

Airspace Change Programme second consultation report.

July 2017





01

Welcome

Welcome to this report on Edinburgh Airport's Airspace Change Programme's second consultation. We have been discussing airspace change with communities, organisations and politicians for over a year now, via two distinct consultation exercises.

Our initial consultation in 2016 helped us understand our surrounding areas better, so that our airspace change design process was as best informed as it could be, on the issues and concerns raised by you.

Our second, on which we report here, sought opinions on the options which that process created for different flight paths in the future, as we prepare for technological, regulatory and growth changes.

It was important to us to have a rich and informed conversation on this necessary change. It is an important change. It is significant, of course, for the communities that we currently overfly and may overfly in the future.

That was evident in the design options we put forward - informed by our initial consultation and changed, perhaps controversially, to include new routes outwith the design envelopes we first suggested.

I believe that is right that no option be left unexamined as we strive to modernise and improve our airspace for the foreseeable future.

We have now had the extensive, deep and broad discussion for which we aimed; I thank all those who contributed to enrich our understanding of your concerns and opinions about the options we set out, as clearly as we could; we are currently working on how best to respond to what we've been told, in numerous public meetings, letters, submissions, emails and web commentary.

I can assure you that we have listened and your views loud and clear.

Thank you for your ongoing interest in our Airspace Change Programme.



Regards

Gordon Dewar
Chief Executive

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Glossary of terms

This glossary lists key acronyms within the document and their meaning as well as defining some industry terms and Edinburgh Airport Limited services, and what they mean in this context.

ATC	Air traffic control	NATS	Air traffic management company providing en-route air traffic control throughout the UK
ATM	Air traffic movement	NM	Nautical mile
CAA	Civil Aviation Authority	PBN	Performance Based Navigation
CAP	Civil Aviation Publication	RNAV	This is a sub-set of 'performance based' navigation which uses many navigational references, including satellites rather than the conventional ground-based radio beacons and is far more accurate
CAS	Controlled airspace	SEL	Sound Exposure Level: is the constant sound level which has the same energy in one second as the original sound event
EACC	Edinburgh Airport Consultative Committee	Vector	This means that aircraft do not follow the flight path until the very end of the path, but may be directed onto a different heading by air traffic control once a certain altitude has been reached after departure. Vectoring occurs for many reasons including weather conditions and flight safety
EAL	Edinburgh Airport Limited		
Design envelope	The area within which each flight path may be positioned		
FAS	Future Airspace Strategy		
ICAO	International Civil Aviation Organisation		
L_{eq}	Equivalent continuous sound level: is the average noise level over a specified time period		
L_{max}	Level maximum: is the maximum value of the time weighted sound pressure level, which occurs during the measurement period		

Consultation introduction

The report you're currently reading is the culmination of the second consultation on our Airspace Change Programme. In this consultation, we asked for opinions on a number of flight path options. It stands on the back of an initial three month public consultation in 2016, which was used to inform our design process. It builds on days of technical design work. It reflects hundreds of hours of impassioned debate, argument and discourse. It has been created in church halls and local villages, in the technology filled rooms of air route designers, funky creative spaces, bland offices, cluttered front rooms, home offices and the debating chambers of our elected representatives.

The dialogue between Edinburgh Airport and its surrounding communities has been a long and involved one. For some, it has been a difficult one. For all involved, it is a vitally important one and one that we must have for the social, economic and sustainable future of Scotland.

Edinburgh Airport must change its airspace in order to follow the current modernisation of all airspace across the UK. It must also build capacity in that airspace in order to meet current demand, and to be able to grow sustainably and efficiently in the future.

In this second consultation it was suggested to us that we were “losing the argument.” This fundamentally misunderstands the process and indeed the nature of public consultation.

We weren't arguing. Rather, we were consulting – we put forward a range of carefully researched and calibrated options, incorporating many of the views we heard in the 2016 consultation exercise and sought your considered reaction and opinions on which options you might favour, under what circumstances.

The sole purpose of this exercise was to gather feedback on our working assumptions and options that we presented so you could assess them in

order to allow us make the best decisions on how to move forward, that we shall present to the ultimate decision-making authority in these matters, the Civil Aviation Authority (CAA).

Our task was to inform, listen and then act. This report describes how we went about that task and explains the next steps.

The report details who responded, where they were, and what they told us. It presents the data with no analysis, and doesn't offer any view on how they may affect our final submission to the CAA. That analysis by us will come later, and will be published, as we prepare our recommendations to the CAA.

This consultation saw a robust and full-blooded discussion of the flight path options and a number of themes and issues arose from that engagement on process points.

It was clear from the outset that three main issues would dominate our conversations aside from the substantive options themselves:

- the population data we used in assessing the options;
- the presentation of options outwith our original design envelopes (having made adjustments after the 2016 consultation);

- and the integrity of the consultation itself given people's perceptions on the first two issues.

We spoke with over 1,000 people at 23 public drop-in sessions and public meetings over the course of the second consultation and these were indeed the issues that came through very clearly.

Our response was clear too.

It is unfortunately obvious that in any process of this kind there are going to be winners and losers. We have certainly found that airspace change cannot be achieved without this. Someone described it as a 'balance of trade-offs'.

This consultation process is designed to understand better the impact of our airport business, and then to fashion a solution that lessens the numbers negatively impacted.

It is active listening - we have invited views over many months and we have put forward options based on what we were told in the initial consultation. This process is ongoing. Much of the past year has involved hearing hard truths about how the airport impacts on lives in the communities of those who surround us, and also the fears of those who may be newly impacted in the future.

Again, we have tried to be active in our listening - it is not enough to register a strongly held opinion or view. We've been probing instant reactions for more detail, commissioning further work, such as focus groups, to better understand what we're hearing.

We've been asking the 'why' question and tirelessly searching for viable alternatives.

The richness of the dialogue we've had means that we have an unparalleled amount of data on which to make our decisions. A secondary and unanticipated benefit has been to enrich our relationships with many of those previously anonymous 'stakeholders' who are affected daily by our operations, in a positive or negative manner.

The dialogue has attracted many participants; we were unsurprised by the diligent and effective work of Community Councils, district Councillors, MSPs and MPs in the vigorous representation of their constituents' legitimate concerns.

We also appreciate the conversation with over 1,000 organisations on everything from wildlife to childcare; airport runways to housing growth in West Lothian.

Various aspects of these conversations have been reported in the media which we believe played a key role in encouraging responses and amplifying concerns and issues. A lively social media dialogue also enlivened and deepened the discourse.

Stakeholders attended our public meetings and pressed us on the issues raised, whilst being sympathetic to the process and our aims.

Although some politicisation of the debate was inevitable - there was a local and a general election during the consultation period - and in some cases the language intemperate, their contribution aided the process.

We were disappointed that a debate regarding the Airspace Change Programme in the Scottish Parliament did not better reflect the debate that was being held with communities, but we value the scrutiny and interest of our MSPs and the challenges they set us to be clearer and more expansive in our approach.

We have sought and welcomed this reaction from all quarters; we see it as part of our accountability to our community; we have also built in third party independent assessment into our processes.

The Airport's Consultative Committee, which represents local communities as well as passengers and other interested groups, did its usual creditable work in understanding our rationale and challenging us in our process.

The Stakeholder Reference Group (SRG), chaired by Dame Sue Bruce and reporting through the Consultation Institute, challenged all aspects of our consultation. The SRG, which continues its important work into the next stage of analysis, feedback to consultees, and 'feed-forward' to our board, and then to the CAA, represented a broad spectrum of stakeholders and its advice, whilst not always easy for us to take, was consistently valuable; we believe it enhanced the consultation process considerably and commend the model to others.

The Consultation Institute itself sets formidable standards to reach and we have worked extremely hard to ensure we continue to comply with these standards. The Consultation Institute will report on where we did and importantly, if we did not, in the commentary included later in this document.

This is important as one of the things that we have learned in bringing this incredibly complex and contentious consultation project to life is that errors will be – and have been – made. How we dealt with these is the important part.

We acknowledge that some mistakes have been made. They are embarrassing for us. They are resource intensive to deal with. But they are inevitable and we have learned from them. We apologise to everyone affected by them.

We have learned from the late delivery of our consultation books – the core ‘narrative’ on which the options rested. We have learned from the error in the freepost address on the FAQ page on the website. With hindsight, we would perhaps have handled the design envelopes differently and the population data, given the difficulties we faced in acquiring up-to-date details, and accurate projections, when public bodies and private developers seem to use different formulas.

However, we are confident that these are, in relation to the huge ambition of the changes, relatively discrete and manageable incidents – they did not impair the overall completeness of the consultation; we have been open in identifying them and tenacious in our attempts to fix them. We have done all that we can to allow those affected to give their reactions and opinions in dialogue with us.

Our growth plans that will be enhanced by these airspace changes, if approved, has its own detractors who have been equally tenacious in using these errors against us.

We welcome debate on our proposals and engaged with diverse groups to continue these discussions. We especially welcomed dialogue with Edinburgh Airport Watch (EAW) who diligently attended all of our public meetings and held a few of their own. We sought to develop protocols of engagement so that the public could hear all views, without emotional or intemperate language and claims. By and large, we succeeded and we hope that EAW felt that it was able to promote its message.

We are sure in our discussions, we are sure in our information and we are sure that the outcomes of what we are consulting on, if approved by CAA, can be of an enormous benefit to our country.

We welcome this scrutiny and debate.

If we had not consulted fully we would not have had this scrutiny. It is evidence of our full participation in lively debate on the options presented; it has helped us inform our developing views and perspectives on the complex challenges of engaging half of the central belt of Scotland in a large change project.

During the course of our two public consultations, we’ve received nearly 10,000 responses regarding our Airspace Change Programme, with nearly 3,900 received in the second consultation.

We appreciate the time people put into their response letting us know their views about our viable flight path options.

So what happens next?

The analysis of the data and its deployment to help determine the preferred flight paths will be presented as part of the application to the CAA for an airspace change at Edinburgh Airport. This application will include regulatory, operational and technical information. It will also report on our response to the consultations; all consultation responses will be read and assessed by us, and all will be forwarded to CAA as well, as part of our conscientious consideration of every opinion gathered. We anticipate submitting this application later in the summer.

We will publicise our case for change including a summary of the application to the CAA and responses to the comments made during the consultation. It will also explain the methodology behind determining the final flight paths.

The CAA takes a minimum of 17 weeks to make a decision on our Application for Airspace Change. The decision on the application will be made publicly available by the CAA. If the milestones are met, we expect this to be around year end 2017.

Thank you for your interest and your participation in our Airspace Change Programme and we hope that you find this report on our second consultation of interest and value.

Why do we need new flight paths?

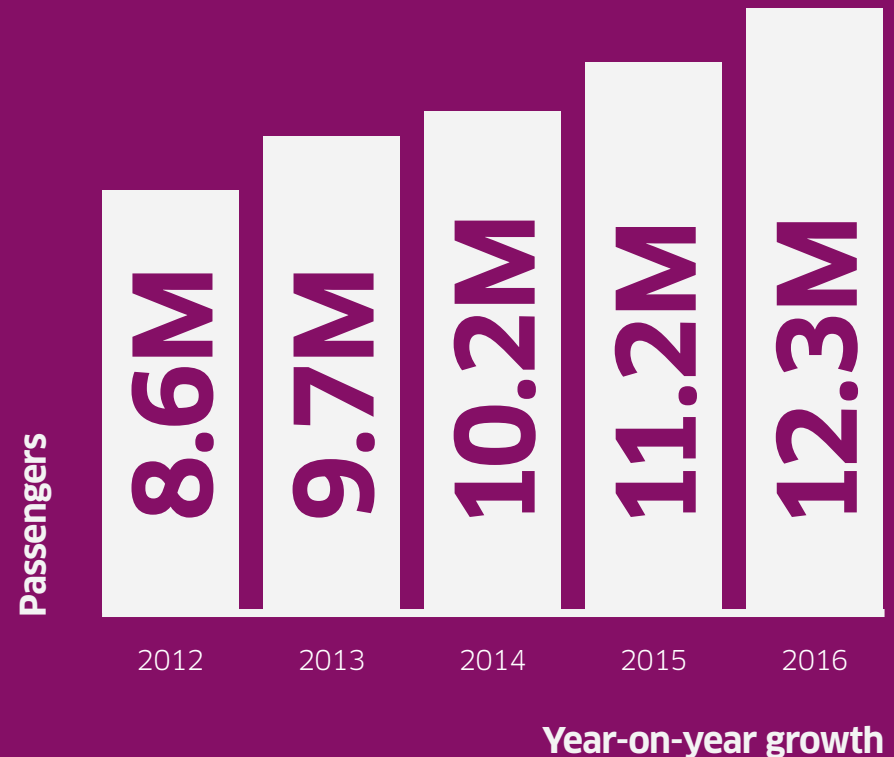
Edinburgh Airport is growing. In 2016, we helped 12.3 million passengers through our airport - a growth of 11% on 2015. Growth for Edinburgh Airport is not new; our passenger numbers have consistently grown over recent years.

The Airspace Change Programme is about the way in which Edinburgh Airport intends to grow, ensuring that it continues to be able to support Scotland's aspirations in a safe and effective way.

There are two main reasons why we need to run an Airspace Change Programme: growth and modernisation.

- **Growth:** We ran a study that looked at the capacity of our arriving and departing operations. The report noted that already during peak traffic times, we had runway delays during these times as aircraft take off or land at a minimum of two-minute intervals. Reviewing our arriving and departing procedure, the delays and environmental impact of the delays can be reduced if we work towards a one-minute separation, from the current two-minute separation.
- **Modernisation:** The UK Government's Future of Airspace Strategy requires all airports within the UK to use an area navigation system. This concentrates flight paths in a narrower and more precise track (1 nautical mile either side of the centre track) compared to the current flight paths which are typically dispersed (up to 5 miles wide).

The proposed routes will introduce departure flight paths that permit aircraft to turn off the centre line earlier, i.e. turn left or right. This can allow a following aircraft waiting on the ground, to take-off sooner if it is taking a different route. With the current day routes the smallest departure interval is 2 minutes between successive departures. With the proposed routes, some pairs of departures will be able to take-off with only 1 minute between them.



Programme mandates

Edinburgh Airport has commissioned an independent quality assurance of our consultation process by the Consultation Institute (consultationinstitute.org). As part of our commitment to you, we are publishing our programme mandate, as well as the mandate of our initial and second consultation. Given the nature of the consultation and the requirement of the CAA guidelines, we have developed a mandate for the overall programme, and individual mandates for the two specific consultations.

These are:

Programme mandate:

We, Edinburgh Airport, need to understand the views of stakeholders concerning the presentation of an airspace change proposal to the CAA that complies with the relevant regulatory requirements so that Edinburgh Airport can operate flight paths that maximise operational benefits and minimise community impact by 2018 so as to improve Edinburgh Airport's national transportation infrastructure to enable the economic, social and cultural growth of Scotland.

Mandate 1: Initial consultation

We, Edinburgh Airport, need to understand the views of stakeholders concerning issues that may arise from altering arrival and departure flight paths so that we can analyse concerns gathered during the initial consultation (June to September 2016) and develop viable

options by December 2016 so as to develop a flight path change consultation on options to effectively maximise operational benefits and minimise community impacts.

Mandate 2: Further consultation

We, Edinburgh Airport, need to understand the views of stakeholders concerning viable options for arrival and departure flight paths so we can alter flight paths to maximise operational benefits and minimise community impacts by summer 2017 so as to produce an airspace change proposal to the CAA which complies with relevant regulatory requirements and responds to consultee concerns.

Initial consultation

In June 2016, we launched our Airspace Change Programme – a two-stage public consultation regarding our desire to modernise Edinburgh Airport’s flight paths.

In the initial consultation, we asked “what local factors should be taken into account when determining the position of the route within the design envelope given the potential impacts, and why?”

This simple question allowed us to gather information from stakeholders, communities and other interested groups so that we could build their voices into the design stage of our programme.

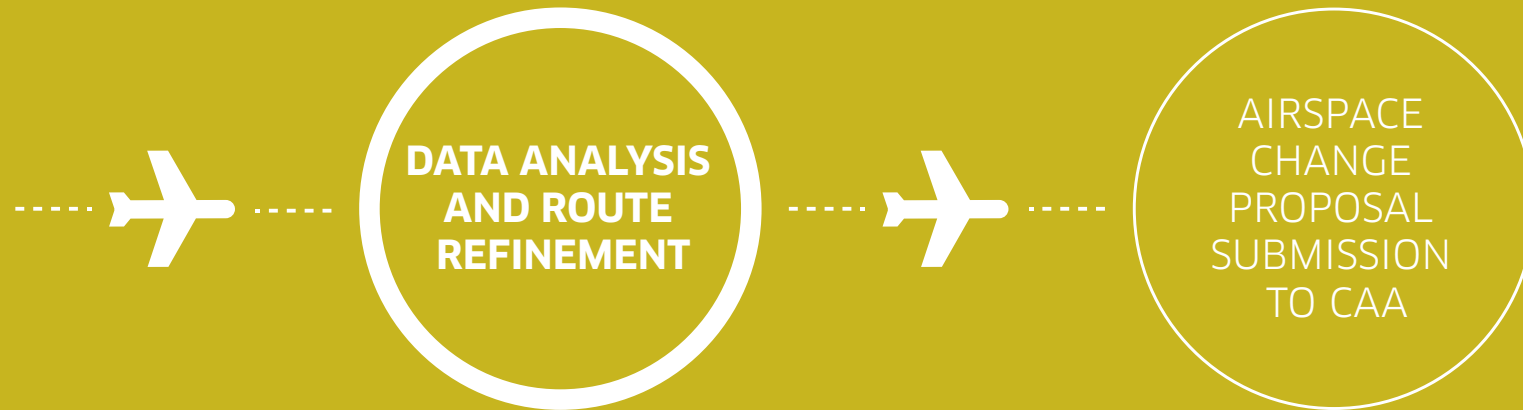
The initial consultation ran from 6 June to 19 September 2016 and we received 5,880 responses – 89 from organisations and elected members and 5,791 from individuals.

The main issues raised were regarding noise levels, time of noise, health concerns and environmental concerns. The feedback from the initial consultation has informed the flight path options development and design.

You can find more information about the initial consultation on our website at edinburghairport.com/airspacechangeprogramme.

Programme timeline





Second consultation

The second consultation ran from 30 January to 7 May, covering a 14-week period. The consultation originally ran for 13 weeks to allow respondents enough time to respond to the consultation to cover the Easter holiday period. In response to requests from a number of consultees, we extended the consultation by one week to allow for those who attended events later in the original 13-week period, providing some extra time to consider and respond to the consultation.

When considering design options, we needed to balance the impact on the community, regulatory requirements and our operational requirements. Based on feedback provided during the initial consultation, the key community concerns raised were around noise, health and environmental impacts on local communities.

We engaged an independent noise expert to help us understand how to evaluate the impact on communities and have used population density mapping as a key criteria. The impact on care and education facilities was also raised as a community concern. As well as population density mapping, we also mapped schools and care facilities under the design envelopes.

We have evaluated the flight path options on an individual basis as well as looking at the airspace as a whole. We have considered how one flight path may affect another and looked overall at the benefits and impacts to communities and tried to improve these where possible.

We have read every response to the second consultation and all responses will be provided to the CAA as part of our Application for Airspace Change.

How did we consult?

From the launch, we have committed to an open and transparent Airspace Change Programme. Our consultations are about giving people enough information to understand the situation and the opportunity to provide their views on our proposed flight path options.

Communication and advertising approach

Our approach to the second consultation was to generate feedback on the flight path options.

We used a bespoke website (letssofar.com) for people to find out information about the consultation. The website hosted our consultation book and materials such as fact sheets, frequently asked questions and a background reading library as well as the online response form. We also developed smaller individual flight path books to show detailed information for particular flight paths.

Hard copies of the consultation book and response form were printed and shared via community events and on request. We also offered a free post address to those who wanted to submit responses by post.

We monitored the responses during the consultation and updated frequently asked questions on a regular basis for emerging themes.

We mailed a letter to 643,655 households to advise of the consultation to EH, FK and KY postcodes. We also emailed over 1,100 stakeholders from impacted areas to advise of the consultation. We advertised on radio, on billboards at key locations and drove an ad trailer around areas in those postcodes.

We ran social media campaigns, advertised in the local and national press, and a PR campaign locally and nationally. We also met with politicians, journalists, stakeholders, both communities and protest groups.

Public meetings

We hosted 23 community drop-in and town hall sessions with over 1,000 attendees. These sessions were to give people access to information and the opportunity to ask questions. All attendees were encouraged to provide a consultation response either online or via the paper response form. They allowed us to answer community questions, respond to concerns and continue the discussion around flight path options.

We worked with an equalities consultancy to help tailor information to equality groups, and held an equality-focused drop-in session. We also worked with YoungScot to help tailor information for those under 25.

Table of methods to notify people about the consultation

Radio	
Forth 1, Forth 2, Forth 3 (Broadcast area: 1,139,791 adults)	Audience of 360,690 adults (31.6% of population) with six opportunities to hear the advert during the first two weeks of the consultation
Mail	
Royal Mail	Letters delivered to 646,452 households with an estimated readership of 1.1 million adults
Digital	Targeting
Facebook posts/videos	Daily posts targeting adults aged 18-65 within a 50km radius of Edinburgh Airport
Press	
Edinburgh Evening News (Circulation: 21,803)	Advertisement placed in paper during consultation period
West Lothian Courier (Circulation: 8,513)	Advertisement placed in paper during consultation period
Linlithgowshire Journal and Gazette (Circulation: 4,579)	Advertisement placed in paper during consultation period
Dunfermline Press (Circulation: 11,230)	Advertisement placed in paper during consultation period
Falkirk Herald (Circulation 21,900)	Advertisement placed in paper during consultation period

Stakeholder mapping

We conducted a full stakeholder mapping exercise before the programme launched and updated this continually throughout the initial consultation, before the second consultation and throughout the second consultation.

The consultation was open to anyone who wanted to participate. We considered the following criteria to determine who may be a stakeholder, specifically:

- Who may be impacted directly by the potential flight path options?
- Who may be indirectly impacted by these changes?
- Who do we need help from to make the potential changes work?

Equalities

We have sought independent advice on equalities, ensuring our consultation is available to the widest number of people possible. It is important for us to make it as easy as possible for those who wanted to participate to have a voice. We are finalising an equalities assessment which will be included in our submission to CAA.

We will pay due regard to these concerns as we consider all of the various views and opinions in our flight path developments.

We also provided the consultation book in an easy read format, and information was available as a translation, on request. To help people with a specific concern regarding equality during the consultation process, we worked with a diversity company who helped target hard-to-reach groups, and we held a joint equalities drop-in session.

Populations overflown

We used population density mapping to determine existing populations and future populations that may be overflown within the design envelope. The population information was taken from the most recent Census and known areas of housing developments were also identified. For each proposed flight path we have compared those overflown today, to those who may be overflown under the proposed flight path. This has allowed us to determine if the population may be a new community to be overflown.

Outside of the design envelope

Some of the design options for the second consultation fall outside of the design envelopes that were shown in the initial consultation. Design envelopes shown within the initial consultation were based upon route design criteria which used RNAV coding. However, as a result of the community feedback during the initial consultation, and in order to minimise noise exposure at low altitude, we explored other coding possibilities which could, in some cases, facilitate a tighter first turn. This has resulted in some of the viable flight path

options presented in the second consultation being outside the design envelopes identified during the initial consultation.

All of those affected by this and all other flight path options were consulted with in the second consultation.

