the proportion of each age group made up by non-EEA nationals. This uses APS 2017/18 data to identify the migrant population by migrant status such as worker, student or dependant.

For health estimates, unit costs are calculated based on OBR data on the proportion of total health spend by age group²² and weighted by the proportion of non-EEA nationals in each age group by migrant status. It is important to note that the estimates used in the central and high scenario only adjust for the age distribution of the non-EEA population, and do not make any further adjustments. For example, no adjustment is made in the central and high scenario for use of the service, which can be different between migrants and the native population. A further reduction of 72 per cent has been made to health unit costs in the low scenario, to reflect Department of Health & Social Care internal analysis on lower use of service of the migrant population compared to UK population²³.

Unit costs for education and social services are calculated by apportioning PESA 2017/18 spend to the proportion of non-EEA nationals in each age category. A unit cost is estimated by migrant status, which seeks to reflect the characteristics of the different segments of the non-EEA population. Note that no education costs are assigned to workers and students. Non-EEA workers are by definition in the UK for employment reasons and therefore no spend on education services is apportioned to them. Non-EEA students pay tuition fees set at a higher level than for UK and EEA students, which are assumed to cover the cost of their studies.

The estimates used for education, health and social services unit costs are summarised in the Table A4.2 below.

Table A4.2 Education, health and social services unit costs, 2019/20 prices, £.

Health, Education, Social Services (2019/20 prices), £	Central and High Scenarios (£)	Low Scenario (£)
All migrants	3,100	1,900
All non-EEA migrants	3,000	1,800
Non-EEA More than 5 years	2,400	1,200
Non-EEA Less than 5 years	2,700	1,600
Non-EEA Economic migrant	1,800	700
Non-EEA Student	600	200
Non-EEA Dependant	3,500	2,400

²⁰ Rounded to the nearest £10

²¹ The methodology used in the 2016 Fee Order impact assessment was based on work by the National Institute for Economic and Social research 2011, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/257236/impact-of-migration.pdf

²² OBR 2016; <http://budgetresponsibility.org.uk/fsr/fiscal-sustainability-analytical-papers-july-2016/>

²³ Department of Health & Social Care estimate of the use of service is based on data on use of primary and secondary care by immigration health surcharge payers.

The estimates are based on the age distribution of non-EEA migrants using APS data on nationality. They do not therefore include those long-term migrants who have obtained British nationality as they are considered part of the resident population. It should be noted that the age distribution used in the analysis may therefore be skewed towards younger and working age individuals.

Treatment of public services: Welfare

Individuals subject to visa requirements are not eligible to access the welfare system for the first five years lived in the UK²⁴. As the appraisal period of the analysis covers five years, welfare costs are only applied in the high scenario as sensitivity, as it is unlikely that the majority of migrants considered in the analysis would be eligible for welfare payments.

The central scenario assigns half of welfare expenditure to all migrant categories except those who have been in the country for less than five years²⁵. This reflects the fact that the visa categories considered cover both new applicants and extensions and therefore it is possible that those who extend their visa may have been in the country long enough to be eligible for welfare payments.

The estimate used for welfare costs per person is based on PESA 2017/18 expenditure, weighted to reflect the working-age and pension-age splits of non-EEA nationals using APS 2017/18 data. The Home Office estimates this cost to be £2,500²⁶ per person in 2019/20 prices (2017/18 data has been updated with inflation). It is important to note that this only takes into account the age distribution of the non-EEA population, and does not make any further adjustments.

The estimate is also based on the age distribution of non-EEA migrants using APS data by nationality and not by country of birth; it does not therefore include those long-term migrants who have obtained British nationality as they are considered part of the resident population. The age distribution used in the analysis may therefore be skewed towards younger and working age individuals.

Results

In summary, the impact assessment makes the following assumptions in the low, central and high scenarios, as set out in Table A4.3.

Table A4.3 Summary assumptions used in the IA, 2019/20 prices, £.