Viable flight path options (including outside design envelope)

Our second consultation information presented details for each flight path option. This included:

- current flight path tracks
- flight path options including those considered unviable, to show they had been considered
- a criteria table showing option alongside option
- highlighting our preferred option including the decision making process for determining the preferred options
- information on the optioneering process
- concerns raised by local communities and a response to these concerns
- details about possible vectoring⁴
- population density maps overlaid with flight path options
- L_{max}^1 footprints and information regarding noise levels with reference to a further full noise report with L_{eq}^2 16 contours and SEL^3 footprints
- analysis of flightpath options against the criteria of regulatory, operational and community requirements
- current flight path usage based on preferred flight path options
- future flight path usage projections based on preferred flight path options (to 2023).

Research tender

We ran a research tender to appoint a marketing research agency to host the consultation response form, to collate the data and to report on the data. This agency was an Edinburgh-based agency and provided this function for us for the second consultation.

Research methodology

We hosted the consultation questions on our website letsgofurther.com from launch until 1 March when this was taken over by Progressive Partnership our research agency.

The online survey provided responses with an automatic feedback of results. Respondents were given the option to complete the survey by paper. The consultation was open for responses from 30 January to 7 May 2017 and was open to anyone who wanted to respond.

Questionnaire design

The survey consisted of 55 questions – a combination of structured questions with levels of agreement with all viable flight path options, and with text boxes where respondents could input their reasons behind agreeing or disagreeing with flight path options or provide general feedback. The online questionnaire included full illustrations of the flight path options, and the paper version referred to page numbers in the consultation book.

We gathered information on name, email address and desire to be updated; as well as information on protected characteristics to allow a report on the diversity of respondents. It also included the opportunity to raise any issues connected to equality.

Nearing the close of the survey it was noticed that the paper version of the survey did not exactly match the online survey in that a slightly different scale was used to assess alternative routes. The paper version used a scale ranging from strongly oppose to strongly support. The online version used a scale of strongly disagree to strongly agree. The similarity in the two versions was thought to be close enough to allow aggregating the data from both types.

Despite respondents from the paper version being less likely to express strong support than other respondents across most of the flight paths tested, the number of those who reported on paper (1.3% of the sample, 52 questionnaires in total) did not make a difference to the overall findings. The non-viable option of flight path B6 was included in the online version of the questionnaire. The responses to the non-viable option B6 have been discounted and this has not affected views on the other, viable options. The airport, recognises and apologises for this error.

Freepost address in FAQs

There was an error in the freepost address given on the FAQ pages on our website.

Royal Mail advised that incorrectly addressed letters with no return address would be opened under secure conditions to look for the sender details. If no sender details were located the contents would be disposed of. If a sender address was located the item would be returned to that address. We were unaware of any issues with the FAQ address until after the consultation closed.

All of those who raised this issue with us have sent us their submissions. These have been logged and will be submitted to the CAA when we submit our Airspace Change Proposal later this summer.

Where someone believes they sent a consultation response to the incorrect freepost address, they have the opportunity to resend their consultation response to:

AIRSPACE CHANGE PROGRAMME
COMMUNICATIONS TEAM
EDINBURGH AIRPORT
TERMINAL BUILDING
EDINBURGH
EH12 9DN

by 31 July 2017. These responses will be included in our submission to the CAA as part of our Application for Airspace Change.

Further information can be found on edinburghairport.com/airspacechangeprogramme.

Questions analysis

All paper versions of the questionnaire were included in the analysis (52). Progressive partnership analysed the data by levels of agreement ranging from strongly disagree to strongly agree. We created subgroups for analysis that included: region of residence, source of response (individual, elected member and organisation). This allowed us to understand where opinions were coming from. We analysed the data for each of the flight paths separately.

Data management

When multiple questionnaires with identical responses were submitted by the same individual, they were removed. There were 281 duplicates removed. We acknowledge that these multiple entries might have been entered by one person because they felt so strongly about the consultation that they had taken the time to write on multiple occasions or indeed, multiple entries may have been entered by more than one person, who simply copied the response of another person because they have similar views. In our view the best approach was to exclude these identical responses notwithstanding the uncertainty described, because of fears that one person's opinion might unduly influence the results.

We also acknowledge that there is a risk that an individuals' response may have been counted more than once if they filled in an individual response, and also formed part of a response by an organisation.

¹Level maximum: is the maximum value of the time-weighted sound pressure level, which occurs during the measurement period.

²Equivalent continuous sound level: is the average noise level over a specified time period.

³Sound Exposure Level: is the constant sound level which has the same energy in one second as the original sound event.

⁴This means that aircraft do not follow the flight path until the very end of the path, but may be directed onto a different heading by air traffic control once a certain altitude has been reached after departure. Vectoring occurs for many reasons including weather conditions and flight safety.

Who responded?

Overall responses

There were 3,963 respondents to the survey. This is broken down as:

3,884 Individuals	61 Organisations	18 Elected members
plus 63 additional letters	plus 12 additional letters	plus 6 additional letters

The additional letters are not included in the quantitative responses analysed as the content of these letters was very specific and could not be matched back to the survey questionnaire. They also raised topics that were not related to airspace change.

Locations of respondents

They are included in the qualitative responses analysis. Response by areas is defined by respondents who were given a drop-down menu to select the area in which they live, or if provided when responding in paper copy.

Area	Individuals	Organisations	Officials	% of total response
West Lothian	1,579	15	7	41%
Fife	1,085	8	3	28%
Edinburgh	794	18	3	20%
Falkirk	126	5	2	3%
Midlothian	117	6	1	3%
East Lothian	119	3	1	3%
Elsewhere in Scotland	52	3	-	1%
Other/No response	12	3	1	<1%

Responses from individual – locations

Area	Number	% of the response	Local population*	Consultation response shown as %
West Lothian	1,579	41%	179,442	0.87%
Fife	1,085	28%	369,793	0.29%
Edinburgh	794	20%	508,675	0.15%
Falkirk	126	3%	159,581	0.07%
East Lothian	119	3%	104,049	0.11%
Midlothian	117	3%	88,656	0.13%

This table only reports on areas where more than 100 responses were recorded.

*Population figures taken from NRS projections published in 2016
<https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Equality data

From 3 April through to the closing date of the survey, questions were included that asked respondents about their personal details to ensure that we had represented people with protected characteristics and to determine if they had classifiable views.

Ethnic group (1,797 people answered this question)	
Scottish	77%
Other British	19%
Other White	2%
Irish	1%
Gypsy Traveller	<1%
Polish	<1%
Mixed/Multiple	<1%
Asian/Asian Scottish/Asian British	<1%
Indian/Indian Scottish/Indian British	<1%
Chinese/Chinese Scottish/Chinese British	<1%
Other Asian	<1%
African/African Scottish/African British	<1%
Caribbean/Black Caribbean/Caribbean British	<1%
Other Arab ethnic group	<1%
Other ethnic group	<1%
Total	100%

Respondent numbers under 10 represented by <1% of the total

Age group (1,723 people answered this question)	
0-15	1%
16-24	2%
25-44	27%
45-64	39%
65-84	22%
85+	<1%
Prefer not to say	9%
Total	100%

Gender identity (1,796 people answered this question)	
Man (including trans man)	50%
Woman (including trans woman)	42%
Other gender identity	<1%
Prefer not to say	8%
Total	100%

Long-term health condition (1,771 people answered this question)	
Yes	13%
No	75%
Prefer not to say	13%
Total	100%

Sexual orientation (1,733 people answered this question)	
Gay/Lesbian	1%
Bi-sexual	1%
Heterosexual	77%
Prefer not to say	22%
Total	100%

Religion (1,675 people answered this question)	
Buddhist	<1%
Christian	42%
Hindu	<1%
Muslim	<1%
Sikh	<1%
No Religion	36%
Other religion	1%
Prefer not to say	21%
Total	100%

We did not attempt to analyse the data by different age groups because the equality question set was only applied to one month of the survey's life and included 1,797 people.

What did you say?

The following section lays out the findings from individuals, organisations and elected members to our flight path options.

Figure 1 shows the preferred departure flight path options off runway 06 and Figure 2 shows the preferred departure flight path options off runway 24. They also show the current usage if applied to the preferred flight path options and the future usage projected until 2023. These maps were provided as part of the second consultation both online and on page 39 of the second consultation book.

Figure 1: Runway 06 departures (2016: 19% - 69 days per year)

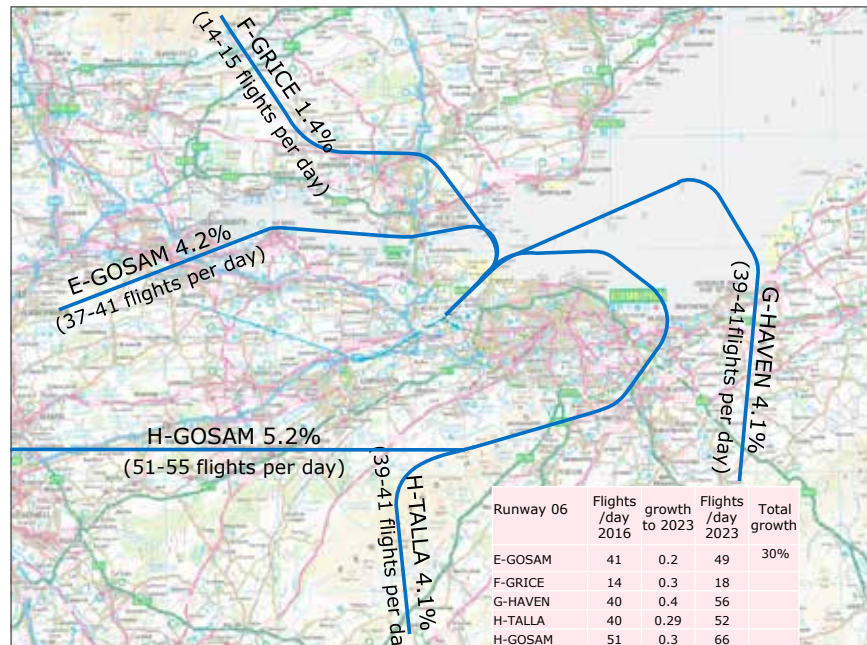


Figure 2: Runway 24 departures (2016: 81% - 296 days per year)

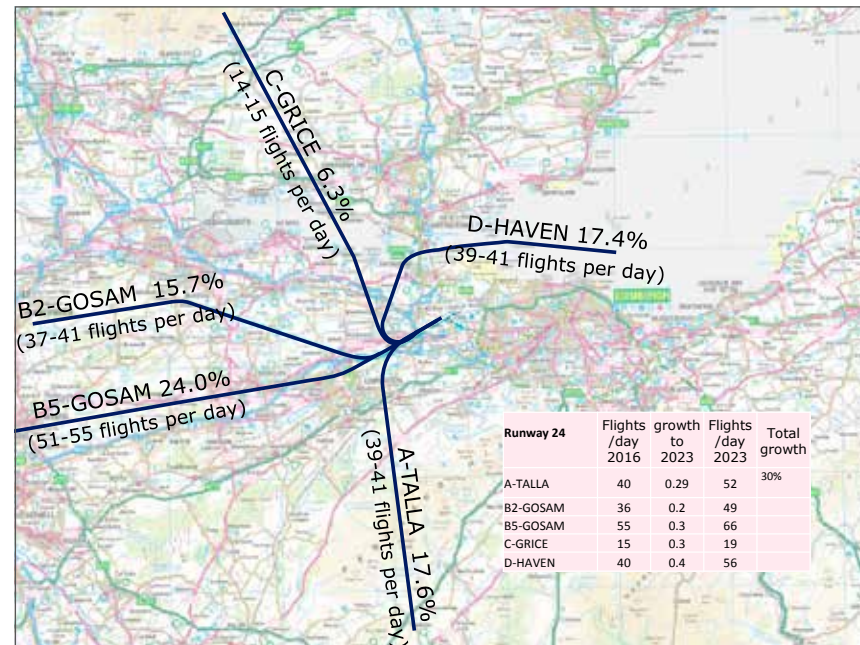


Table of definitions for key terms found within responses

There were a number of open responses provided to the second consultation.

Open questions were asked whereby respondents could write in free text boxes. Also, a number of respondents chose not to complete the questionnaire but to write a letter instead.

Closed questions can be reported by adding up the number of ticks in boxes, but open questions require some interpretation by independent data analysts. Progressive Partnership were asked to create a code frame to categorise comments and help provide an indication of the number of similar comments received and this code frame is set out below.

Noise	Impact on local communities/environs	Route issues	Environment	Health and wellbeing	Operational issues
Noise in general	Impact on the local area	Proposed an alternative path	General air pollution	Quality of life	Flight planning
Night noise	Impact on urban developments	Advised to follow the M8 as a route	Impact on wildlife and nature	Health issues	Departure operations
Noise in unsociable hours		Route flies over military or industrial complexes	Local pollution and impact on local environment	Disturbed sleep	Other operational and aircraft issues
Noise when turning		There are alternative travel methods than that route	Safety issues	Impacts on leisure activities	Arrival operations
Noise on departure			Climate change carbon emissions	Stress and mental health issues	Interruptions to transmission signal
Noise of arriving aircraft			Farming related issues	Impacts on existing health issues	Flight efficiency
			Air quality issues	Breathing and respiratory issues	
			Concerns over deposits and fuel dumping	Will affect hospital and care facilities	
				Impact on long-term medical conditions	

Property issues	Time issues	Schooling issues	Political issues	Consultation	Survey process	No need
Property was previously unaffected	Ban on night flying or limitations on night flying	Impact on schools and other education facilities	Government policy	Consultation process and related issues - Negative comments	Postcode was not under the design envelope of the initial consultation	No need demonstrated or evidenced
Property/house value	Time restrictions on routes	Educational issues such as learning when its noisy		Lack of consultation	Questions are biased	Profit driven
Compensation and mitigation	Hours of operation	Impact on homework		Inaccurate data population figures		
Replacement double glazing				Request for additional information		
Property insulation				Inaccurate data used in consultation and inaccurate aircraft type		
				Flawed/Unaware of previous consultation		
				Flight Paths have changed after initial consultation		
				Confusing format of presentation		
				No mandate/ justification		
				No data to prove need		



10.1 Responses by theme

All of the comments and open text that was submitted online were subject to a full analysis of patterns and common themes and frequency of comment. All members of the team conducting analysis documented the prevalence of themes and sentiment of feelings into a coding frame.

Comments were categorised into nine themes, such as noise, pollution and environmental issues and then subjected to further analysis on subthemes. These are based on the themes that were commonly referred to after analysing responses. For example, pollution included comments on air quality and fuel dumping. In total 46 different subthemes were coded.

All other contributions to the consultation such as letters, independent surveys and scientific papers were subjected to the same rigorous analysis. Where data from letters could be included in the main data frame, it was.

When the themes were outwith the main frame of enquiry they were entered into a separate coding frame. For example, we received some comments that relate to the consultation process.

A sentiment of positive, negative and neutral was appended to each comment and the data was analysed accordingly. Respondents who made a comment in favour of the flight path were given a positive attribution, those who made comments against were given a negative attribution, and those who gave both in favour and against were given a neutral attribution.

When multiple questionnaires with identical responses were submitted by the same individual, they were removed. There were 281 duplicates removed.

The majority of comments were made in relation to the flight paths being proposed and they are reported on in a standalone section.

Comments on the process of consultation have been reported on separately. These comments were made by individuals as well as organisations and elected members.

Noise

There were 4,048 mentions of noise by individuals which is 16% of the total qualitative response mentions (24,964).

Individuals raised issues relating to noise:

Topic	Number of responses	Typical representative comments
Noise	3,145	<p>These flight paths all curve around and fly over South Queensferry creating noise and air pollution to an area already suffering air pollution from road traffic.</p> <p>A5 and A6 are above or near my residential area - don't want additional noise.</p> <p>Don't want new flight paths... loads of new housing estates were built in all the areas - many more people and communities are now effected with the noise and pollution if the expansion goes ahead!</p> <p>The noise levels are very high.</p> <p>As before very unhappy due to increased noise levels and volume of flights.</p> <p>These flight paths are directly above communities and will cause significant disruption. Route option a6 causes less disruption than all the b routes. The communities are close to airport and therefore noise levels and pollution will be the highest as they lie directly underneath the flight paths! PLANES TAKING OFF PRODUCE THEIR HIGHEST POLLUTION IN BOTH NOISE AND EMISSIONS b5 route is the least disruptive.</p>
Night noise	317	Edinburgh Airport is a 24 hour facility, therefore, I am concerned you intend to fly overnight which will dramatically affect my health and sleeping.
Noise in unsociable hours	191	The noise at present from planes in this area is already unacceptable particularly early in the morning and late at night when we are not directly under a flight path.
Noise when turning	182	Due to the steep incline and sharp turn (vectoring) involved in D0, aircraft will require additional engine thrust on take off, the noise produced could be as loud as 80 decibels.
Noise of departing aircraft	125	In D0 engine noise will be firing directly towards Dalgety Bay as aircraft climb or descend out/in to the airport.
Noise of arriving aircraft	86	The noise from aircraft pulling back on speed and coming down in height has a very noticeable effect.

Themes with less than three responses are not reported on.

Organisations and elected members raised issues relating to noise:

Topic	Number of responses	Typical representative comments
Noise	87	All of these proposed routes are over an area that currently experiences very little air traffic noise and would be a total disaster to the area.
Noise when turning	11	This route would lead to Uphall and Ecclesmachan being directly overflown at low altitude whilst aircraft are turning and the noise disruption from this would be unacceptable.
Night noise	7	Night time flights have not been ruled out and this may be an option later down the line. This would result in the population not only suffering drastic noise disturbance during the day but also experiencing significant disruption to sleep.
Noise of arriving aircraft	3	We would wish to see a continuous descent approaches used when ever possible.
Noise of departing aircraft	3	We have significant concerns over the potential for noise on occasions when this route may be employed for take off.

Themes with less than three responses are not reported on.

Impact on local communities/environments

There were 1,659 mentions of impact on local communities/environments by individuals which is 7% of the total qualitative response mentions (24,964).

Individuals raised issues relating to impact on local communities/environments:

Topic	Number of responses	Typical representative comments
Local impact issues	847	<p>All to a greater or lesser extent would be to the detriment of people's living and working environments, and Edinburgh Airport is assuming that its needs and desires as a business are more important than those of individuals and smaller businesses.</p> <p>I strongly disagree with ALL the new flight paths due to increased health issues with increased CO₂ emissions from increased road traffic and flights, as well as noise concerns day and night, Concerns over the impact on current airport infrastructure and capacity on the roads as its already gridlocked at peak times!</p>
Impact on urban development	812	<p>Impacts too heavily on areas targeting population growth, historical villages with growing tourist attractions. Absolutely devastated you will be flying over/around Winchburgh, when initially you said our postcode would NOT be affected! We have just bought a new house away from flight paths as most residents in the new town, terrible decision for the airport and government, why build a new town under a flight path! You will be held responsible for compensating residents and thus will impact upon future sales and resale prices within this new town. It's also massively detrimental to resident's health and wellbeing. We are frequently awoken by planes and find sitting in our garden during the trial a misery. I understand the airport needs to make profit and increase capacity but affecting residents in this way is not ethical.</p> <p>Preferred flight path overflies Winchburgh. As a resident of Winchburgh for several years, I was not concerned enough during the first consultation to comment, because as far as I understood the town would not be affected. Now it appears two of your preferred flight paths overfly the town (C5/D0). You state that your preferred options take into consideration lower population density, and state the population of Winchburgh as 2000. I cannot claim to have an up to date figure for the population of Winchburgh, but considering the current rate of expansion of the town, with multiple new build developments ongoing, I strongly suspect your estimate is wildly incorrect (and will continue to become even more incorrect!).</p> <p>Winchburgh is going through a phase of significant redevelopment with a reported spend of £1bn, encouraging a large number of families to relocate and build a new home there. This decision was made prior to any announcements about potential flight paths directly over the village. This is counterproductive and will lead to families to reconsider their decision and move home, or to discount the village entirely from future considerations.</p>

Organisations and elected members raised issues relating to impact on local communities/environments:

Topic	Number of responses	Typical representative comments
Local impact issues	28	Due to width of vectoring this affects a large amount of people who are already at risk of increased noise from the proposed new departure routes.
Impact on urban development	27	Consultation based on 2011 Census which is outdated and new housing developments directly under preferred route in West Fife contrary to your professed reasoning.

Route

Individuals raised issues relating to route:

Topic	Number of responses	Typical representative comments
Proposed alternate flight paths	1,400	<p>Is it not possible for the paths to be driven further to the north by banking earlier and maintaining it after take off.</p> <p>A6 - The flight paths should be moved further north by an earlier and maintained banking after take off.</p> <p>B5 - NO changes are proposed to runway 24 arrivals, therefore request strongly these are implemented by an offset approach, over the estuary and open country!</p> <p>C5 - It seems that with a very minor adjustment to C5 it could be OK, rather than taking it over Winchburgh don't turn so sharply north and had up between the far west of Winchburgh to go out over 3 mile town!</p> <p>D0 - Aircraft need to attain a considerable height before turning right. This arrangement is designed to upset most of north west Lothian and seems unsuitable under most conditions. The southerly route would be more acceptable.</p> <p>E6 - We request that these are pushed substantially further north by an earlier and maintained banking left after take off.</p> <p>F2a - Go further east, towards the sea to gain height before turning (so less noisy over conurbations).</p> <p>G5 - The path should include an early banking manoeuvre to the left on take off to avoid households in Cramond.</p> <p>H2 - These flight paths need to be pushed substantially further north and east further out to sea before banking after take off.</p> <p>Runway 24 - Arrivals from the court should be brought up the coast and along the Forth thereby not over flying areas of population.</p> <p>Runway 06 - Put the planes further west so the descent starts out over the sea minimising noise for communities.</p>
Alternate route M8	52	More use of the airspace above the River Forth towards Kincardine then M876 road line would affect less householders.
Alternate routes overfly military/industrial complexes	51	Selected flight path goes straight over fuel storage depot at Kinneil terminal Grangemouth. I have safety concerns due to this.
Alternate travel methods	23	It does not make sense to spend money improving rail services yet increase the number of flights within the UK. All internal flights should be banned and replaced by High Speed rail links.

Organisations and elected members raised issues relating to route:

Topic	Number of responses	Typical representative comments
Proposed alternate flight paths	33	<p>Flights should proceed further east before turning to prevent overflying of existing and new communities and therefore exposing many people to new excessive noise when they have a very reasonable expectation of not being overflown.</p> <p>E6 – This is the existing GOSAM route which was used for fly arounds before its use was changed recently after the unconsented runway 06 trial. We strongly opposed the runway 06 trial and oppose flight path E. If it must be flown then E5 extended eastwards before the turn would allow height to be gained before crossing the Fife coast. It is however, highly inefficient in terms of miles flown particularly for aircraft going south.</p> <p>B5 – The starting point for these flight paths is to keep B5, which is the one that overflies the largest population, which does not seem to address the issues of noise levels and pollution. We believe that one flight path would be enough (even if traffic were to increase) if the best possible sequence of departures (with the required split) is used. At the end of the day aircraft flying B5 or B2 are going to end up in a similar piece of airspace, so it is not clear where the increase in capacity for the most used route would come from. For those reasons, we believe that B4 alone would be the best flight path for the neighbouring community.</p> <p>G5 – G5 avoids the most heavily built up areas but it needs to be moved further eastwards so that either H3 or H4 can be adopted as the preferred H flight path. See comments under H flight paths. G4 is not favoured because it overflies densely populated Port Seton and Tranent, including the area to be developed as a new settlement at Blindwells (initially 1,600 dwellings). We do not understand why flight path G is headed left turn to south when it a right turn movement from the runway. It is our concern that under the new arrangements more aircraft will be vectored to turn right when leaving runway 06 in order to separate prop aircraft from the faster jets and to give respite to people in West Lothian. Given proposals for the H flight path and the vectoring for G, there is potential for Musselburgh to be overflown by inward and outward aircraft during the course of a day if there is a change in wind direction.</p>
Alternate routes overfly military/industrial complexes	4	Our concern is that no flights go over the Ineos Grangemouth Petrochemical site. We have a duty under the COMAH Regulations 2015 to minimise risk from our site.

Themes with less than three responses are not reported on.

Environment

There were 2,038 mentions of environment by individuals which is 8% of the total qualitative response mentions (24,964).

Individuals raised issues relating to environment:

Topic	Number of responses	Typical representative comments
Air pollution	1,048	<p>A6 – The preferred path is directly over a new build estate. This is an area of natural beauty and also new families with young children. The noise and air pollution will be detrimental to all in this area, specifically in preferred option. Please reconsider.</p> <p>C5 – These were noisy and very badly tested during the trial in 2015/16. The inability of aircraft to stick to the markers (“acceptable tolerances”) meant significant disruption to our whole family’s sleeping patterns. What’s also not considered here is the impact of the prevailing wind on noise and air pollution. The westerly wind that predicates the use of these routes increases the impact because while you’re not flying directly above them, the sound and fumes (albeit the latter dissipates quicker) mean more disruption for the people who live and work in these areas.</p> <p>D0 – Flying over heavily populated area. Additional noise and air pollution!</p> <p>Runway 24 – This flight path offers absolutely no improvement to the noise and air pollution to the residents of Barnton, Braehead and Cramond. A more offset approach over the estuary and open country must be considered.</p>
Wildlife and nature	282	The proposed A4-A6 routes are directly over protected wetland areas and the migratory path of geese. Since the trial routes have commenced the level of geese has visibly reduced. This is totally unacceptable.
Local pollution	202	<p>B5 – The very heavily populated area of Livingston and surrounds where there are many young families should not be subjected to further disturbance. The risk to the environment and pollution in all suggested routes is unacceptable.</p> <p>F2a – Flights over area will adversely impact natural environment, will also increase level of noise and air pollution in Dalgety Bay and surrounding areas.</p> <p>Runway 24 – I would disagree with statement that number of flights is low, there are days where airplanes approach airport every 5 min or so, which is affecting quality of life, health and pollution of those leaving close by the airport.</p>
Safety issues	192	I strongly disagree with the flight path options on the grounds that it will increase air pollution and therefore not meet the WHO recommendations and the Scottish government safety standards.
Climate change and carbon emissions	188	I strongly disagree with ALL the new flight paths due to increased health issues with increased CO ₂ emissions from increased road traffic and flights.

Individuals raised issues relating to environment continued:

Topic	Number of responses	Typical representative comments
Farming	52	There is a farming community here who are outdoors all the time never mind disruption to livestock.
Concerns over air quality	49	The frequently overpowering smell that is related to air pollution from the planes is at times unacceptable and consciously very unhealthy.
Concerns over fuel dumping	25	Burning aviation fuel is damaging to the environment.

Organisations and elected members raised issues relating to environment:

Topic	Number of responses	Typical representative comments
Air pollution	33	All of these routes have a cumulative negative, or very negative noise and air pollution impact on residential areas.
Wildlife and nature	17	G5 would overfly the nature reserves and bird roosts at Aberlady.
Local pollution	12	Several community councils, as well as individuals, have highlighted their concerns to me regarding local pollution and environmental issues.
Safety issues	7	Route A6 is too close to RAF Kirknewton and will not provide sufficient separation for safe operations.
Climate change and carbon emissions	7	Edinburgh Airport must do all it can to ensure that it fulfils the criteria set out in the Department for Transport's document 'Guidance to the Civil Aviation Authority on Environmental Objectives Relating to the Exercise of its Air Navigation Functions', regarding greenhouse gas emissions and ozone depleting substance.

Themes with less than three responses are not reported on.

Health and wellbeing

There were 1,501 mentions of health and wellbeing by individuals which is 6% of the total qualitative response mentions (24,964).

Individuals raised issues relating to health and wellbeing:

Topic	Number of responses	Typical representative comments
Health issues	464	I don't want to worry about getting ill with all the fumes from the planes.
Quality of life	460	The reason I moved to this area is due to the current peace and quiet and away from the flight path. I do not want noise over this area.
Disturbed sleep	208	The planes are flying low over us and either disturb our sleep or make conversation impossible during daytime.
Impact on leisure activities	163	Flights should avoid overflying the Scottish Equestrian Centre.
Stress/mental health issues	137	Living under a flight path has been linked to physical and mental health problems in adults and children.
Impact on existing health issues	39	My partner suffers from hyper sensitivity to sound and has trouble sleeping in areas of high noise pollution.
Breathing/respiratory issues	17	I suffer from asthma and we are going to be beside an additional bridge with all the traffic that will generate.
Hospital/care facilities	16	Flight path A6 will cause significant disruption to local communities (Blyth Bridge, Kirkurd) and Castlecraig Hospital.

Themes with less than three responses are not reported on.

Organisations and elected members raised issues relating to health and wellbeing:

Topic	Number of responses	Typical representative comments
Health issues	25	The Aviation Environment Federation shows reports which state that UK-based studies over the past 10 years have found that higher aircraft noise levels are associated with increased risk of high blood pressure, heart disease, heart attack, stroke and dementia.
Quality of life	20	A6 - This proposed route takes no account of this large consented development and will severely affect the quality of life for residents.
Impact on leisure activities	21	All of these proposed routes are over an area that currently experiences very little air traffic noise and would be a total disaster to the area. There are many establishments that would suffer badly from the increase in noise, Oatridge College, Huntercombe Hospital, Scottish Equestrian Centre, canal paths and the many walking and cycling paths in and around the area from Broxburn to Linlithgow and be of great risk to the health of many already vulnerable people who benefit from these facilities. Making planes climb and turn so severely generates much more noise and over a wider range and the CO ₂ reduction is questionable.
Stress/mental health issues	9	Hundreds of newly affected West Lothian and Fife residents have reported sleep disturbance, noise nuisance, and associated health impacts including anxiety, stress, and depression.
Disturbed sleep	7	Research suggests that increased noise exposure can negatively impact on people's health, disturbing their sleep and affecting their ability to learn.

Operational

There were 1,122 mentions of operations by individuals which is 5% of the total qualitative response mentions (24,964).

Individuals raised issues relating to operations:

Topic	Number of responses	Typical representative comments
Flight planning	506	<p>A6 - Make the planes climb out steeply on the flightpath, they go to 7k then trundle all the way across west Lothian. Stop them wandering about over villages and doing low climbs trundling across west Lothian to save fuel, nobody believes in CO₂ global warming any more planes are the most efficient form of transport.</p> <p>D0 - Too much noise from turning too early. New routes should be minimised as much as possible. Not fair on people who have bought houses only to get a flight path over them. Over 3500 people live in Winchburgh soon to be 9000, 9000 in South Queensferry and this hard turn early will be very loud. D5 allows sufficient time for plane to climb without increased noise on new communities. If even it came down to D3/D4/D5 vs D0/D1/D2 then D3/D4/D5 wouldn't be as loud as it will have climbed further as much less noise pollution. Also D5 is closer to existing flight path at the lowest altitude. This is very important!!</p> <p>Runway 06 - We totally understand the reasons for your consultations. We also have no concerns with your proposals except... It would appear that almost all flights arriving from the east are getting closer to the main built up areas of Silverknowes, Cramond and Barnton. I have been on many flights that bank over the Forth adjacent to Ocean Terminal. I would have thought that by banking later and further north (i.e. closer to the Fife shore) would ensure that the aircraft intersected the land west of Cramond Island and follow up the River Almond. This would ensure a safer route, not over housing, while still retaining a straight passageway on to the runway.</p>
Departure operations	319	I prefer a more gentle take off move.
Operational and aircraft issues	117	Air routes MUST avoid populated areas as much as it is possible to do.
Arrival operations	93	The noise from aircraft pulling back on speed and coming down in height has a very noticeable affect.
Interruption to transmission signals	48	Aircraft noise and general OTA transmission interference with wifi, 3G, 4G and terrestrial broadcast television as aircraft pass overhead.
Flight efficiency	39	D0 - It is a lengthy route for aircraft taking off on runway 24 and heading east or south. It should not be considered at all.

Organisations and elected members raised issues relating to operations:

Topic	Number of responses	Typical representative comments
Flight planning	19	Currently, airplanes do not turn north from the airport after take off for destinations in the south. Therefore all routes proposed are increasing the new population impacted and increasing CO ₂ emissions.
Operational and aircraft issues	7	The status quo route should be maintained and reviewed when CAP725 process is completed by CAA. Existing routes should be converted to RNAV standards until then.
Departure operations	6	D0 – D0 does seem to be very tight, with abrupt direction changes. Surely that can't be an efficient or desirable departure option? H2 – AS with other departures to the north/east any of these routes are satisfactory as long as the bank to the left on take off is maintained to clear Cramond island.
Arrival operations	5	The change to runway 06 arrivals will result in an increased number of aircraft movements, and associated impact of aircraft noise and air pollution, focused directly over the population centre of Peebles.

Themes with less than three responses are not reported on.

Property

There were 962 mentions of property by individuals which is 4% of the total qualitative response mentions (24,964).

Individuals raised issues relating to property:

Topic	Number of responses	Typical representative comments
Impact on previously unaffected areas	655	We weren't impacted by aircraft noise before these trials and find unacceptable the impact these proposals have on our physical and mental health.
Property values	263	Being underneath a flight path will undoubtedly impact house prices in an already deprived area as well as increasing sound and air pollution.
Compensation and mitigation	26	This will reduce the value of the property in a wholly residential town and compensation will be expected.
Replacement windows/ double glazing	13	Unable to hear the key phrase in an important item of TV news due to the noise from a plane overhead my own double glazed home.
Property insulation	5	I would like to see some sort of sound proofing help to residents to assist with removing the noise within our homes.

Organisations and elected members raised issues relating to property:

Topic	Number of responses	Typical representative comments
Impact on previously unaffected areas	30	C1 is the only reasonable alternative, other routes overfly far too many existing communities and new communities and therefore exposes too many people with a very reasonable expectation of not being overflowed to new and unnecessary noise.
Property values	5	Residents are concerned about the negative impact of these proposals on the value of their property.

Themes with less than three responses are not reported on.

Time

There were 607 mentions of time which is 2% of the total qualitative response mentions (24,964).

Individuals raised issues relating to time:

Topic	Number of responses	Typical representative comments
Limitations/bans on night flights	325	I strongly request that there is a respite period from flight paths D, E and F during the night (from 11pm - 6am).
Time restrictions on routes	200	There should be a restriction on flights between late evening and early morning.
Hours of operation	82	It's 7am and I have been woken since 6.30am by flights going this route which has encouraged me to respond to this survey. We already have the M9, train line with trains every 15mins and now planes taking off within 2-3 minutes of each other. Totally unacceptable noise.

Organisations and elected members raised issues relating to time:

Topic	Number of responses	Typical representative comments
Limitations/bans on night flights	11	I will be contacting the new council administrations for West Lothian and Edinburgh to request that they use any powers that they have to restrict night flights to clearly defined essential services such as those used by Royal Mail and emergency situations.
Time restrictions on routes	6	If this situation is allowed to proceed then there should be time restrictions such as no early am/late pm flights and some days with no flights.

Themes with less than three responses are not reported on.

Schooling

There were 233 mentions of schooling by individuals which is 1% of the total qualitative response mentions (24,964).

Individuals raised issues relating to schooling:

Topic	Number of responses	Typical representative comments
Schools and other education facilities	202	<p>C5 - During the initial consultation we were told there would be no impact when we entered our postcode. The impact on us is huge, on individuals, the community, local schools, and the development of the area. The noise was unbearable with planes directly over our houses every minute or so.</p> <p>C5 - Winchburgh is a well populated village now with more houses and a town centre still to come. The noise and amount of planes flying overhead would be very disruptive especially with them flying directly over the Primary School! The plane noise we hear now will be nothing in comparison to the new one!</p> <p>H2 - This flight area will bring aircraft over the residential areas of Cammo, Barnton and Cramond as well as areas in Midlothian. These areas have a high population and schools and there will be health implications. The flights should be pushed substantially further north by an earlier and maintained banking after take off.</p>
Education issues	29	The primary school is an old building without double glazing - aircraft noise will affect pupils' education.

Organisations and elected members raised issues relating to schooling:

Topic	Number of responses	Typical representative comments
Schools and other education facilities	14	C5 directly overflies the east Broxburn and Winchburgh Core Development Areas including Winchburgh Primary School.
Education issues	7	A large scale study around major European airports including Heathrow found that where daytime noise levels exceed 50 dB on average; a 5dB increase in noise exposure is associated with a two month delay in learning in UK primary school children.

Themes with less than three responses are not reported on.

Policy

There were 30 mentions of policy by individuals which is less than 1% of the total qualitative response mentions (24,964).

Individuals raised issues relating to policy:

Topic	Number of responses	Typical representative comments
Government policy	30	We should also know the basis for the decision making process. There should be a Civil Aviation Authority to decide and oversee this process.

Organisations and elected members raised issues relating to policy:

Topic	Number of responses	Typical representative comments
Government policy	11	Eskbank and Newbattle Community Council understands that the Department for Transport's UK Airspace Policy Consultation and the CAA's Draft Airspace Guidance consultation will both be concluded by the end of June 2017. It seems unreasonable to drive through this consultation process now ahead of changes that may bring additional safeguards for communities.

Consultation

There were 2,412 mentions of consultation by individuals which is 10% of the total qualitative response mentions (24,964).

Individuals raised issues relating to consultation:

Topic	Number of responses	Typical representative comments
Lack of consultation	517	As we received no direct consultation we have been left to find out as much as we can in a short space of time, having only found out in the last few weeks. Again I would want the whole process to be rethought and made fit for purpose. B5 - The Airport has provided no justification for changing to these new flight paths and why it is necessary to change the current flight paths. These proposals overfly largely residential areas and the consultation hasn't really taken into account the impact on these communities re Noise, Pollution, Risks, Health impacts etc. The consultation falls short in actually "consulting" the residents of West Lothian and for this reason I cannot support these proposed flight paths. D0 - For example, these routes all overfly North Queensferry. No direct information has been sent to North Queensferry. No meetings have been set up to explain the impacts or even basic information such as expected flight frequencies, flight heights, noise levels and their implications for health of the residents.
Inaccurate data population	484	The Airport has failed to get the elementary part of collecting data correct and has used outdated population statistics and has not taken into account new housing estates and proposed housing developments.
Request for additional information	350	There needs to be detailed information provided on sound levels when planes are turning and there must also be a baseline assessment done on environmental impact prior, obviously to trialling flight paths.
Missing information questionable data	514	It fails to make any reference to the East Calder area which will be Overflown by flightpath A6.
There is no mandate or justification	284	The airport is not at capacity and does not need to expand.
Consultation process general negative comments	267	Your consultation material makes no mention of the impact on.
Flawed/Unaware of previous consultation	206	The consultation is hopelessly flawed.
Flight paths have changed after initial consultation	204	At the start I entered my postcode of Winchburgh and the response was that I WOULD NOT BE AFFECTED by future route changes. Now in Stage 2 it appears I AM AFFECTED by routes directly over my home.
Confusing format of presentation	157	I think the format has been deliberately designed to inhibit responses and hope people just don't bother.
No data to prove need	113	There is no data in the document that shows this is needed.

Organisations and elected members raised issues relating to consultation:

Topic	Number of responses	Typical representative comments
Inaccurate data population	44	This information has been taken from the 2011 Census. This information is out of date.
Missing information questionable data	43	The documents are inconsistent, jargon-rich, with missing and or inaccurate data.
Lack of consultation	29	It is our considered view that the consultation period should be extended until the new guidelines are published.
Request for additional information	24	It would also be helpful to have further information on the process of setting up an independent noise board.
Consultation process general negative comments	20	The data provided in the consultation is not clear enough for communities to make an informed response or understand the full impact these routes.
Confusing format of presentation	20	Much of the data is either unreferenced or lacks a baseline, and is therefore meaningless.
There is no mandate or justification	14	We do not believe that Edinburgh Airport has demonstrated sufficient evidence as to why new flight paths are needed.
Flawed/unaware of previous consultation	14	The consultation process is seriously flawed - the 900 plus pages of documentation are not "clear, concise and readily accessible".
No data to prove need	13	No coherent, evidence-based justification for these proposals.
Flight paths have changed after initial consultation	8	P75 are now proposing a preferred option DO on a community which had no right of reply in the first trial.

Survey process

There were 425 mentions of survey process by individuals which is 2% of the total qualitative response mentions (24,964).

Individuals raised issues relating to survey process:

Topic	Number of responses	Typical representative comments
Postcode/address not shown under design envelope in initial consultation	289	Absolutely devastated you will be flying over/around Winchburgh, when initially you said our postcode would NOT be affected!
Biased questions	135	The answers requested are biased towards changes and there is no option provided for "no change" to current routes.

Organisations and elected members raised issues relating to survey process:

Topic	Number of responses	Typical representative comments
Postcode/address not shown under design envelope in initial consultation	14	They have selected this flightpath after a prior consultation which specifically excluded this postcode area as being under any consideration for new flight paths.
Biased questions	9	The questions in the airport's survey form are biased towards change and are divisive, setting one community against another to avoid the worst of the noise.

No need

There were 711 mentions of no need by individuals which is 3% of the total qualitative response mentions (24,964).

Individuals raised issues relating to no need:

Topic	Number of responses	Typical representative comments
No need for expansion	548	We don't need more flight paths. There is no case for any change. We should keep existing routes and aim to reduce air traffic and associated noise and pollution.
Profit driven	163	This is being "sold" as benefit to Edinburgh and more widely to Scotland... the principal beneficiary of course is the proprietor of Edinburgh Airport who's only drive is increasing their profit.

Organisations and elected members raised issues relating to no need:

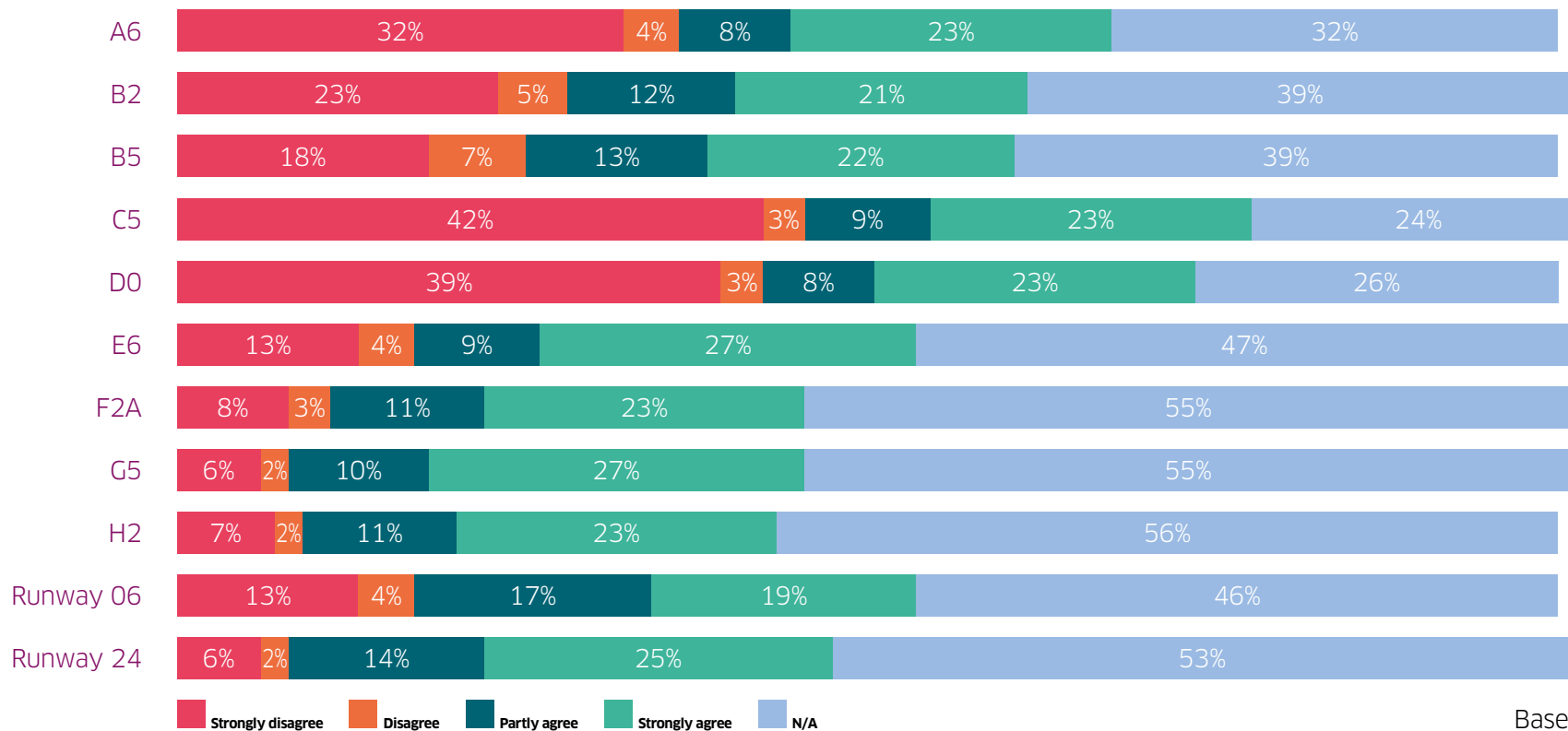
Topic	Number of responses	Typical representative comments
No need for expansion	22	There is no clear demonstration of need for these changes beyond the desire to increase capacity at peak times, and there has been not public consideration of the alternative options to address this specific issue.
Profit driven	3	We have seen no fair justification as to why the flight paths need to be altered in this way and suspect the motivation of the Airport is purely financial as there is no benefits for these affected communities.

10.2 Findings by region

We have reported on regions by council-defined areas. This grouping was conducted by Progressive Partnership. Only areas with more than 100 respondents are reported here.

West Lothian

This table shows responses by individuals of which there are 1,579 comments. This is 41% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

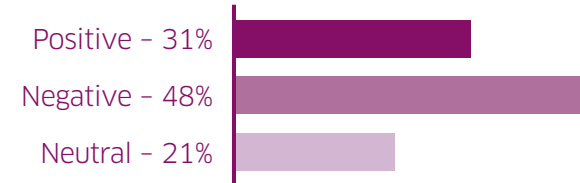


Base: 1,579

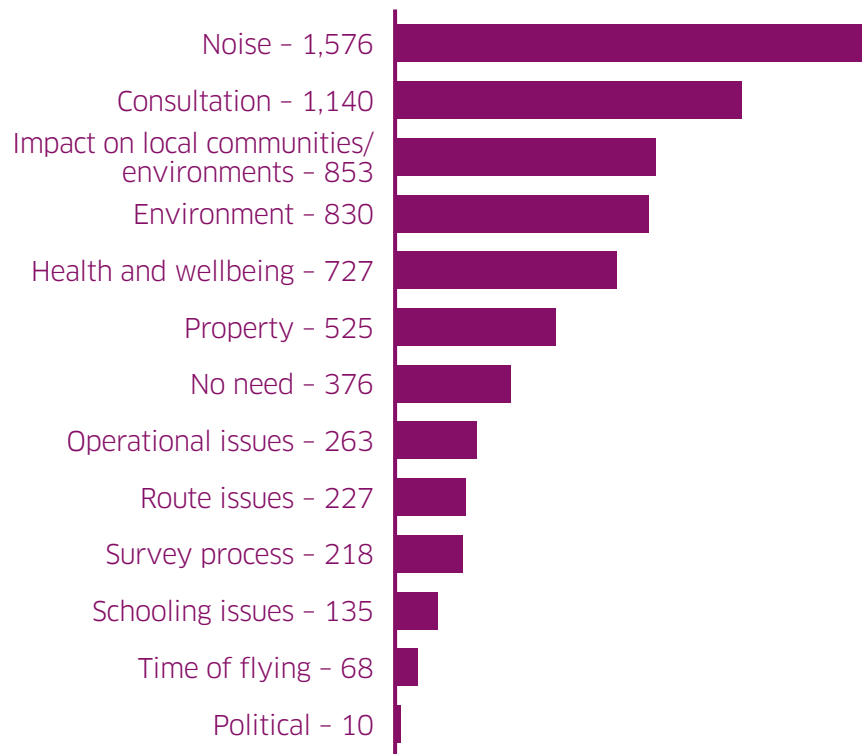
Individuals' opinions from West Lothian

1,579 respondents.