Unit cost	2019/20 prices £	Scenario		
		Low	Central	High
Pure public good	1,700	-	-	Included
Congestible public good	1,600	-	Included	Included
Other public services	500	Included	Included	Included
Health, Education, Social Services	Varies	Included	Included	Included
Welfare	2,500	-	Included (half)	Included (full)

²⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/639597/analysis-of-migrants-access-to-income-related-benefits.pdf

²⁵ In the absence of further evidence on the migrants' use of the welfare system over time, 50% of estimated welfare expenditure has been selected as an indicative assumptions, and it may not accurately reflect reality.

²⁶ Rounded to the nearest £100.

Table A4.4 shows the total unit cost used by migrant status in each scenario.

Table A4.4 Total unit cost used by migrant status in each scenario, 2019/20 prices, £.

Category (2019/20 prices)	Low (£)	Central (£)	High (£)
All migrants	2,500	5,300	9,300
All non-EEA migrants	2,400	5,200	9,300
Migrant in last 10 years	1,700	4,500	8,700
Migrant in last 5 years	2,100	4,900	6,500
Economic migrant	1,300	4,100	8,100
Student	800	3,600	6,900
Dependant	2,900	5,700	9,800

4.2 Fiscal revenue analysis

The analysis on fiscal revenue is based on a similar methodology to that used for the 2016 Fees Order impact assessment, although it has been reviewed and updated where relevant. The model uses a bottom up approach to calculate the expected contribution to direct and indirect taxes from visa applicants. The results are applied to the volume of visa applicants deterred from applying due to the price elasticity effect on visa demand, as a consequence of the increase in visa fees. This enables calculation of the total tax revenue forgone due to fewer migrants moving to the UK or extending their stay.

Data

The analysis applies tax rates and assumptions on tax contributions to generate estimates of both the direct and indirect tax contributions associated with applicants applying to each visa category. These are used as proxies for the earnings of those applying to different visa categories.

The analysis uses the following data on income and spending for different visa categories, with the figures subsequently inflated to 2019/20 prices:

- **Nationality and settlement:** The gross income of applicants is based upon an estimate of the median wage of non-EEA nationals multiplied by the employment rate for this group. Data on employment comes from the Annual Population Survey (2016-2018) and data on earnings comes from the 2018 Annual Survey of Hours and Earnings.
- **Tier 1 Investor:** The fiscal contribution of investors is inferred from the indirect taxation on their spending in the UK. Indirect tax estimates are based upon research by the Migration Advisory Committee (MAC) on the economic impact of Tier 1 investors²⁷.
- **Tier 1 Global & Exceptional talent:** Gross income for main applicants is estimated using an average of 2018/19 ASHE data on the earnings of particular researcher SOC codes.
- **Other Tier 1 routes (Entrepreneur; Graduate entrepreneur):** The estimate of gross income for is assumed to be in line with the median salary of self-employed individuals in the UK, based upon analysis of the 2017/18 Family Resources Survey²⁸.
- **Tier 2 and Tier 5:** Gross income estimates were obtained from 2018/19 Home Office management information. Tier 5 salaries are calculated as the median salary of the subset of those Tier 5 migrants which report that they earn a salary during their visit.
- **Tier 4:** Fiscal contributions are inferred from measures of the 'cost of living' for international students. The direct tax contribution of international students is assumed to be zero because the

²⁷ MAC report available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285220/Tier1investmentRoute.pdf

²⁸ <https://www.gov.uk/government/statistics/family-resources-survey-financial-year-201718>

earnings of international students typically fall below the threshold which would make them subject to direct taxation. A measure of the 'cost of living'²⁹, or the average total expenditure is used to estimate the contribution to indirect tax contribution of international students.

- **Visitors:** The fiscal contribution of visitors to the UK is determined by their indirect tax contribution that results from their spending. Data on the spend of visitors during their trips to the UK is obtained from the ONS International Passenger Survey 2018³⁰.
- **Dependants:** The income of dependants across visa categories is proxied using an estimate of the annual wage of non-EEA dependents (spouse/partner/child under 18) living in the UK without indefinite leave to remain (ILTR) for non-settlement visas, and with ILTR for settlement visas.

The IA assumes that those deterred from applying for nationality do not generate a loss to the Exchequer. This is because nationality products are optional and deterred applicants are still eligible to for leave to remain in the UK, even if they do not apply. Deterred applicants are therefore assumed to continue to contribute to the Exchequer.