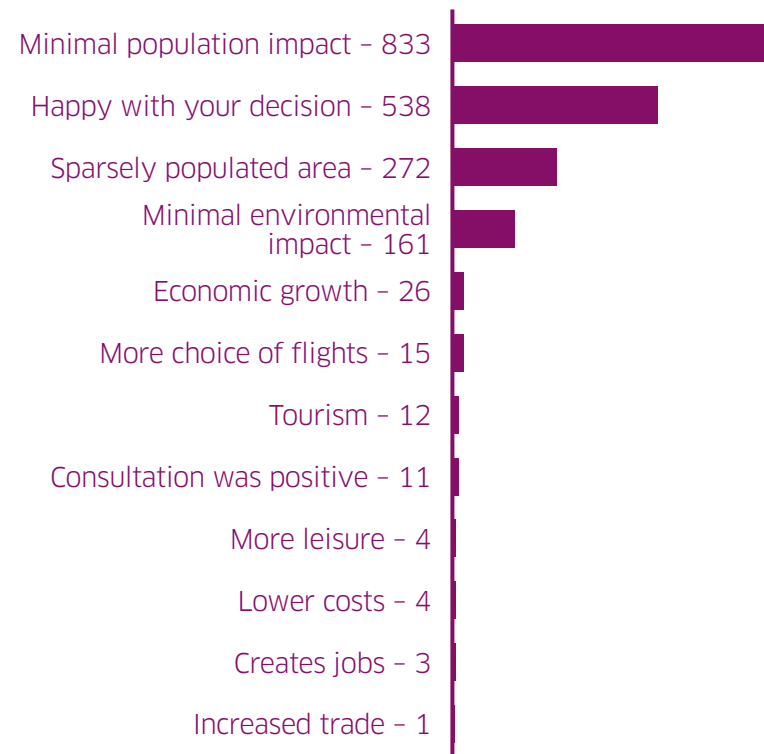
Sentiment expressed



Number of negative comments



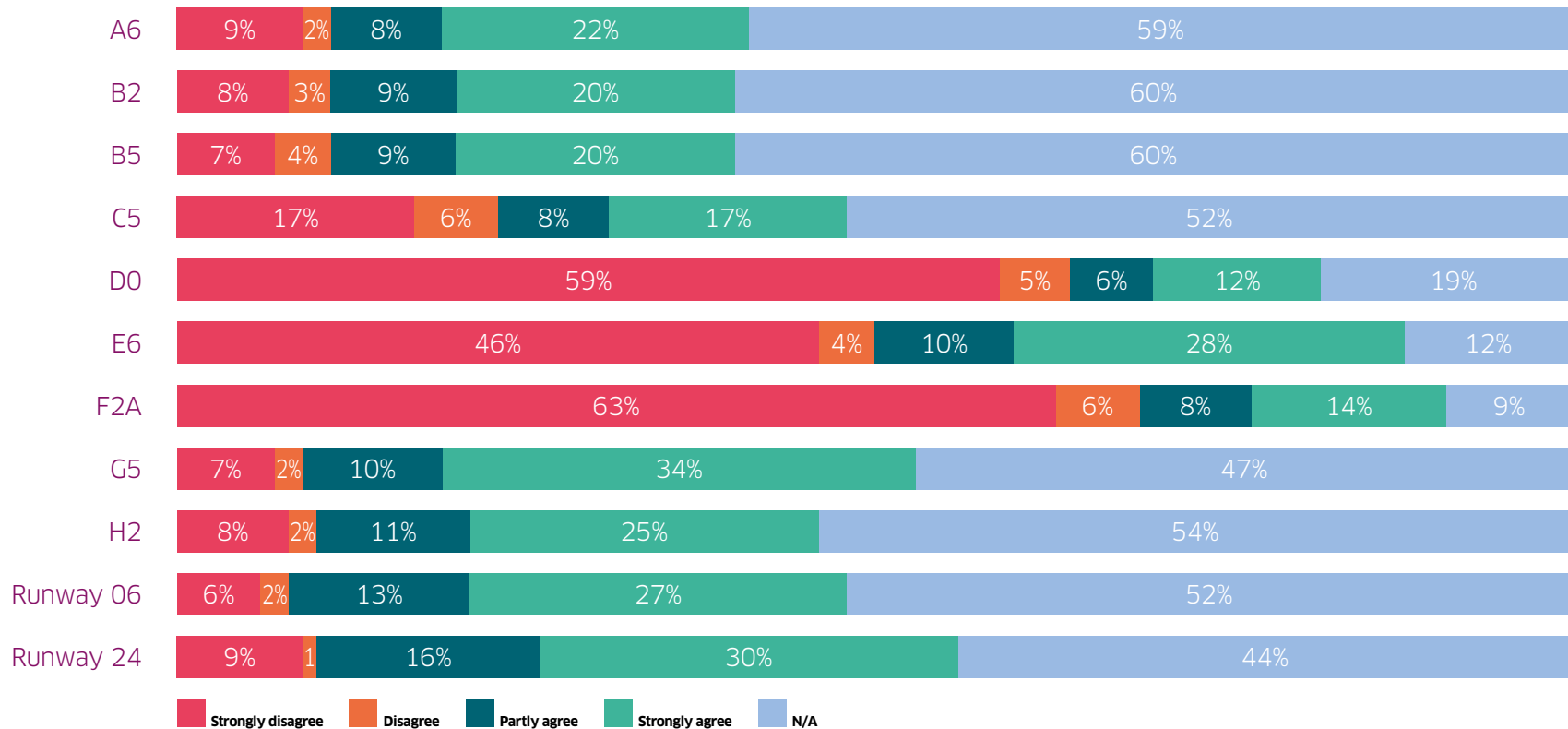
Number of positive comments



Base: 1,579

Fife

This table shows responses by individuals of which there are 1,085 comments. This is 28% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



Base: 1,085

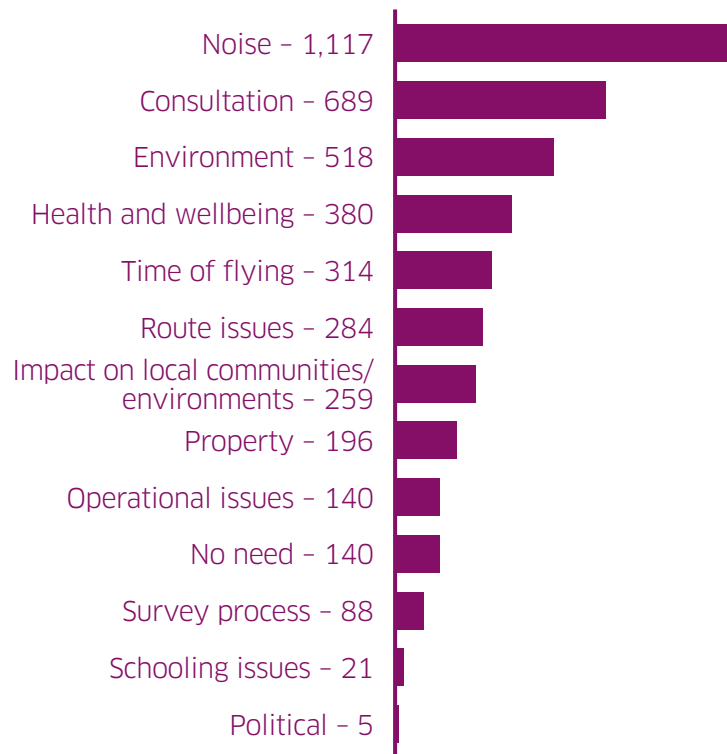
Individuals' opinions from Fife

1,085 respondents.

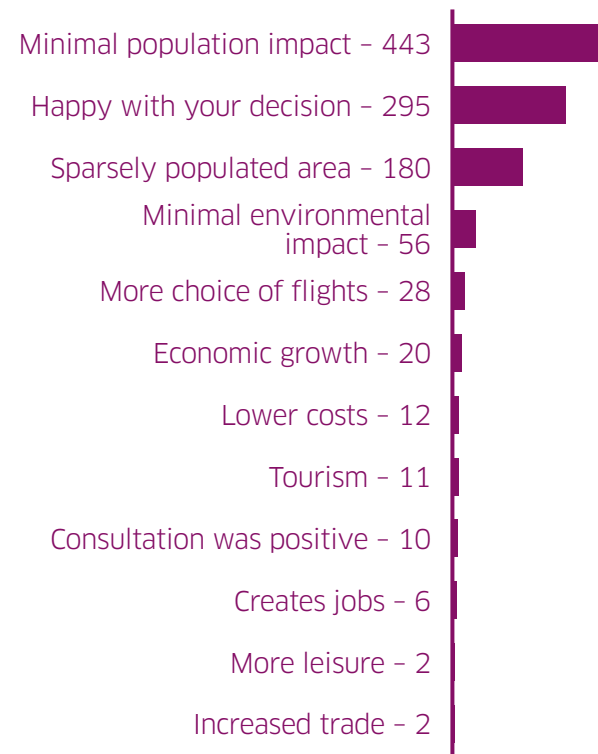
Sentiment expressed



Number of negative comments



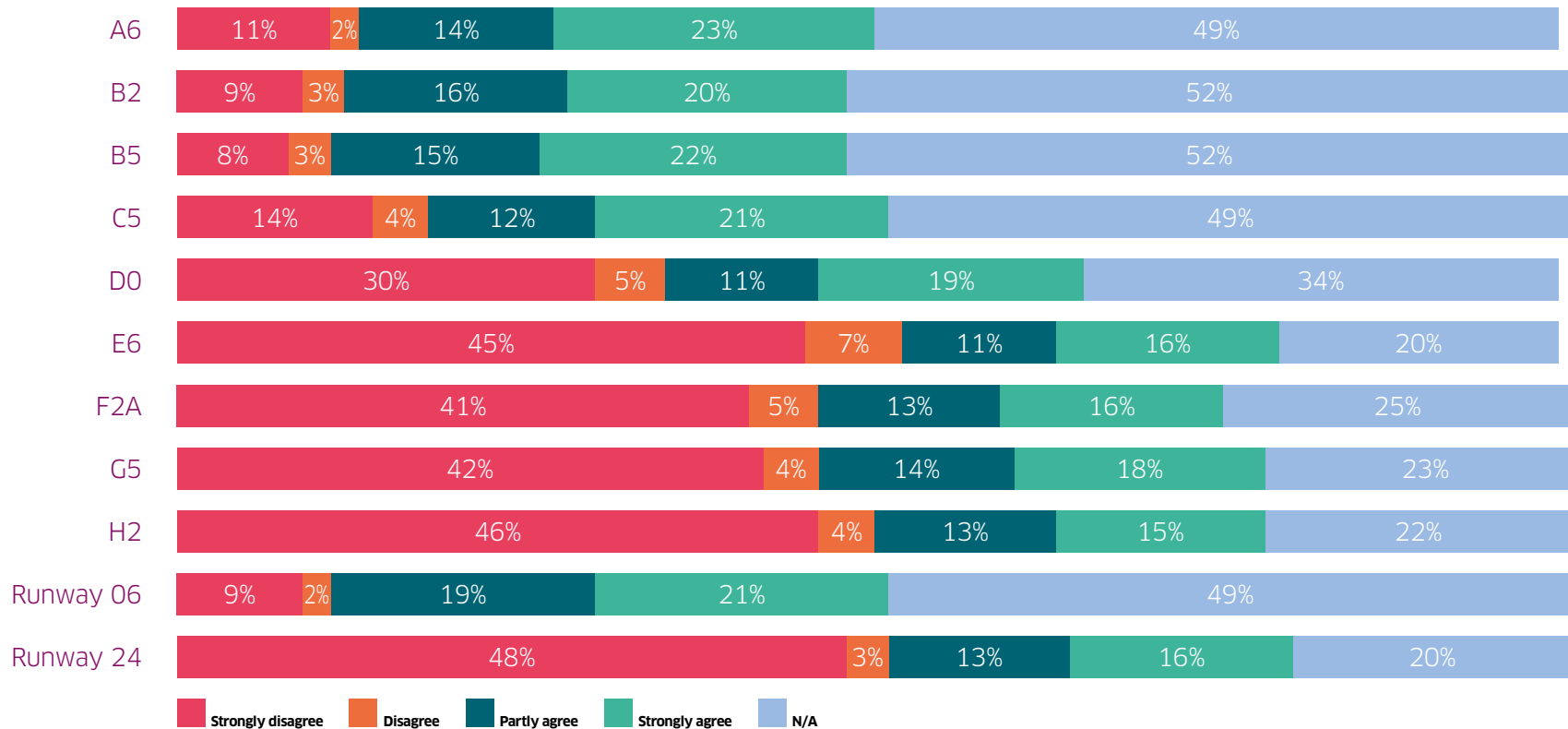
Number of positive comments



Base: 1,085

Edinburgh

This table shows responses by individuals of which there are 794 comments. This is 20% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

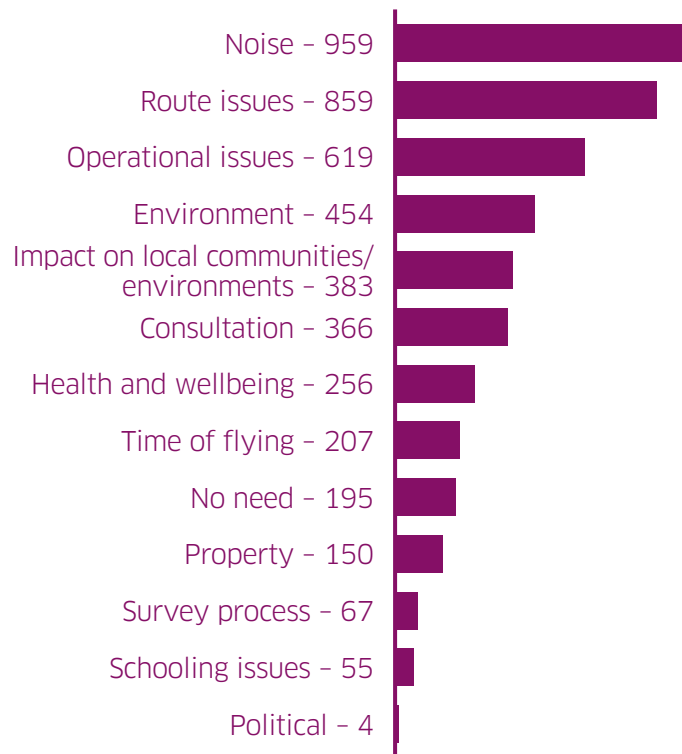


Base: 794

Individuals' opinions from Edinburgh

794 respondents.

Number of negative comments

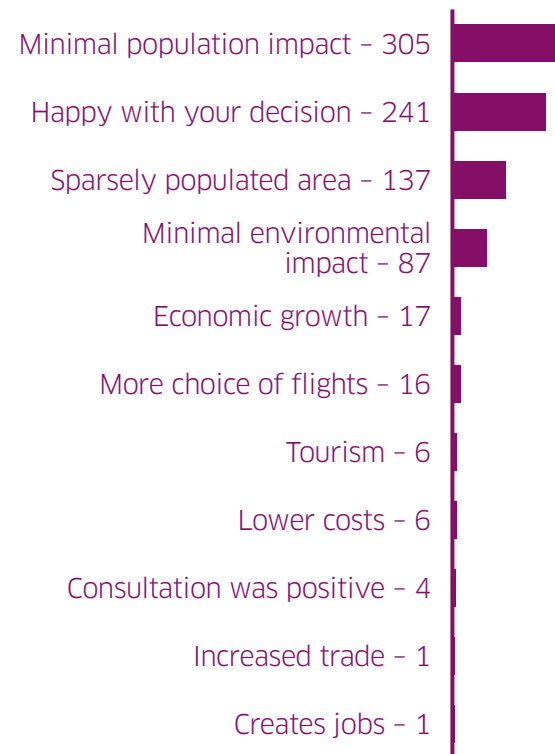


Base: 794

Sentiment expressed

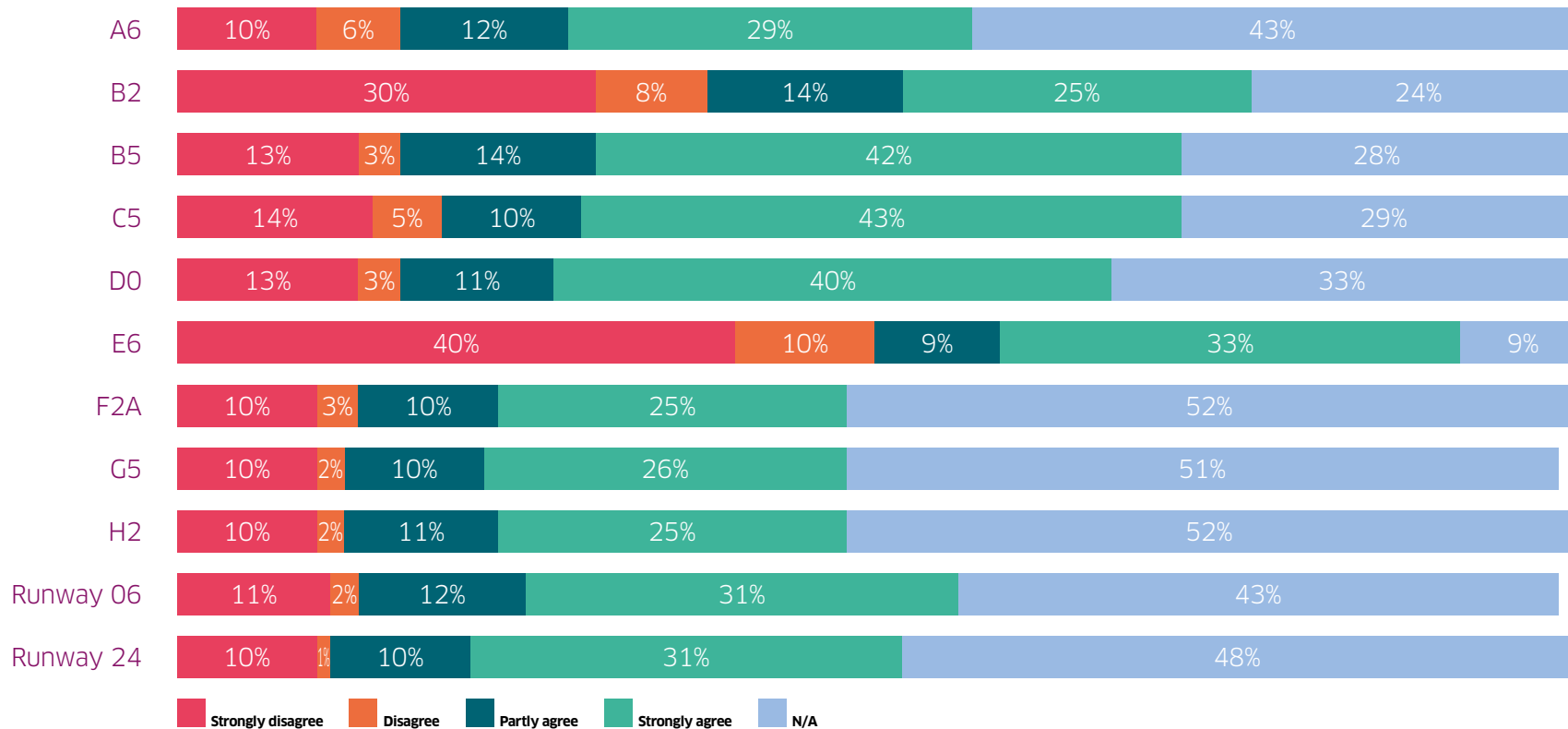


Number of positive comments



Falkirk

This table shows responses by individuals of which there are 126 comments. This is 3% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

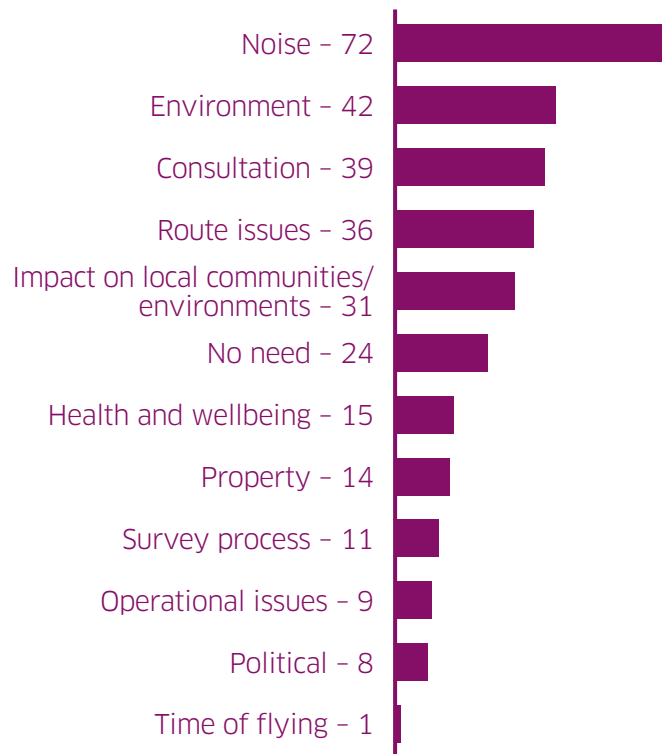


Base: 126

Individuals' opinions from Falkirk

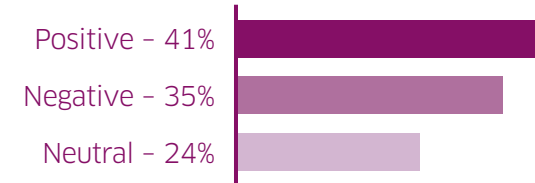
126 respondents.

Number of negative comments

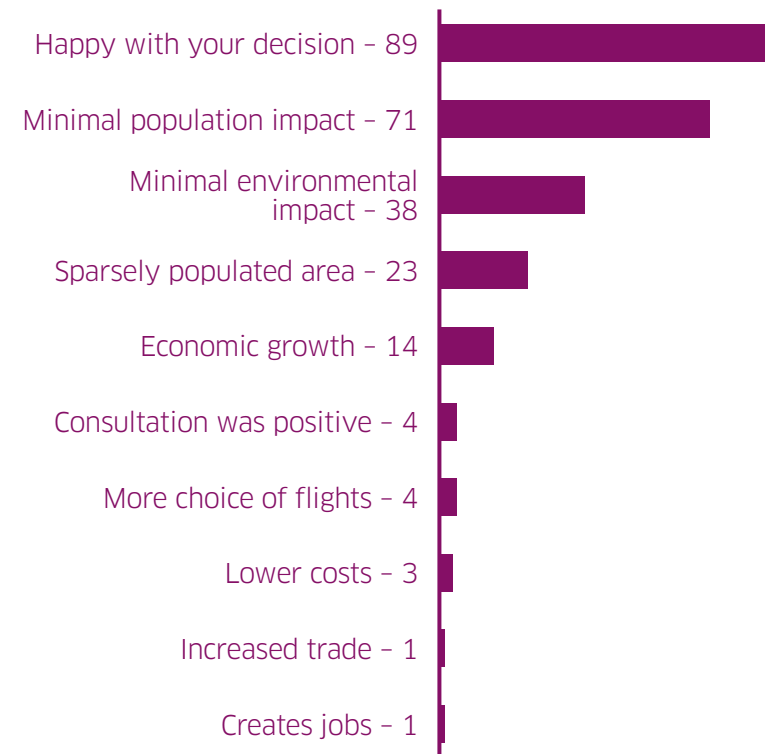


Base: 126

Sentiment expressed

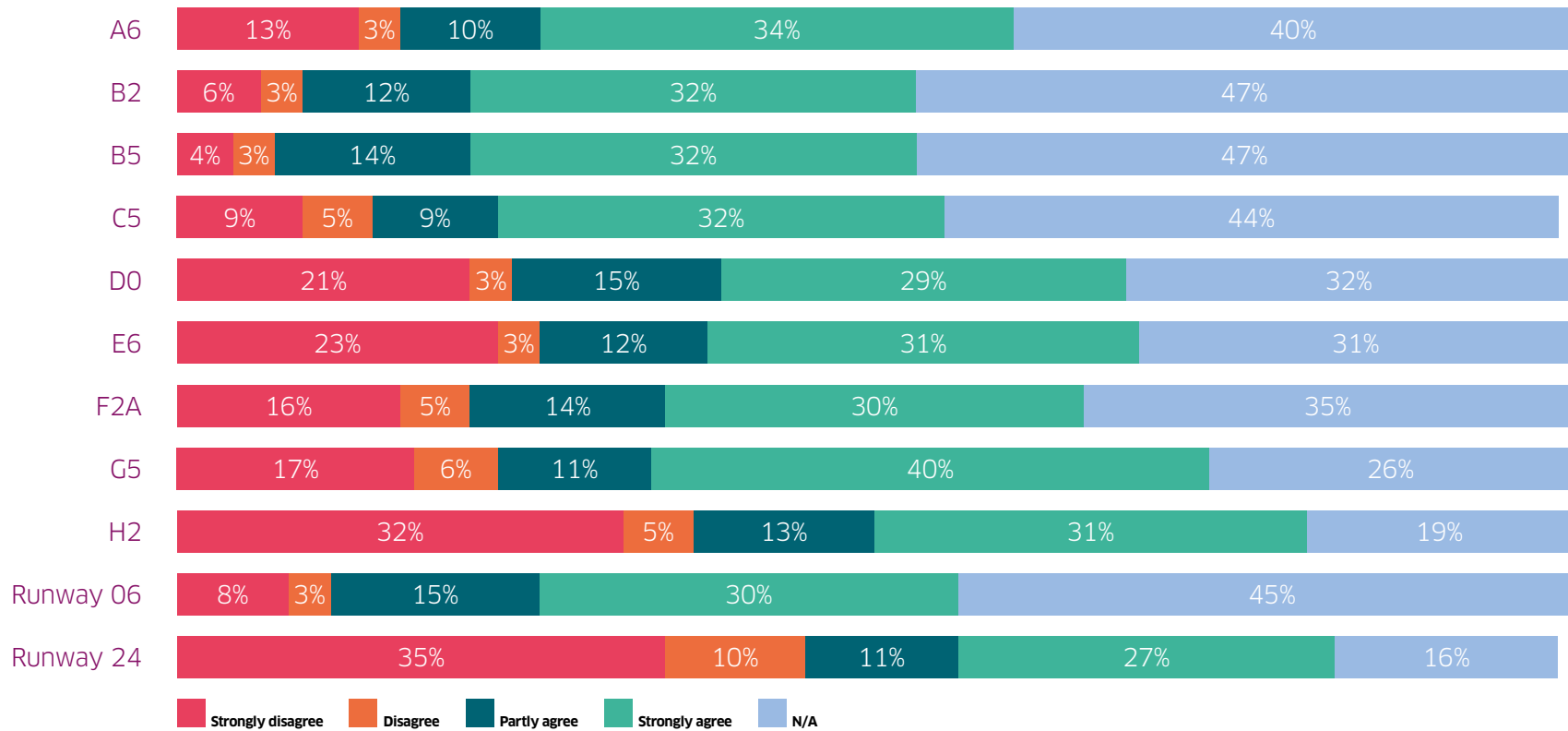


Number of positive comments



Midlothian

This table shows responses by individuals of which there are 117 comments. This is 3% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

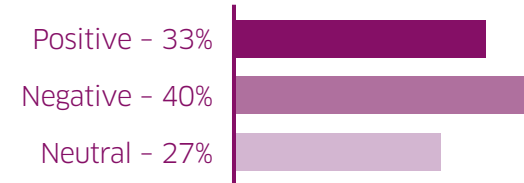


Base: 117

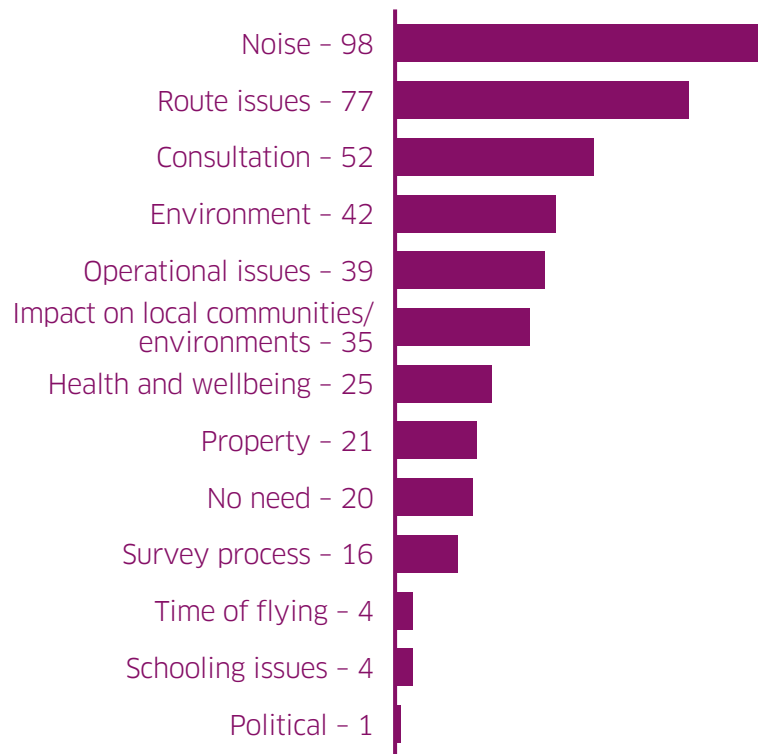
Individuals' opinions from Midlothian

117 respondents.

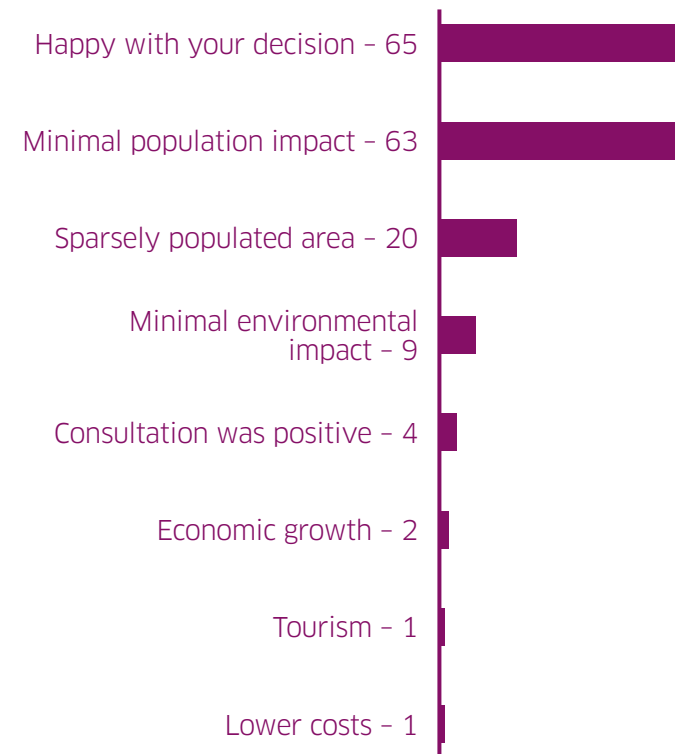
Sentiment expressed



Number of negative comments



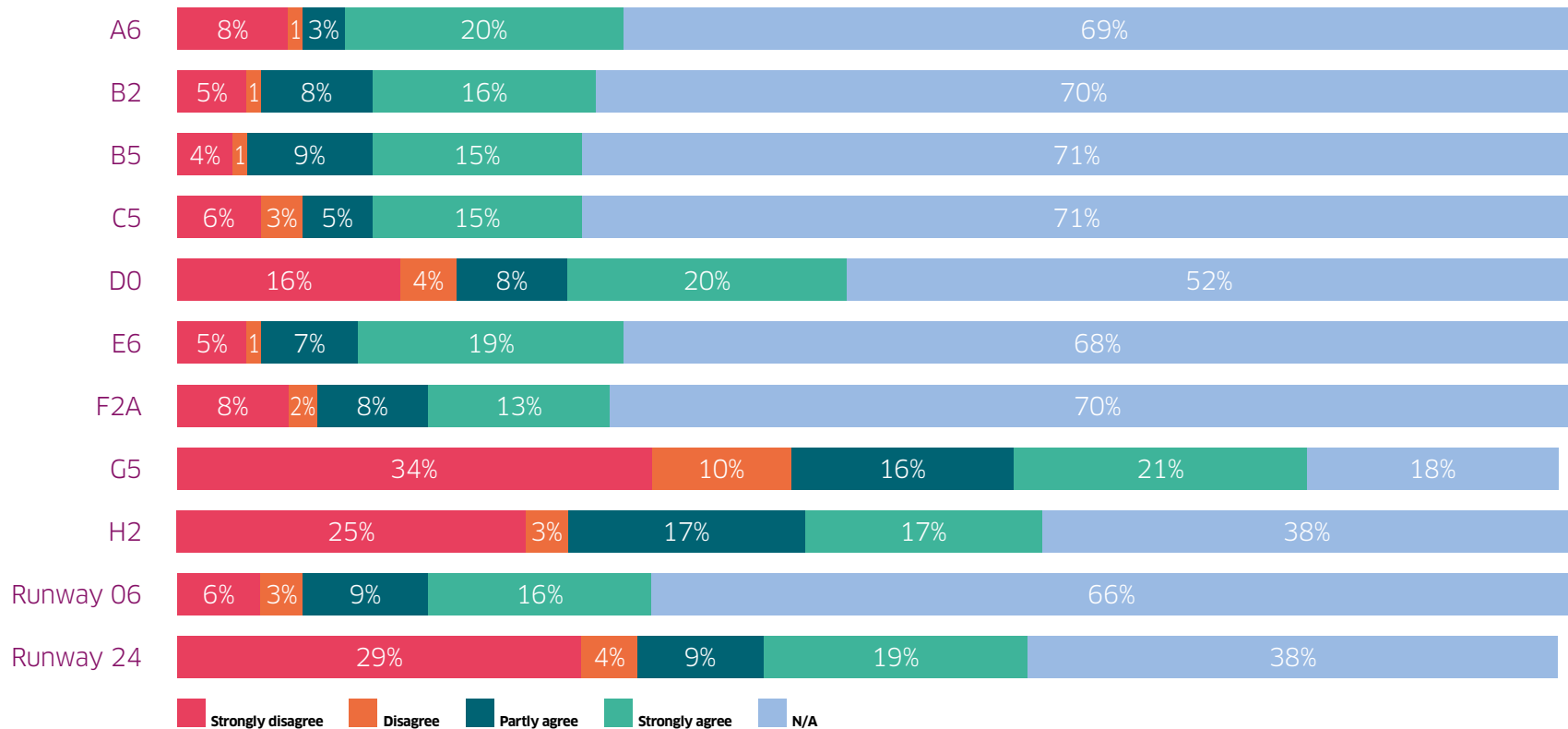
Number of positive comments



Base: 117

East Lothian

This table shows responses by individuals of which there are 119 comments. This is 3% of the total individual response. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

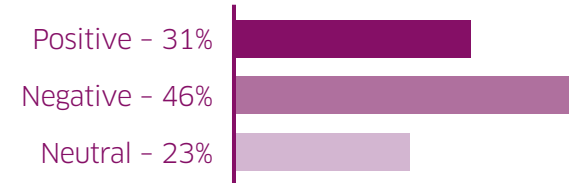


Base: 119

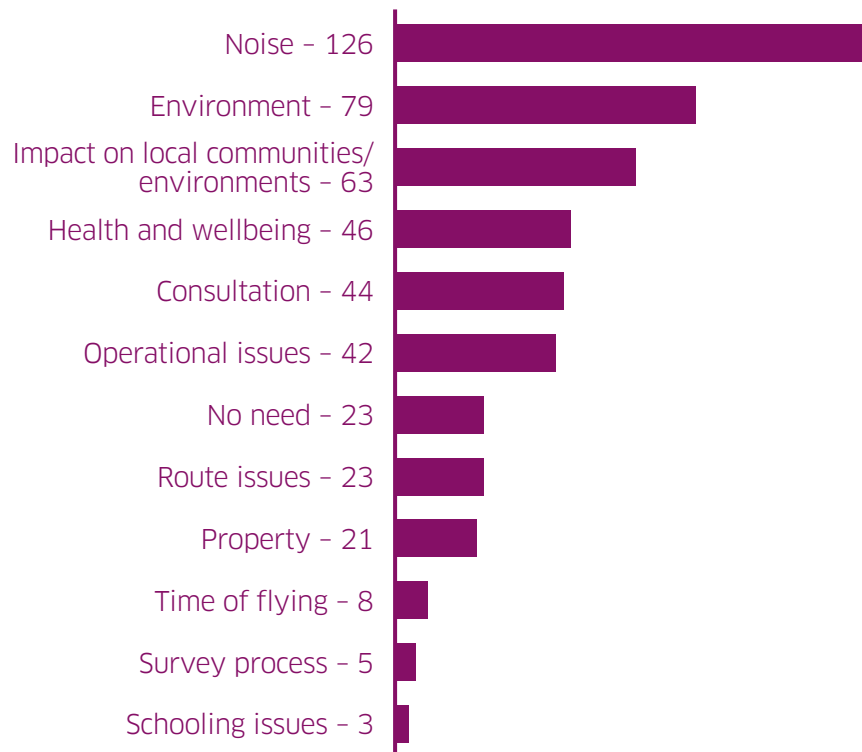
Individuals' opinions from East Lothian

119 respondents.

Sentiment expressed



Number of negative comments



Number of positive comments



Base: 119

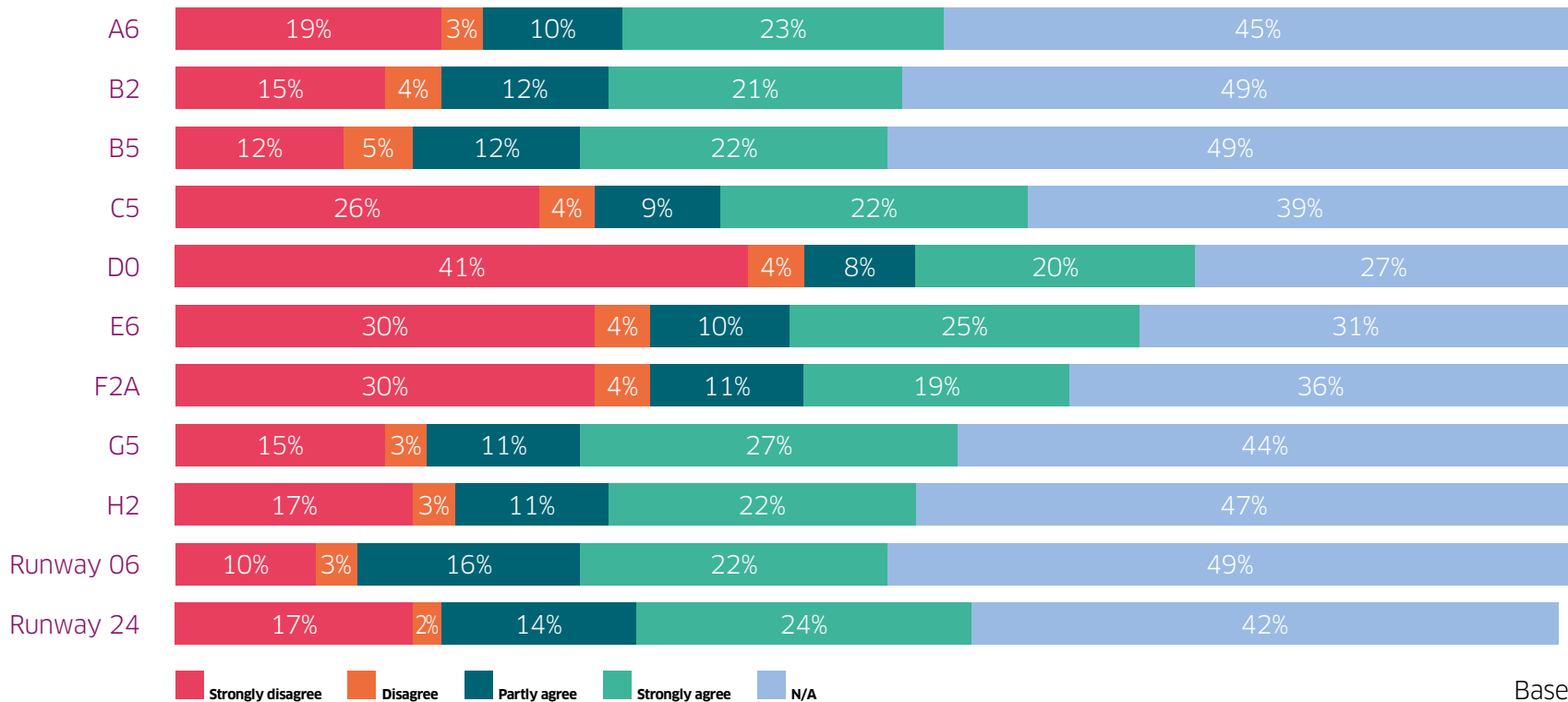
10.3 Overall agreement with preferred flight path options

Individual respondents

There were 3,884 respondents who provided opinion on all flight paths. The following pages report on their comments on preferred and other flight paths, as well as showing a positive, negative or neutral sentiment, and the top 10 positive and top 10 negative comments. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

Overall summary - Individual responses

The level of agreement shows the level of agreement by individuals who responded (3,921) to the preferred flight path options.



Base: 3,884

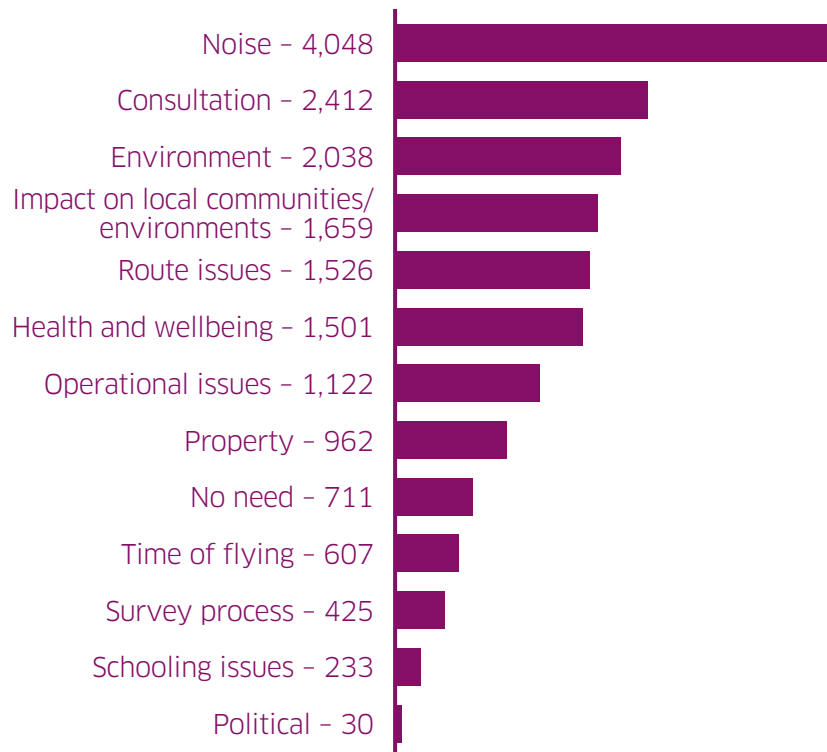
Individual respondents

There were 3,921 respondents including those who wrote letters.

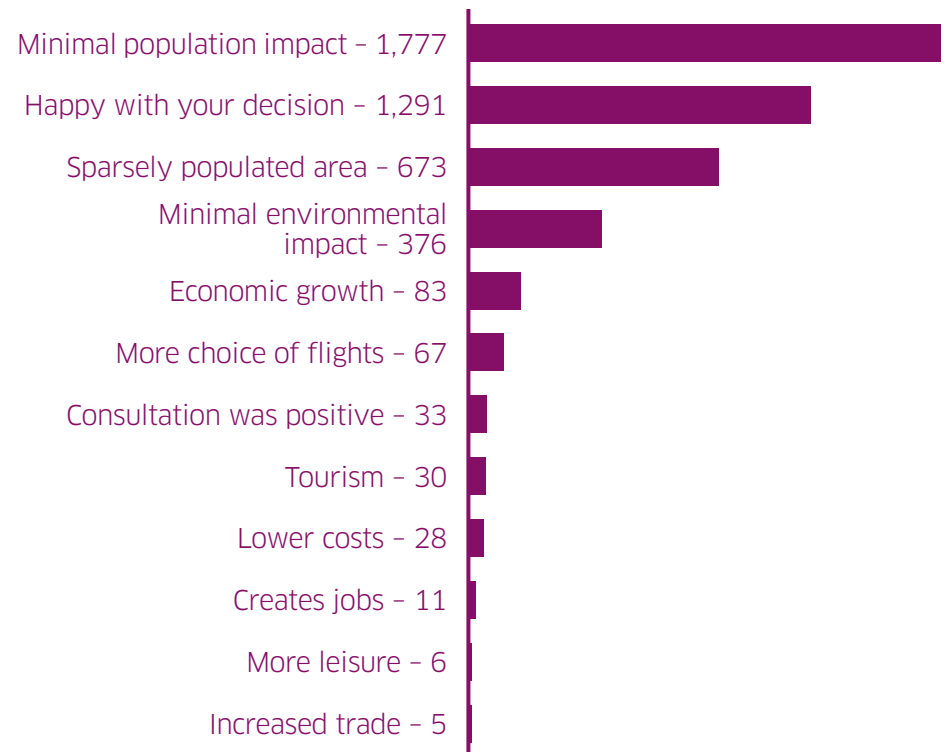
Sentiment expressed



Number of negative comments



Number of positive comments



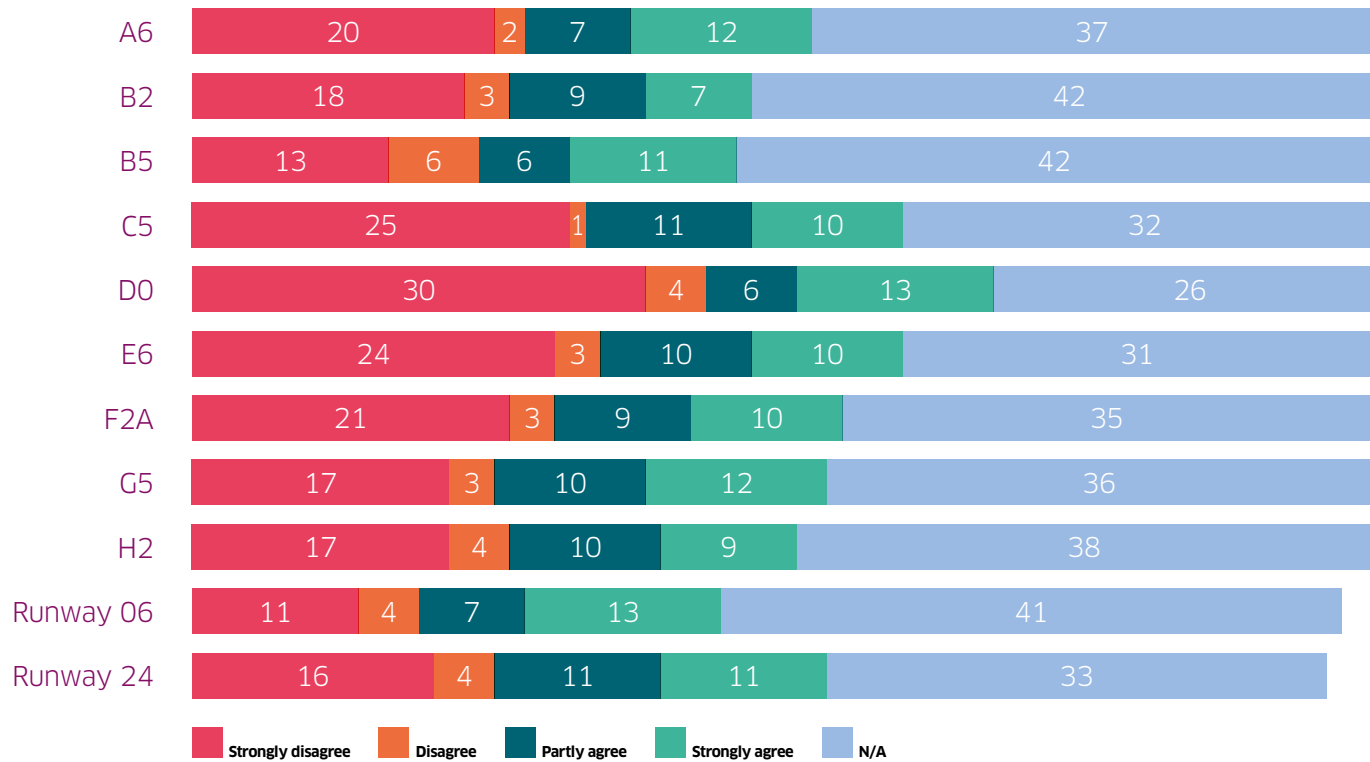
Base: 3,921

Organisations and elected members responses

There were 79 respondents who provided opinion on all flight paths. The following pages report on their comments on preferred and other flight paths, as well as showing a positive, negative or neutral sentiment, and the top 10 positive and top 10 negative comments.