Methodology

The analysis considers the fiscal contribution of a migrant through direct and indirect taxation. For direct taxation the analysis applies income tax and National Insurance Contribution rates from 2017/18 to the income estimates for each visa category. The estimates are adjusted for inflation to generate estimates for 2019/20.

Council tax contributions are estimated based on ONS estimates of council tax contribution by income decile³¹. These estimates are adjusted by the number of economically active people per household to estimate an individual's council tax contribution. The amount spent on council tax for each income decile is then applied to income estimates for each visa category. The income deciles of the salaries for visa categories is based on the same distribution used in the ONS estimates.

Indirect taxes include VAT, duties on specific products such as alcohol and tobacco, licences such as television and intermediate taxes. Indirect tax contributions will depend upon tastes, preferences and characteristics. The lack of robust data on the expenditure of migrants results in uncertainty about their spending patterns. Therefore, for indirect tax contributions the analysis applies a similar approach as taken for council tax. ONS estimates³² are used to calculate the proportion of income spent on indirect tax for each earning decile, and these proportions are then applied to the estimated income for each visa category.

The analysis excludes intermediate taxes paid on employers' National Insurance Contributions, business rates and corporation taxes as these are considered transfers between businesses and the Exchequer. The analysis also does not make further adjustments to cover other taxes, for example environmental levies or capital gains tax or GOS revenue. It is therefore possible that the fiscal revenue estimates outlined in this IA do not align with estimates in other HO publications, as they are not intended to reflect total direct and indirect taxes.

For international students, indirect tax contributions are estimated based upon measures of the cost of living facing these groups³³. For visitors to the UK, indirect tax contributions are inferred from estimates of the average expenditure of visitors during their visit. Contributions to indirect taxes by visitors are based on the VAT rate.

²⁹ Home office analysis based on Student income and expenditure survey 2014/15 available at: <https://www.gov.uk/government/publications/student-income-and-expenditure-survey-2014-to-2015>

³⁰ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/datasets/estimatesoflongterminternationalmigrationbyquarterderivedfromtheinternationalpassengersurvey>

³¹ ONS publication on "The effect of taxes and benefits on household income 2017/18"; April 2018. <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/theeffectsoftaxesandbenefitsonhouseholdincome/financialyearending2018>

³² See reference 28.

³³ Data on cost of living for students is based on the Student Income and Expenditure Survey (SIES) 2014/15 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693184/Student_income_and_expenditure_survey_2014_to_2015.pdf have been updated with inflation to 2018/19 prices.

The estimates of the fiscal contribution of migrants only include direct and indirect tax contributions from migrants themselves. The analysis does not account for any impact that migrants may have on the fiscal contributions of the resident population. For example, this may occur through the impact of migrants on the productivity and wages of resident workers or through the impact of any displacement of resident workers that may result from migration.

Results

The following table shows the expected contribution per year to direct and indirect tax by selected types of visa applicant. Results are based on the salary estimated for each visa category.

Table A4.5 Expected average annual salaries and contributions per year to direct and indirect tax by type of visa applicant, 2019/20 prices, £.

Visa Product	Average income (£)	Estimated yearly contribution to direct and indirect taxes (£)
Tier 1- Main applicant	23,800	7,400
Tier 1- Dependant	7,100	2,400
Tier 2- Main applicant	43,200	18,100
Tier 2- Dependant	7,100	2,400
Tier 4- Main applicant	18,800	5,200
Tier 4- Dependant	7,100	2,400
Tier 5- Main applicant	26,300	14,600
Tier 5- Dependant	7,100	2,400

Source: Home Office internal analysis

ANNEX 5 – Displacement Assumptions

Displacement

Labour market displacement occurs when employment opportunities in the UK that could be filled by UK natives (UK born or UK nationals) are instead filled by migrants (foreign born or foreign nationals).

There is some uncertainty about the presence and strength of displacement effects. A Migration Advisory Committee (MAC) report analysing the impact of displacement on the UK labour market³⁴ found a “tentative negative association between working-age migrants and native employment when the economy is below full capacity, for non-EU migrants and for the period 1995-2010”. This is similar to the findings of a Home Office and Department for Business, Innovation and Skill literature review on the impacts of migration on UK native employment.³⁵ A more recent MAC report³⁶ found that “migrants have no or little impact on the overall employment and unemployment outcomes of the UK born workforce... with more negative effects for the lower-skilled”.