Overall summary - Organisations and elected members responses*

The level of agreement shows the level of agreement by organisations and elected members who responded (79) to the preferred flight path options.



*Data displayed as absolutes. Not all respondents answered every question.

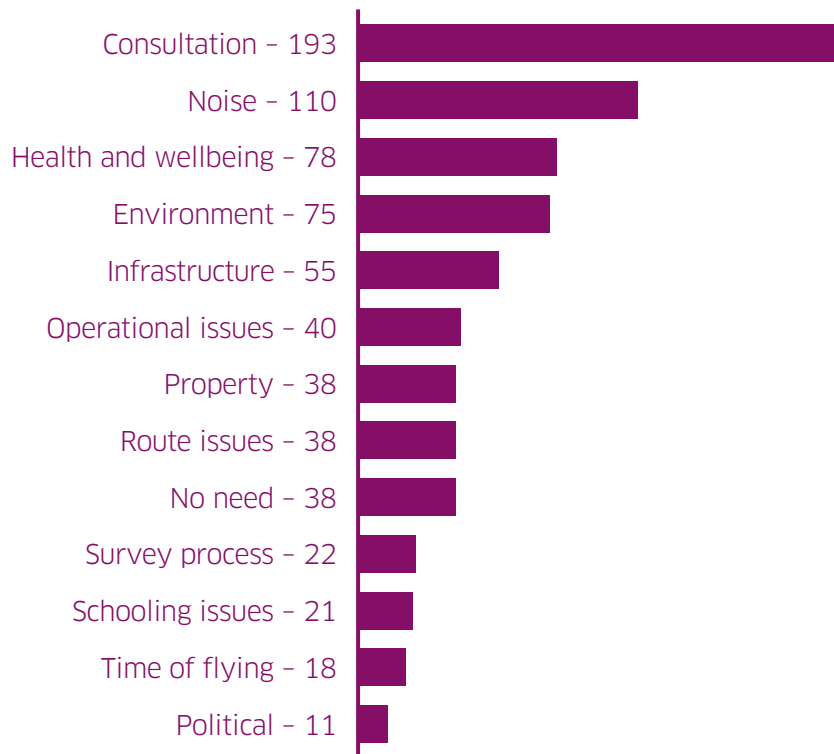
Organisations and elected members respondents

There were 79 respondents.

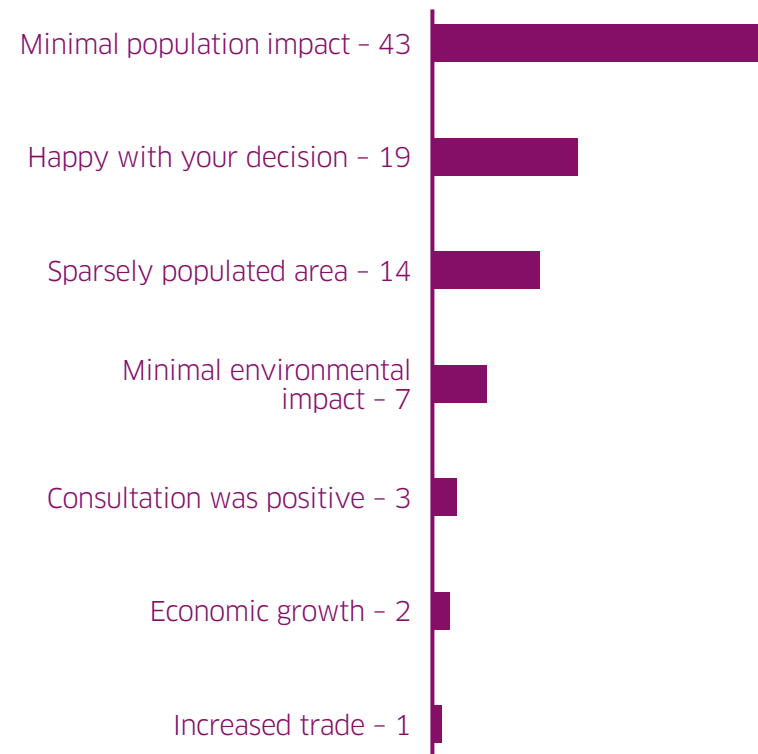
Sentiment expressed



Number of negative comments



Number of positive comments



Base: 79

10.4 Individual flight path responses

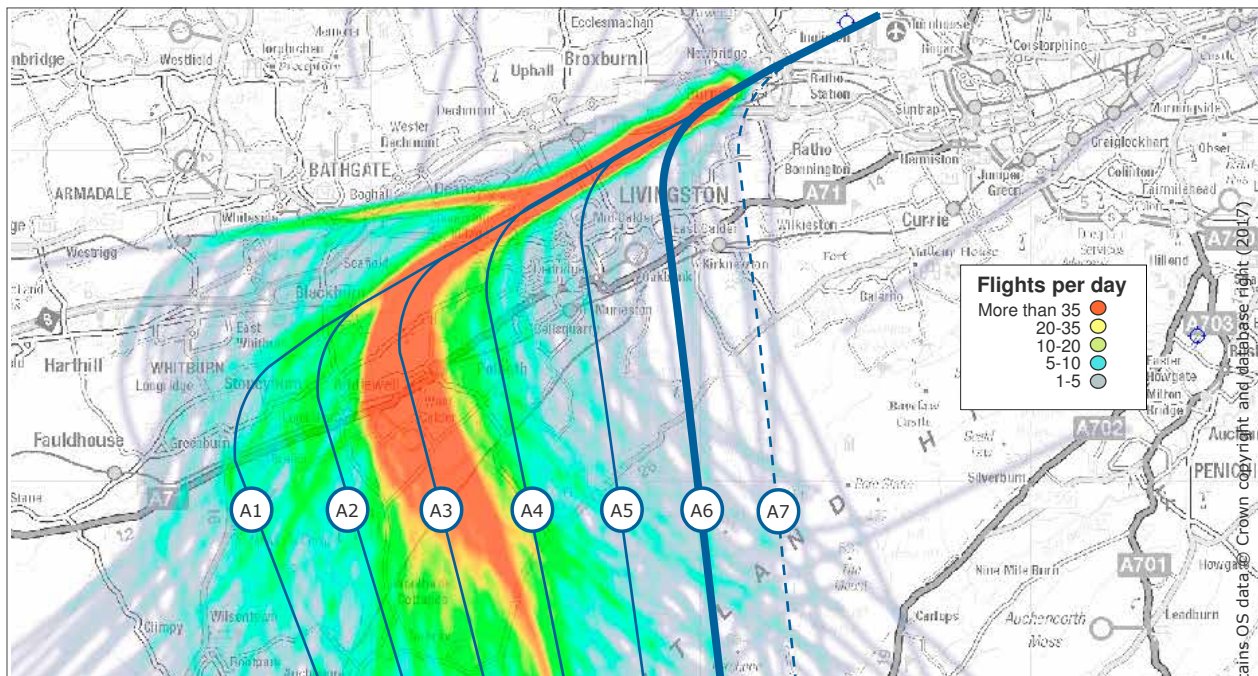
The following section breaks down the feedback from individuals, organisations and elected members on our flight path options along with a summary of responses by area.

10.4.1 Responses to flight path A

Flight path A

Figure 3 is a map showing the current flight tracks (coloured) overlaid with our considered flight path options (A1-A7).

Figure 3: Considered options for flight path A



This map previously appeared on page 42 of the second consultation book.

Flight path A

Option A6 was our preferred option. To show how options were evaluated, we tabled all of the options against our criteria. A7 was considered unviable as it didn't meet safety requirements and ICAO design criteria. We consulted on all viable flight paths (A1-A6).

Preferred optioneering

		A1	A2	A3	A4	A5	A6	A7	
Safety/ICAO design criteria		Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Non compliant	
CO ₂		Longer track	Longer track	Similar	Shorter	Shorter	Shorter	Shorter	
Noise - population overflown		Similar	Similar	Similar	Similar	Similar	Less	Less	
Noise - new population impacted		More	More	No	More	More	Slightly more	Slightly more	
Populations impacted	Broxburn	14,140	Similar	Similar	Similar	Similar	Similar	Further away	Further away
	Uphall		Similar	Similar	Similar	Similar	Similar	Further away	Further away
	Dechmont		Similar	Similar	Similar	Similar	Similar	Further away	Further away
	Livingston - 56,269	Similar	Similar	Similar	Similar	Similar	Overflown	Further away	Further away
	Kirknewton - 2,267	Similar	Similar	Similar	Similar	Similar	Closer	Overflown	
	Polbeth	5,370	Further away	Further away	Similar	Overflown	Further away	Further away	Further away
	Addiewell		Further away	Overflown	Similar	Further away	Further away	Further away	Further away
	Stoneyburn - 3,790	Overflown	Closer	Further away	Further away	Further away	Further away	Further away	Further away
	Blackburn - 4,970	Overflown	Overflown	Similar	Further away	Further away	Further away	Further away	Further away
	Bathgate - 20,363	Closer	Closer	Similar	Further away	Further away	Further away	Further away	Further away

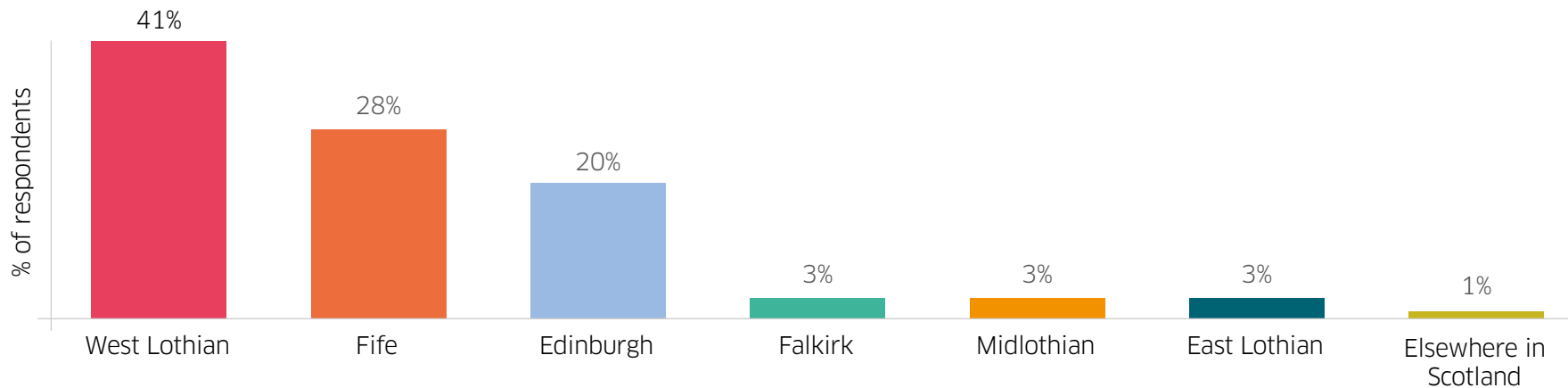
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 43 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



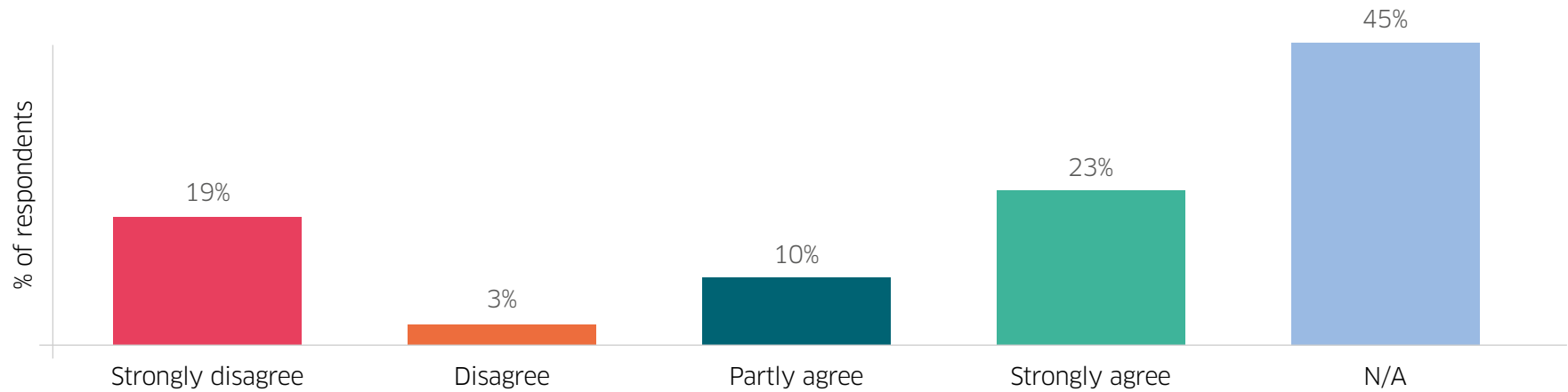
Responses from individual – locations

Area	Respondents	Number – Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

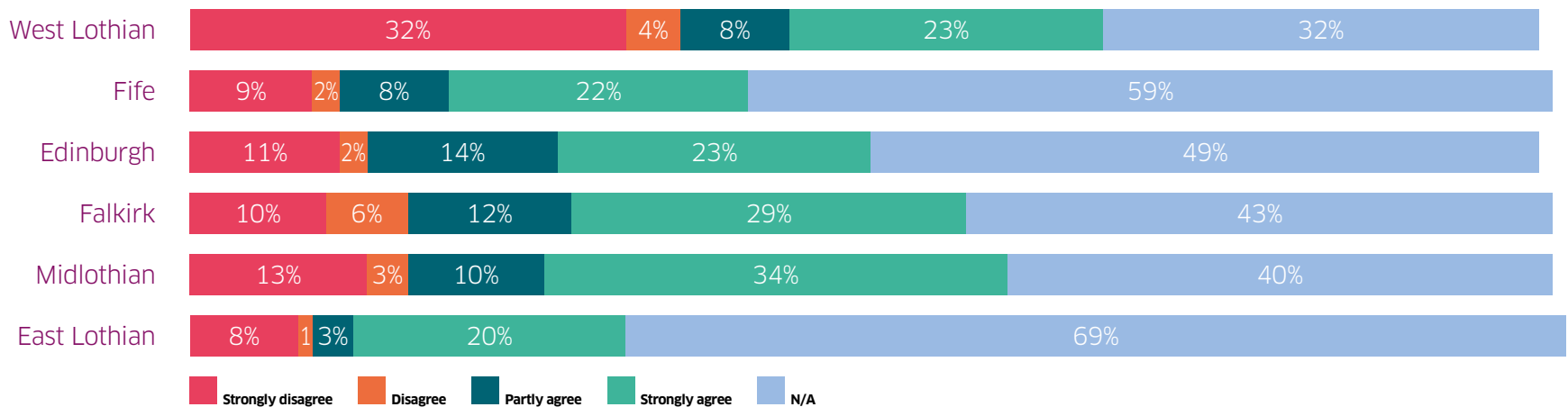
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path A6

Responses to flight path A are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

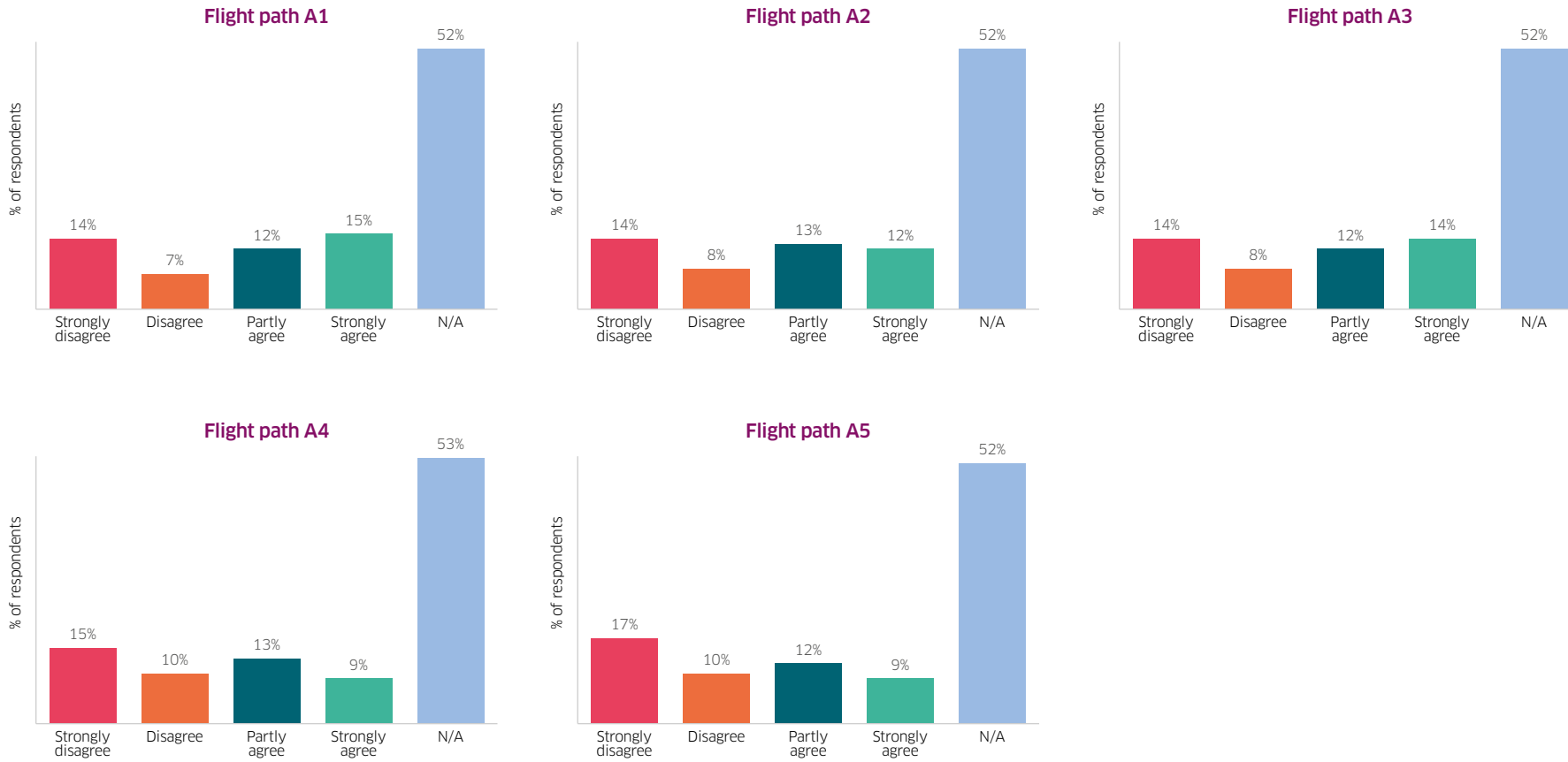


Agreement to flight path A6 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



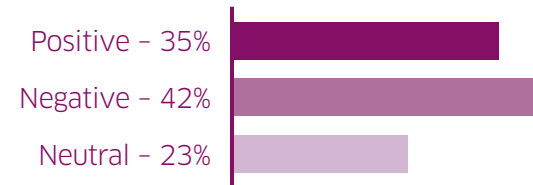
Base: 3,884

Individuals' opinion on path A

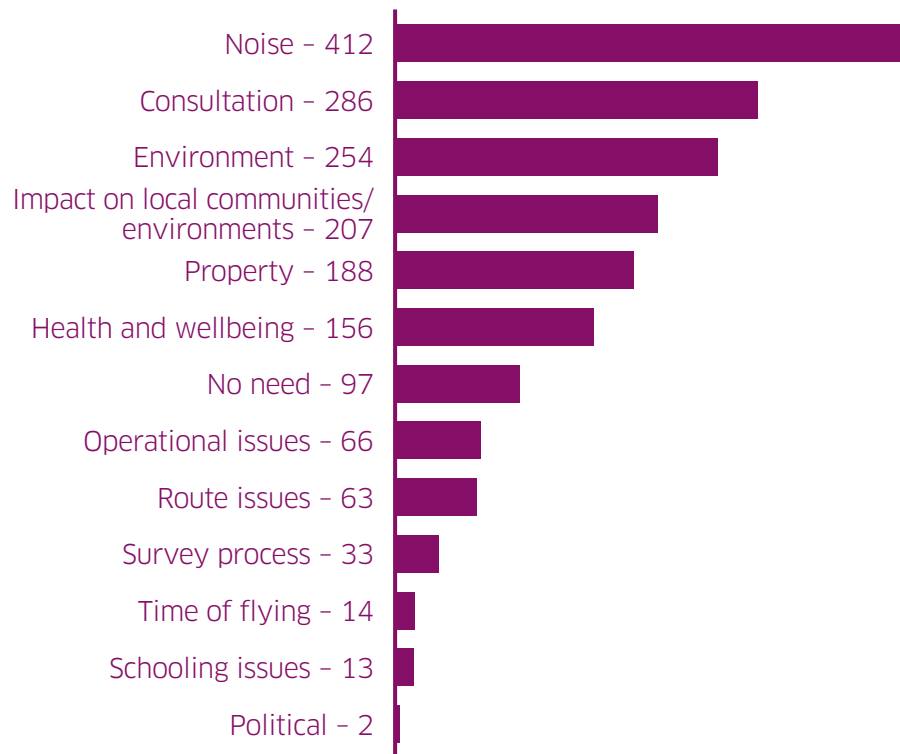
There were 1,783* respondents who provided comments in the free text box on flight path A. These were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