Application to this IA

Given the high degree of uncertainty around the extent of displacement/ replacement effects on low skilled workers, **this IA has not attempted to capture such effects as part of the Net Present Social Value (NPSV) estimates.** However, it has adopted a similar approach to that taken in the 2018 IA on Updating the Immigration Health surcharge³⁷ to provide indicative estimates of the potential displacement effects on the low skilled in section E.18. The remainder of this annex provides a summary of the assumptions underlying these estimates.

Rate of Displacement

The displacement estimates set out in this IA use assumptions built upon the upon evidence provided by the MAC report (January 2012). The report estimated the association between migration and native employment in Great Britain, using data from the Labour Force Surveys between 1975 and 2010. For the purpose of the report, natives were defined as UK-born individuals. The headline result was that a one-off increase of 100 in the inflow of working-age non-EU born migrants is associated with a reduction in native employment of 23 people (this is based on analysis of data spanning 1995 to 2010).

The Home Office / BIS literature review found little statistically significant evidence of migrants’ displacement of UK natives from the labour market in periods when the economy has been strong, but some evidence that some labour market displacement has occurred in recent years when the economy was in recession. Where displacement effects are observed, these tend to be concentrated on low skilled natives.

In light of this evidence, the displacement estimates set out in this IA assume that a one-off inflow of 100 low-skilled, working-age migrants will displace 15 native workers from employment (15 per cent of such migrants take jobs that would otherwise have gone to native workers) and that a similar increase in high-skilled migrants will not displace any native workers.

Length of Displacement

In implementing the volume of displacement, a key consideration is the tentative association in MAC (2012) that only those migrants who have been in the UK for less than 5 years are associated with displacement, not those who have been in the UK for over five years. This is not directly applicable to IAs, which show impacts annually. Therefore, without further evidence to suggest otherwise, displacement is assumed to diminish equally each year over a five-year period, for each particular cohort of migrants. It is also assumed that those who are removed from the UK may have already spent a period of time in the UK and may be associated with a lower level of displacement. However, the length

³⁴ MAC (2012) Analysis of the impacts of migration.

³⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/287287/occ109.pdf

³⁶ MAC (2018) EEA migration in the UK: Final report.

³⁷ https://www.legislation.gov.uk/ukia/2018/126/pdfs/ukia_20180126_en.pdf

of time in the UK is not known, so it is assumed that migrants would have been in the UK for between 0 and 5 years. For this reason, this IA assumes that displacement effects last for 3 years in the Central scenario, 1 year in the 'Low' and 5 years in the 'High' scenario.

Displacement by Cohort

The tracking over time of displacement is measured per cohort of immigrants. In any year that there is an inflow of migrants, these are classed as one cohort specific to that year. The following year, there will be another inflow of migrants, and while these add to the existing stock of migrants, they are an individual cohort specific to year 2. When displacement is measured over time, it is done so per cohort. This means that moving from one year to the next, there will be a new cohort arriving, but the previous year's cohort will have its own diminishing effects still occurring.

Replacement Effects

Whilst the above outline of displacement is considered to be a cost, a benefit would arise if measuring the impact of migrants leaving the UK, or migrants deterred from coming to the UK. This is known as a replacement effect. MAC (2012) tentatively suggests that any reduction in native employment associated with migrant inflows is equal to an increase in native employment associated with equivalent migrant outflows. Furthermore, as it is not known for how long migrants who leave the country were in the country, the central estimate is that they stayed here for 3 years, and this is taken into account when assessing the replacement effect (essentially, a migrant leaving after staying for 3 years will permit replacement of fewer UK residents than a migrant leaving after staying for only 1 year).

Table A5.1 Replacement rate assumptions under different scenarios, (%)

Scenario	Initial Replacement Rate (%)	Taper	Year 1	Year 2	Year 3	Year 4	Year 5
Low	15	1 Year Taper	100	0	0	0	0
Central	15	3 Year Taper	100	67	33	0	0
High	30	5 Year Taper	100	80	60	40	20