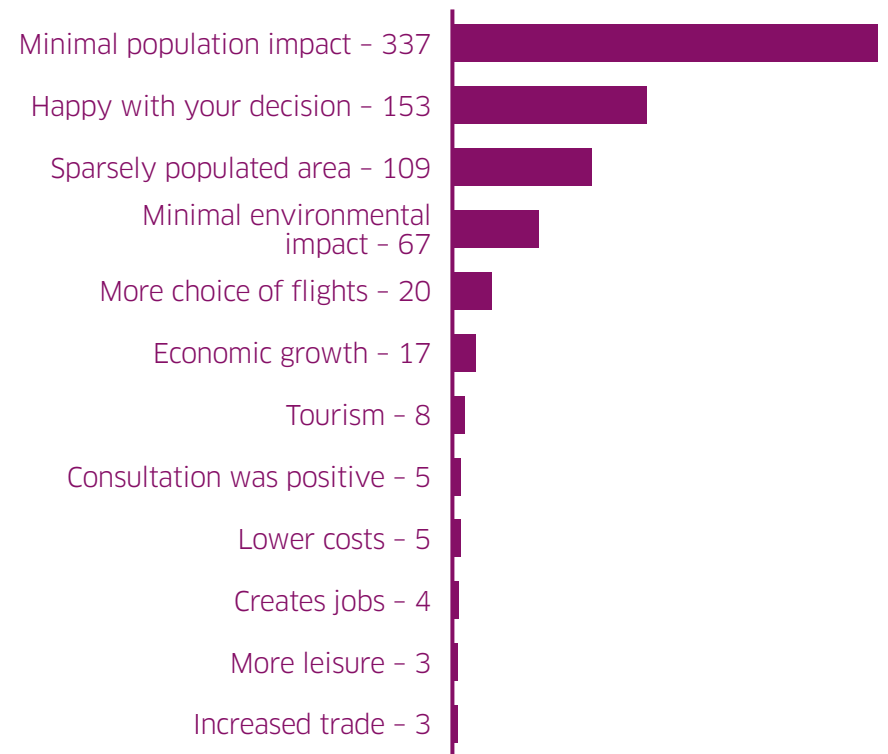
Sentiment expressed



Number of negative comments



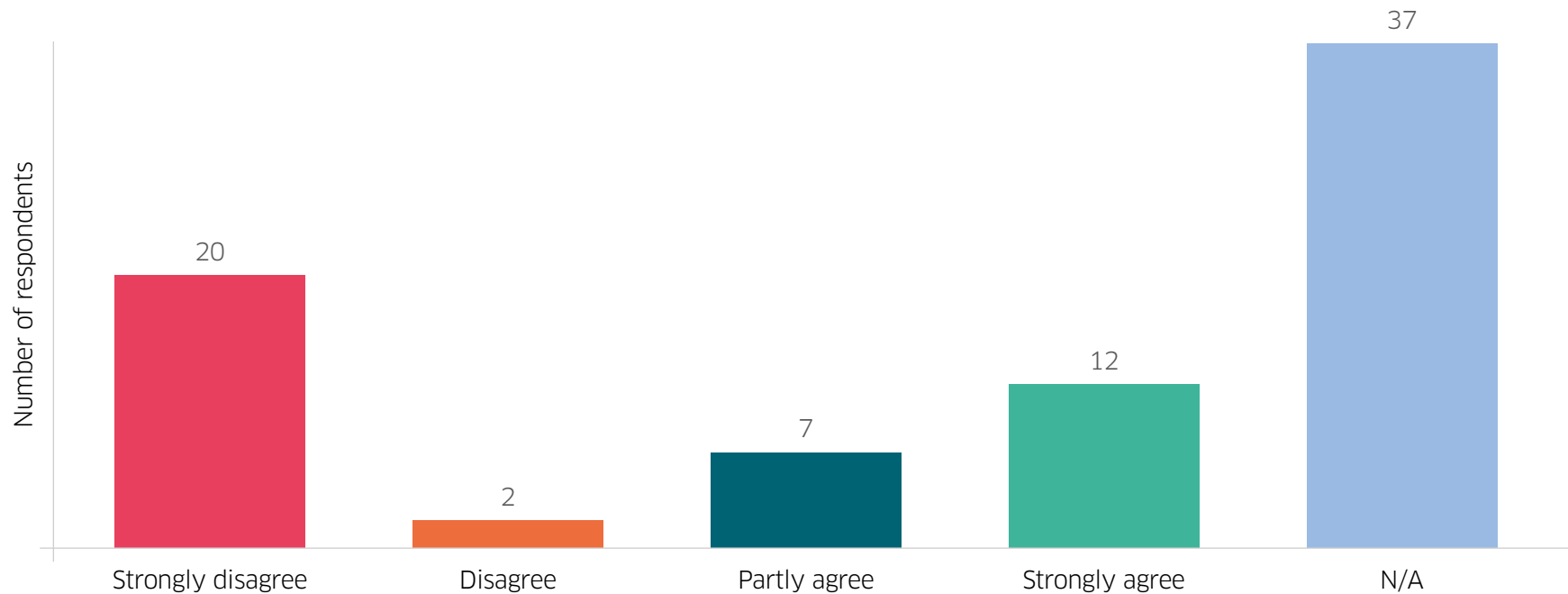
Number of positive comments



Base: 3,884

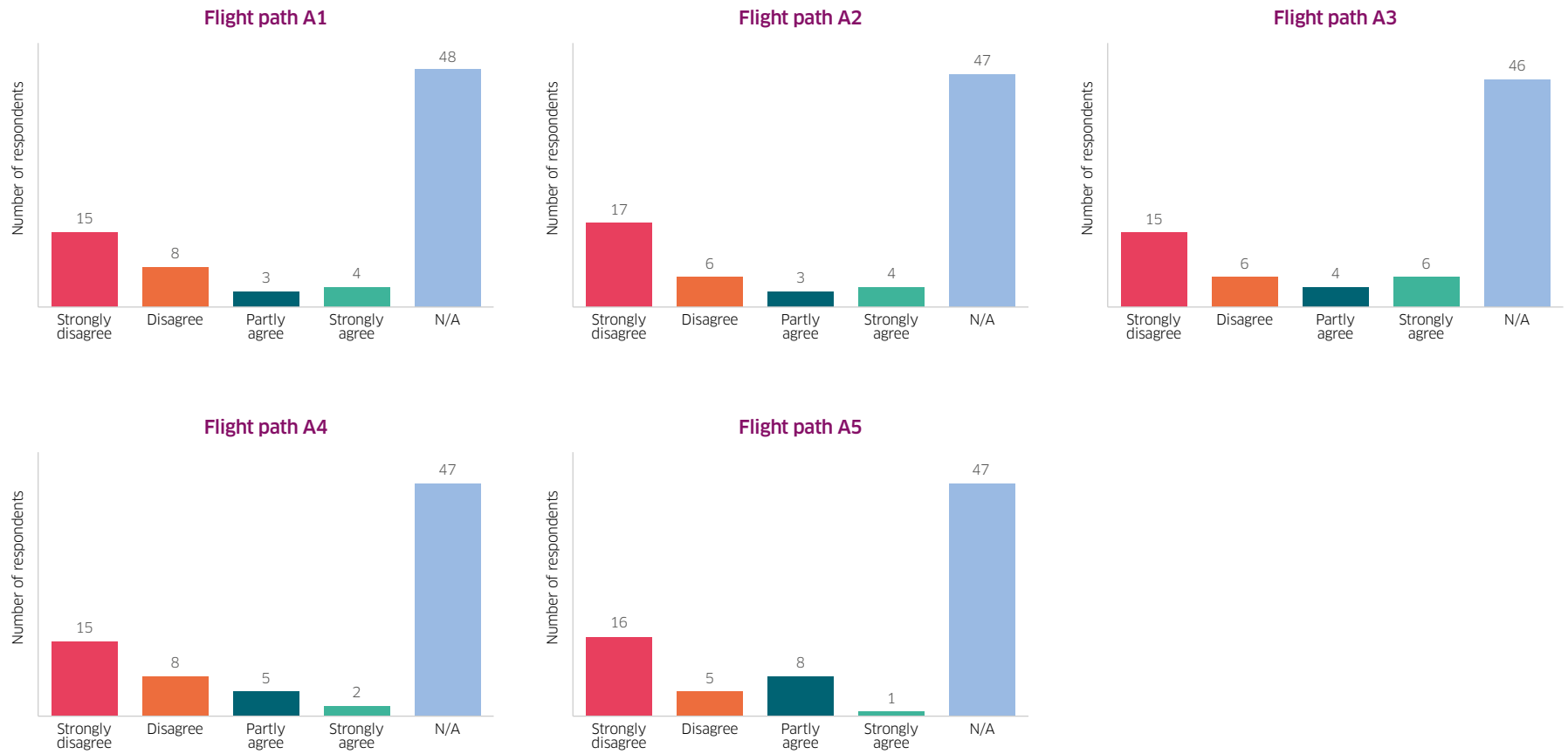
Organisations and elected members - Agreement to flight path A6*

Responses to flight path A are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members - Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

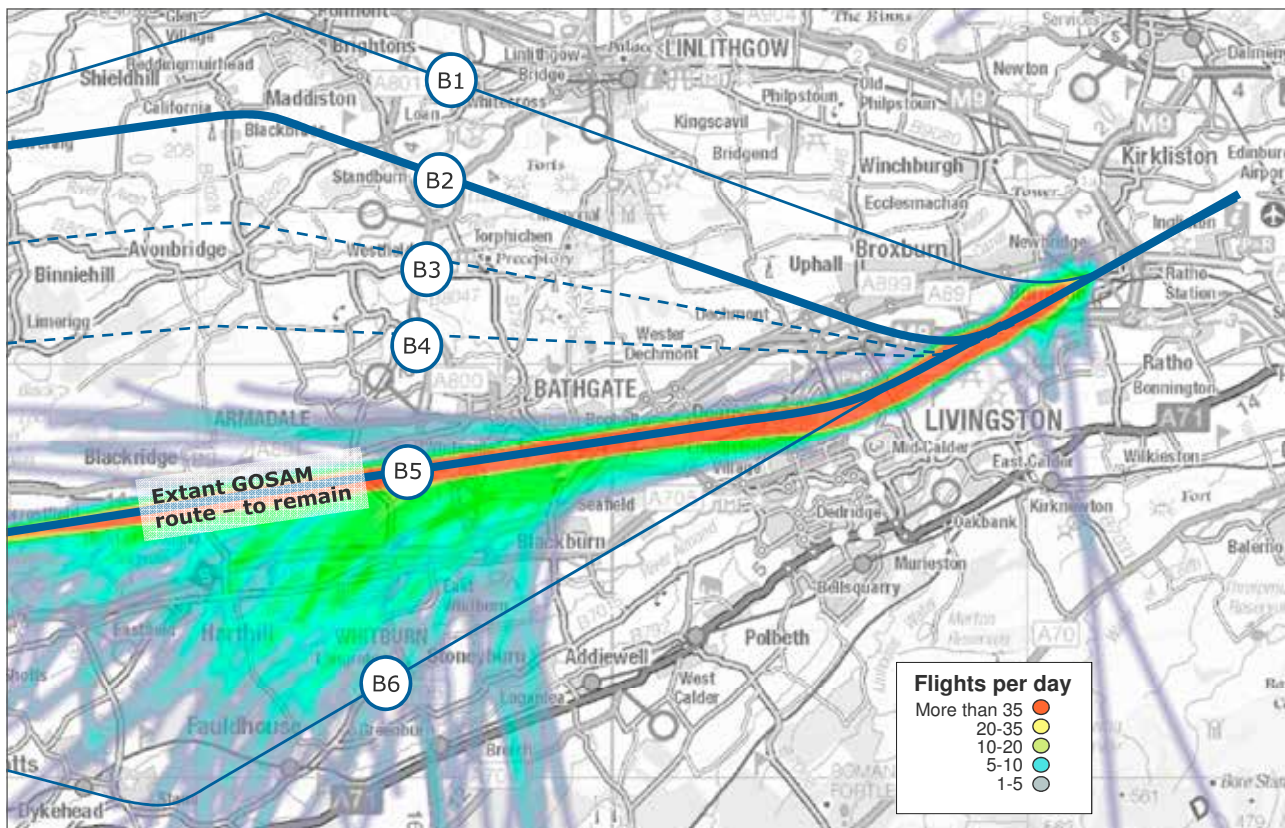
Base: 79

10.4.2 Responses to flight path B

Flight path B

Figure 4 is a map showing the current flight tracks, overlaid with our flight path options (B1-B7).

Figure 4: Considered options for flight path B



This map previously appeared on page 52 of the second consultation book.

Flight path B

Our preferred design option is to keep the existing route B5 and to add parallel route, B2. To show how options were evaluated, we tabled all of the options against our criteria.

Preferred optioneering

		B1	B2	B3	B4	B5	B6	
Safety/ICAO design criteria		Compliant	Compliant	Non compliant	Non compliant	Compliant	Non compliant	
CO ₂		Longer track	Longer track	Longer track	Similar	Similar	Similar	
Noise - population overflown		Less	Less	Less	Less	Similar	Similar	
Noise - new population impacted		More	Slightly less	Slightly less	Slightly less	No	No	
Operational benefit - reduced delay		Yes	Yes	Yes	Yes	Similar	Yes	
Populations impacted	Broxburn	14,140	Closer	Similar	Similar	Similar	Similar	
	Uphall		Overflown	Overflown	Closer	Closer	Similar	Similar
	Dechmont		Closer	Overflown	Overflown	Overflown	Similar	Similar
	Ecclesmachan		Closer	Closer	Closer	Not overflown	Not overflown	Not overflown
	Livingston - 56,269	Further away	Further away	Further away	Further away	Similar	Similar	
	Torphichen - 570	Not overflown	Closer	Closer	Closer	Not overflown	Not overflown	
	Bathgate - 20,363	Not overflown	Not overflown	Further away	Further away	Similar	Further away	
	Blackburn - 4,970	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	
	Stoneyburn - 3,790	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	
	Linlithgow - 19,000	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	
	Polmont/Brightons - 3,790	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown	

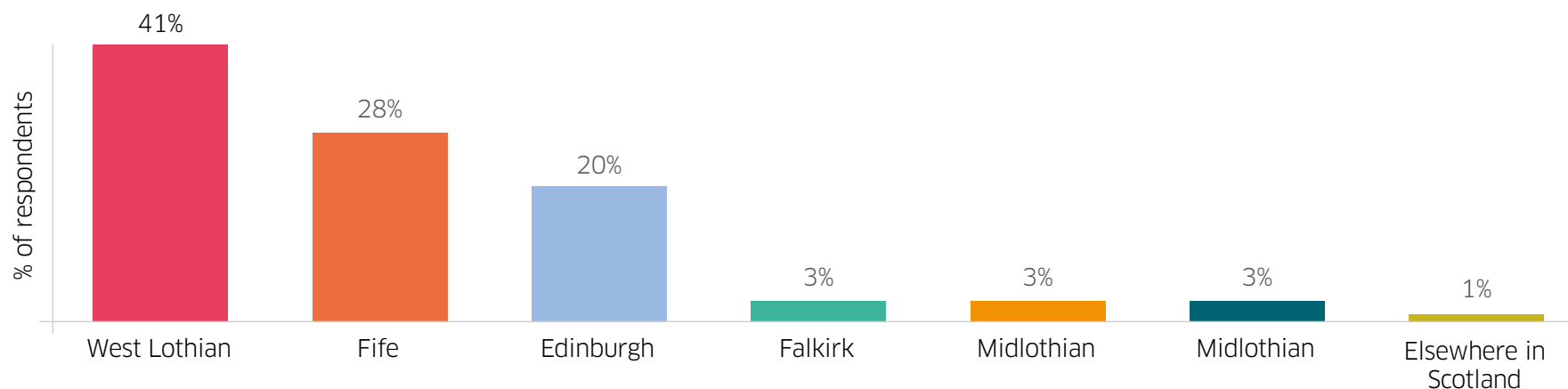
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 53 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



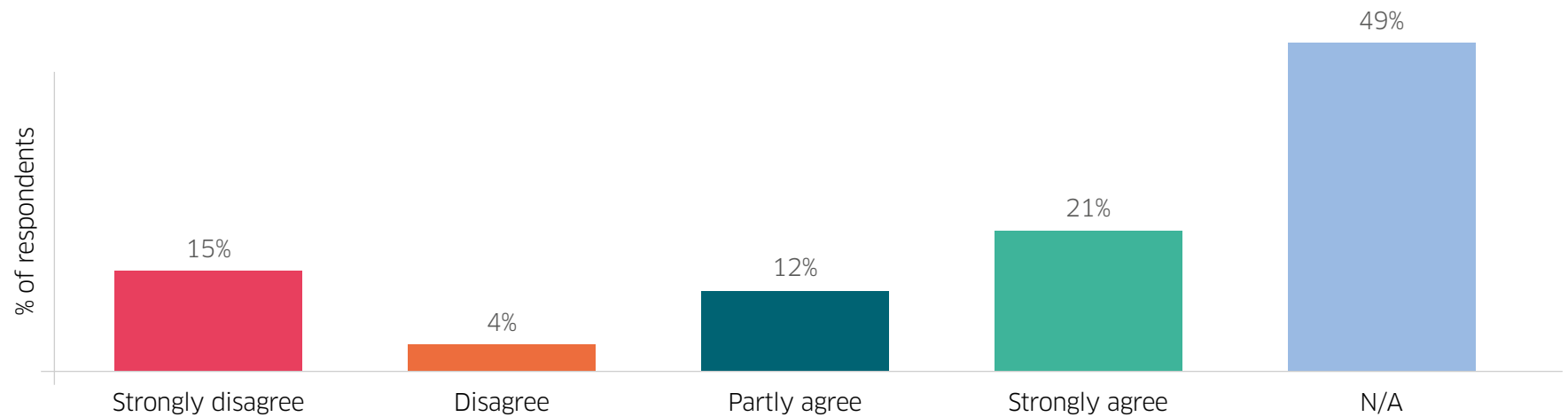
Responses from individual – locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

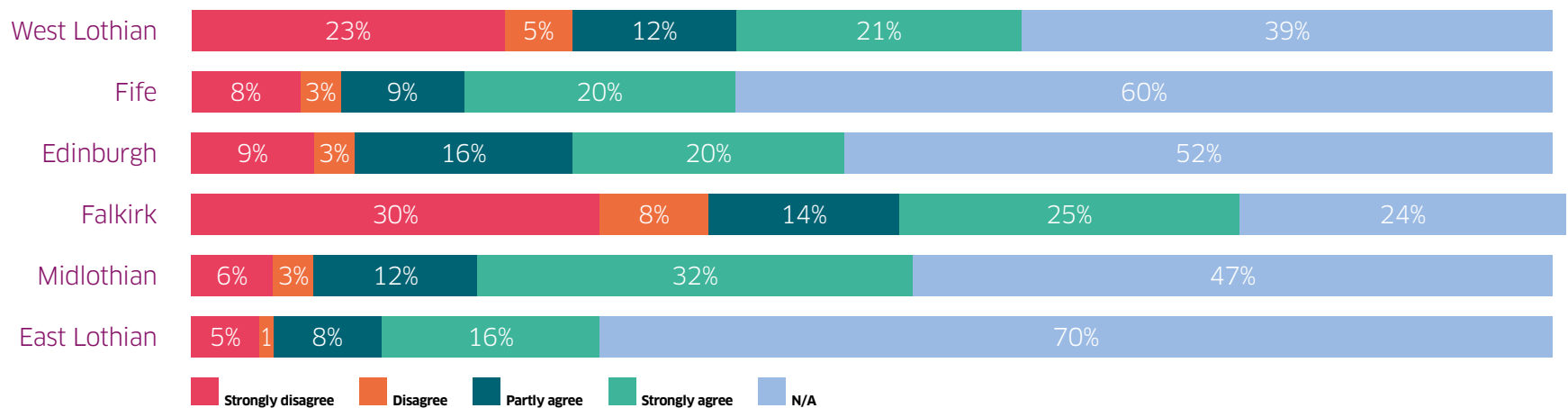
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path B2

Responses to flight path B are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents. There were 3,873 responses on flight path B2.

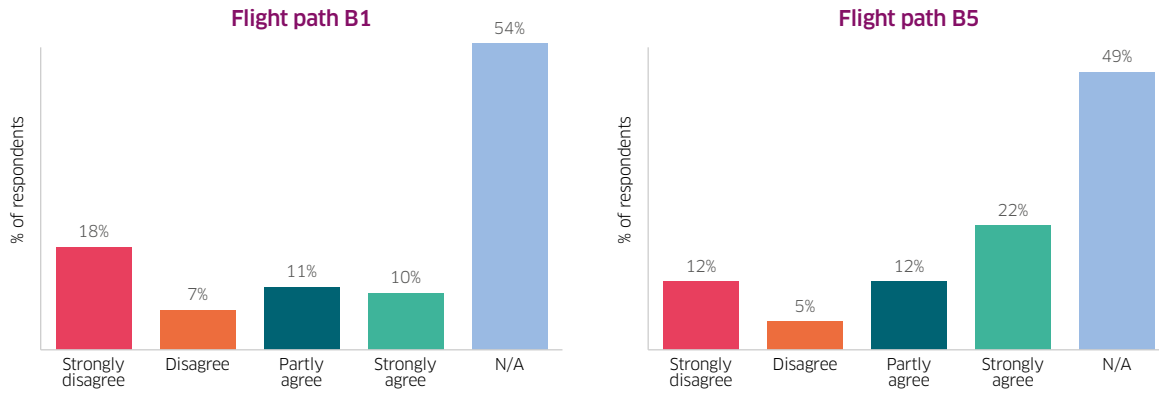


Agreement to flight path B2 by area



Base: 3,873

Responses from individuals - Agreement with all other flight path options



The non-viable option of flight path B6 was included in the online version of the questionnaire. The responses to the non-viable option for B6 have been discounted and this has not affected views on the other viable options.

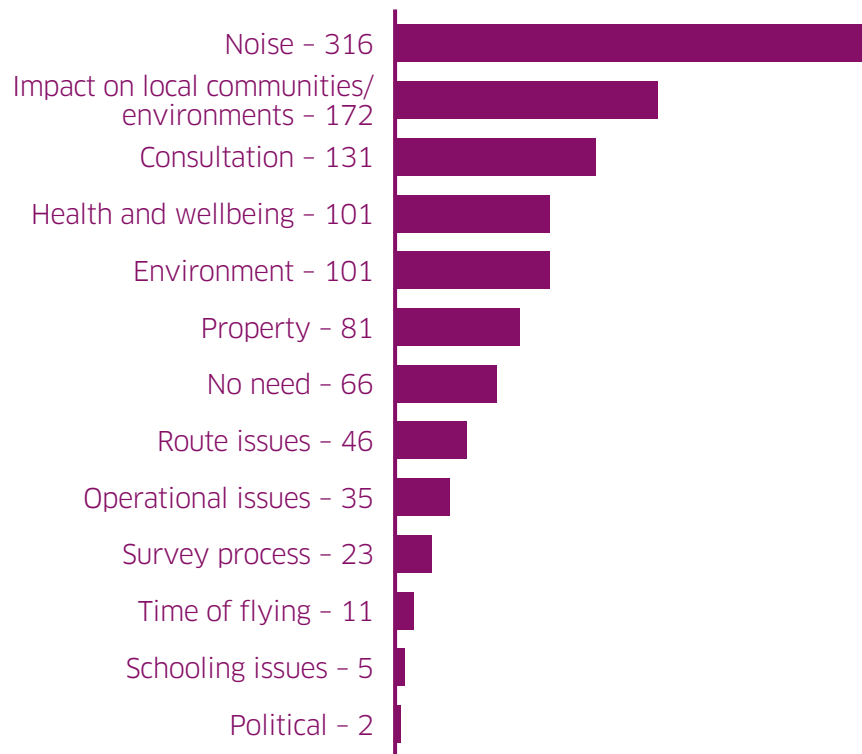
Base: 3,873

Individuals' opinion on path B

There were 1,372* respondents who provided opinion on flight path B. These were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

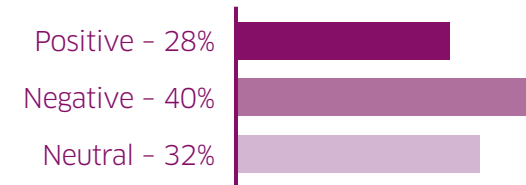
*not every respondent left an opinion.

Number of negative comments

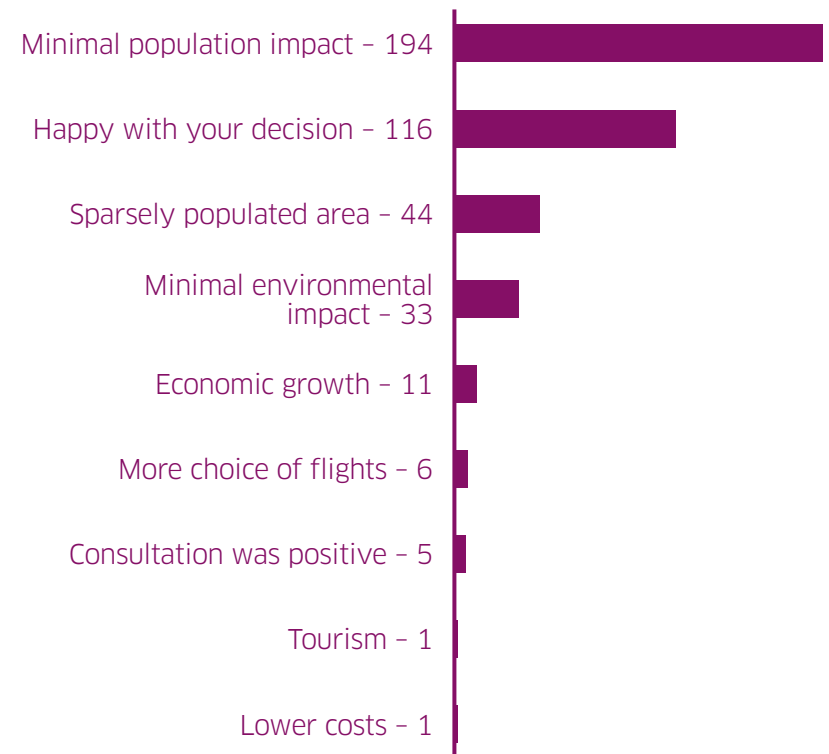


Base: 1,372

Sentiment expressed

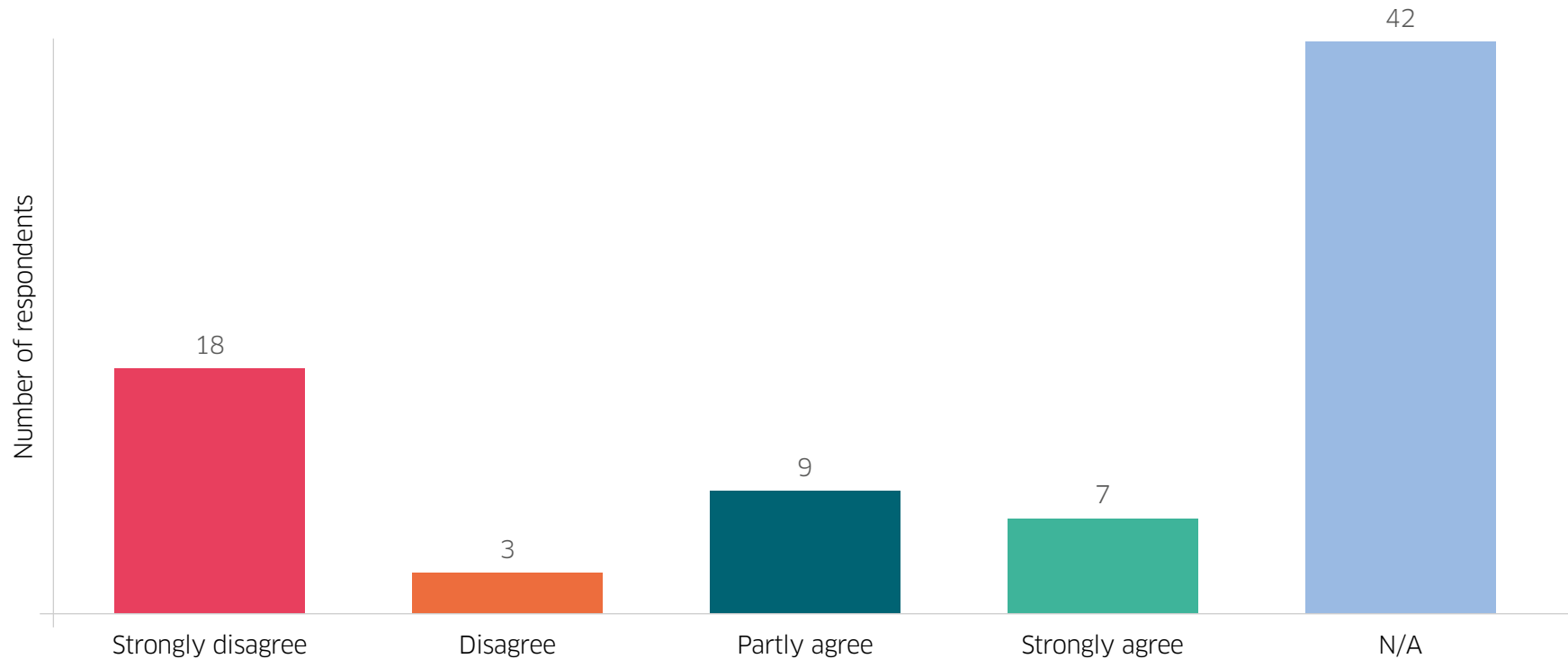


Number of positive comments



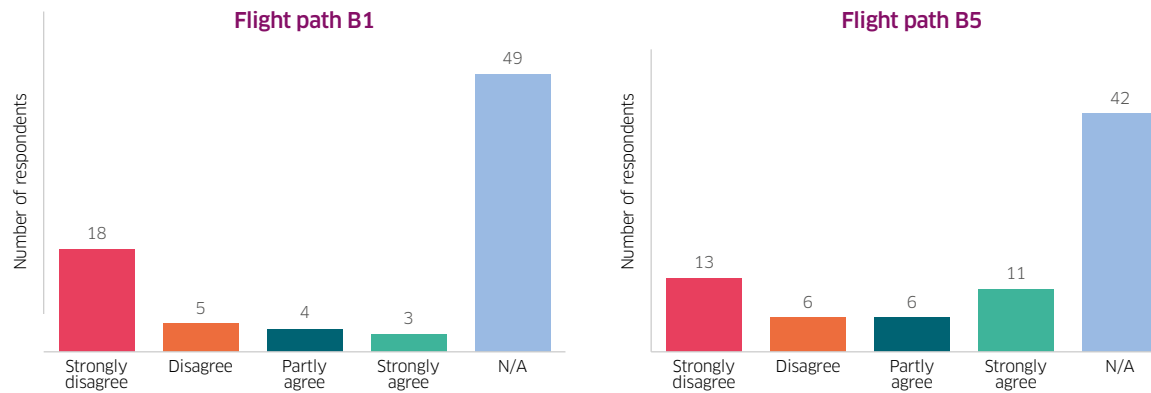
Organisations and elected members - Agreement to flight path B*

Responses to flight path B are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members - Agreement with all other flight path options*



The non-viable option of flight path B6 was included in the online version of the questionnaire. The responses to the non-viable option for B6 have been discounted and this has not affected views on the other viable options.

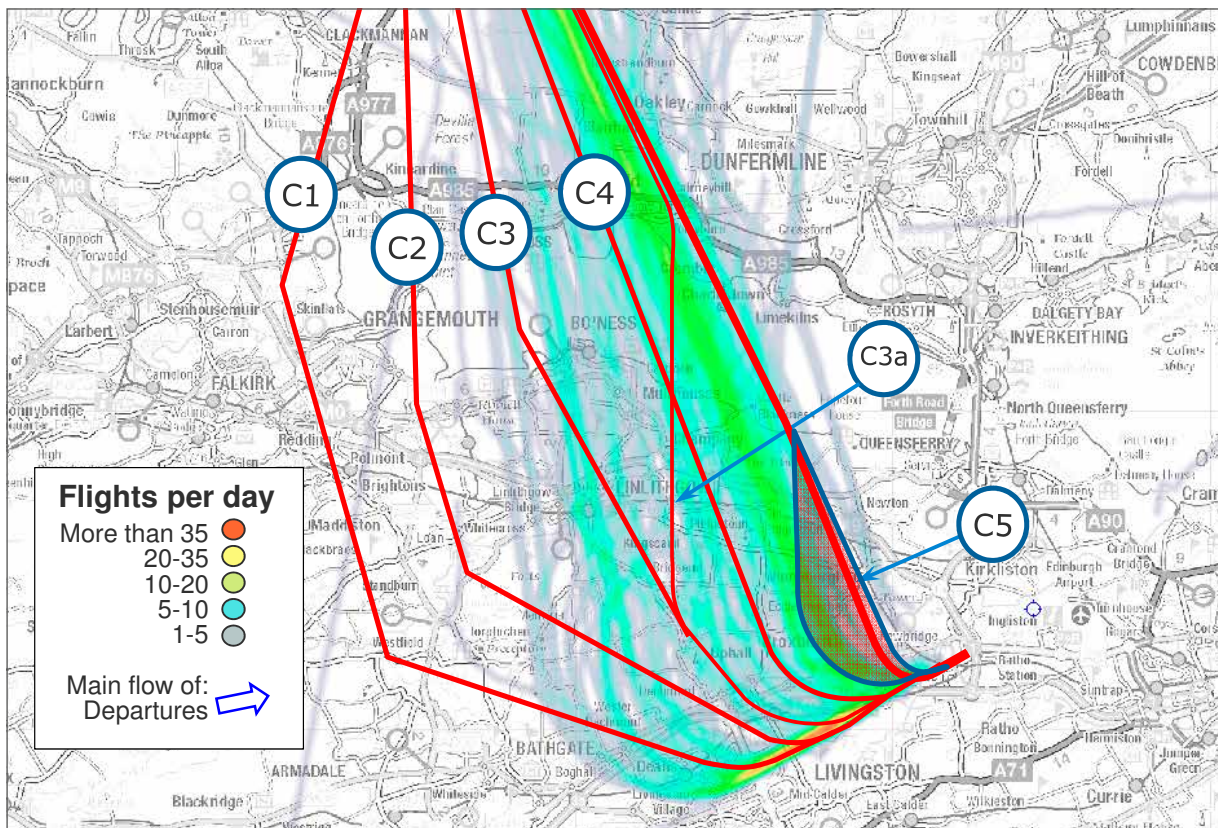
*Data displayed as absolutes. Not all respondents answered every question.

10.4.3 Responses to flight path C

Flight path C

Figure 5 shows the current flight tracks, overlaid with our flight path options (C1-C5).

Figure 5: Considered options for flight path C



This map previously appeared on page 62 of the second consultation book.

Flight path C5

Our preferred design option is C5. To show how options were evaluated, we tabled all of the options against our criteria.

Preferred optioneering

		C1	C2	C3	C3a	C4	C5	
Safety/ICAO design criteria		Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	
CO ₂		Longer track	Longer track	Similar	Similar	Shorter	Shorter	
Noise - population overflown		More	Similar	More	Less	Less	Less	
Noise - new population impacted		More	More	More	More	Similar	Similar	
Operational benefit - reduced delay		Similar	Similar	Similar	Similar	Similar	Similar	
Populations impacted	Broxburn	14,140	Further away	Further away	Similar	Similar	Closer	Overflown
	Uphall		Further away	Further away	Overflown	Overflown	Overflown	Further away
	Dechmont		Closer	Overflown	Closer	Closer	Similar	Further away
	Ecclesmachan		Not overflown	Further away	Similar	Similar	Overflown	Closer
	Winchburgh - 2,000	Not overflown	Further away	Similar	Similar	Similar	Similar	Overflown
	Livingston - 56,269	Similar	Similar	Further away	Further away	Further away	Further away	Further away
	South Queensferry - 9,026	Not overflown	Not overflown	Further away	Similar	Similar	Similar	Closer
	Torphichen - 570	Overflown	Closer	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown
	Bathgate - 20,363	Closer	Closer	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown
	Linlithgow	19,000	Not overflown	Closer	Overflown	Closer	Similar	Further away
	Philpstoun		Not overflown	Not overflown	Similar	Closer	Overflown	Similar
	Bo'ness - 14,490	Not overflown	Closer	Overflown	Closer	Similar	Similar	Further away
	Grangemouth - 17,373	Overflown	Closer	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown
	Falkirk - 32,422	Closer	Closer	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown
	Polmont/Brightons - 9,253	Overflown	Closer	Not overflown	Not overflown	Not overflown	Not overflown	Not overflown
	Blackness - 135	Not overflown	Not overflown	Further away	Similar	Similar	Similar	Similar
	Limekilns - 1,430	Not overflown	Not overflown	Further away	Similar	Further away	Further away	Closer

■ Positive impact
 ■ No change/neutral
 ■ Negative impact

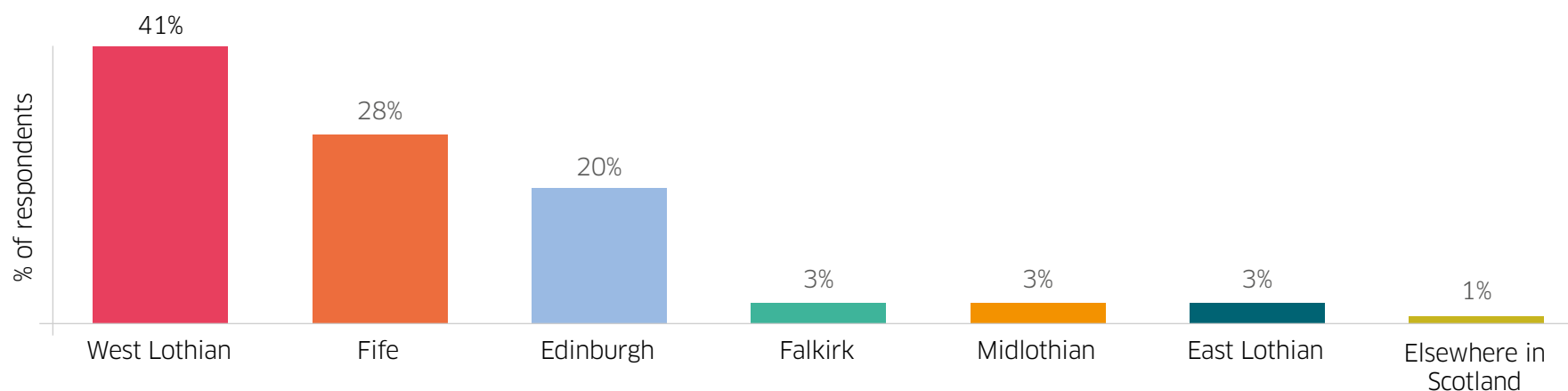
Note: Difference relative to today's impact.

Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 63 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



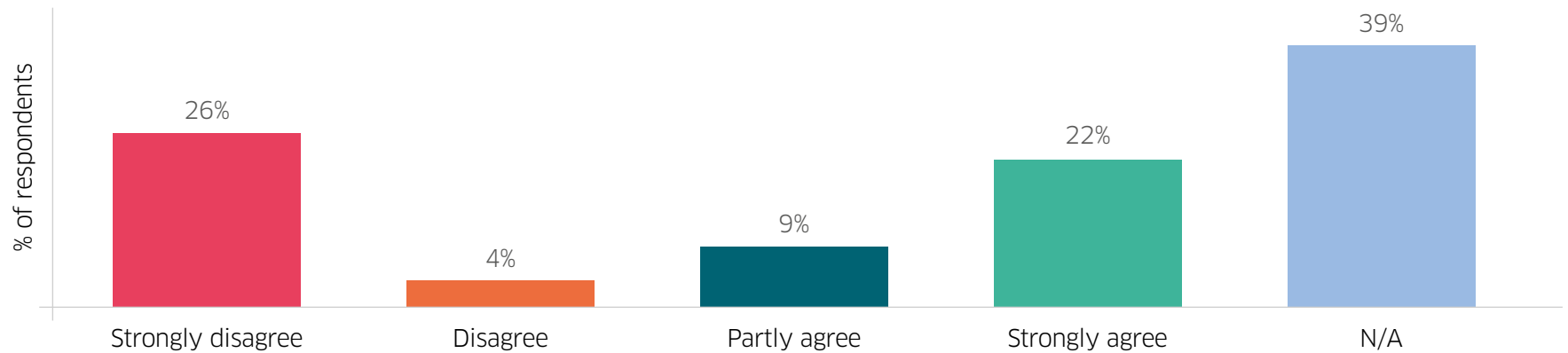
Responses from individual - locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

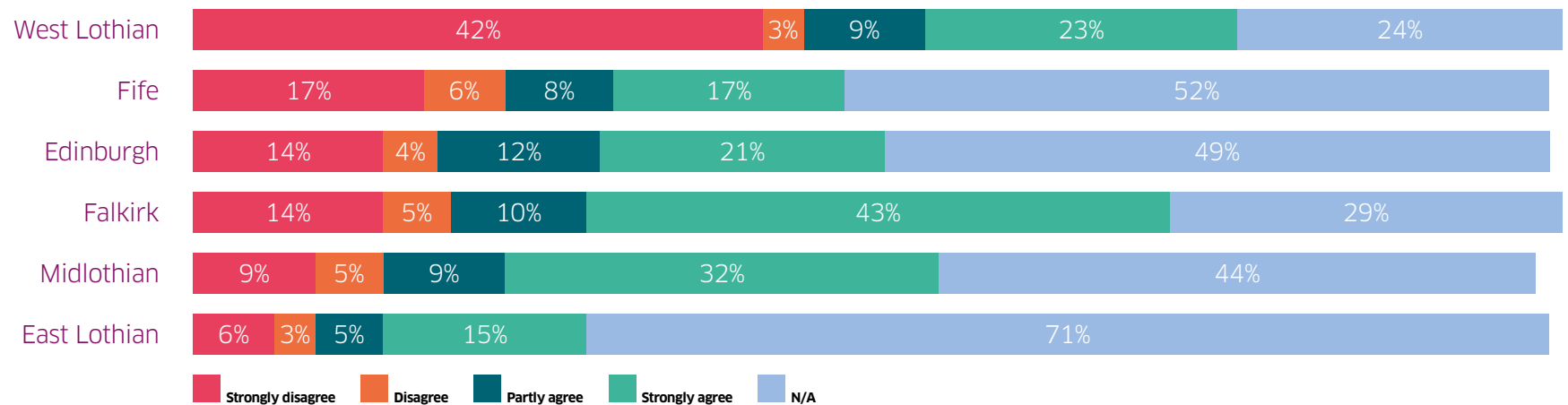
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path C5

Responses to flight path C5 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

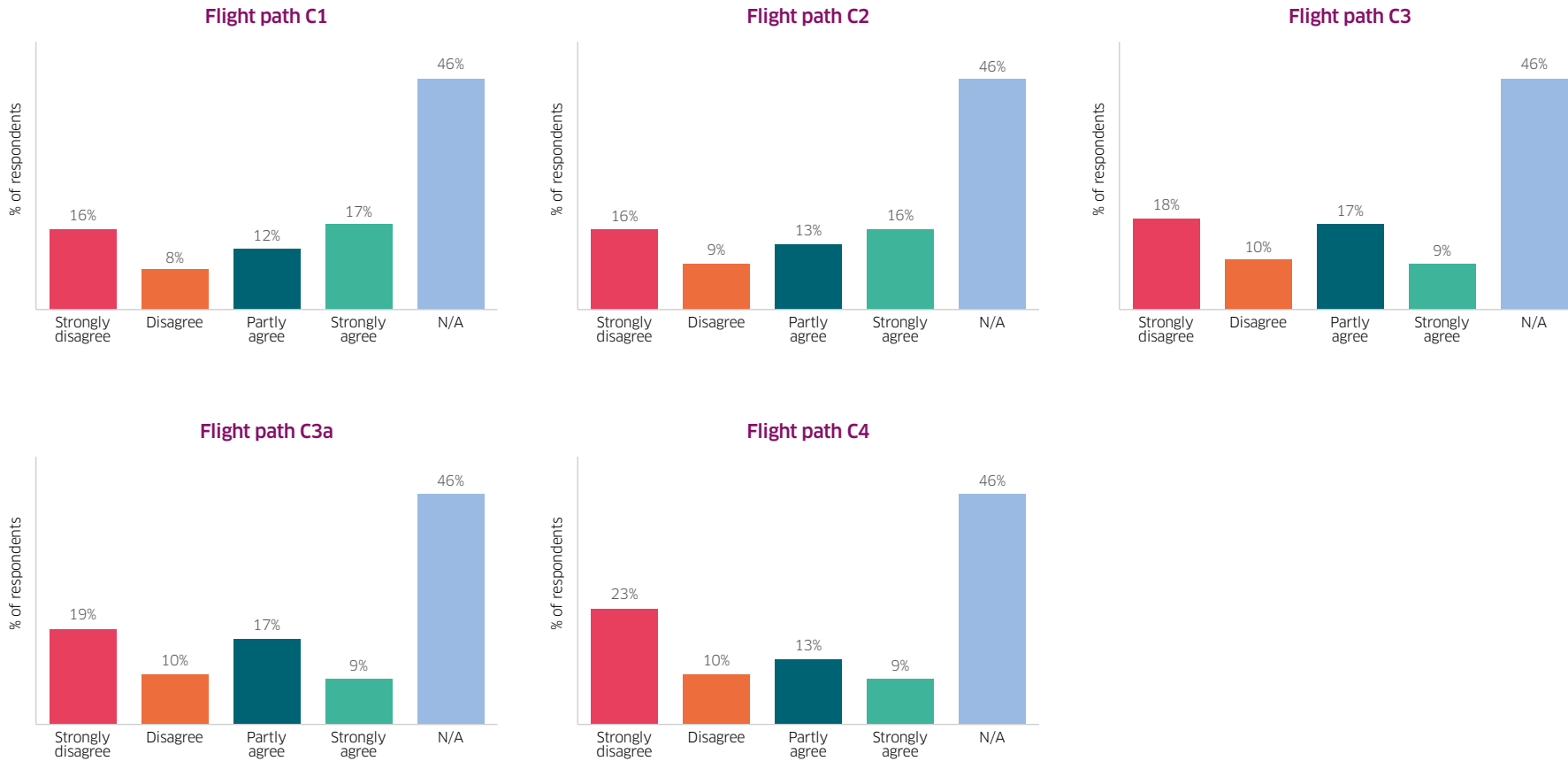


Agreement to flight path C5 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



Base: 3,884

Individuals' opinion on path C

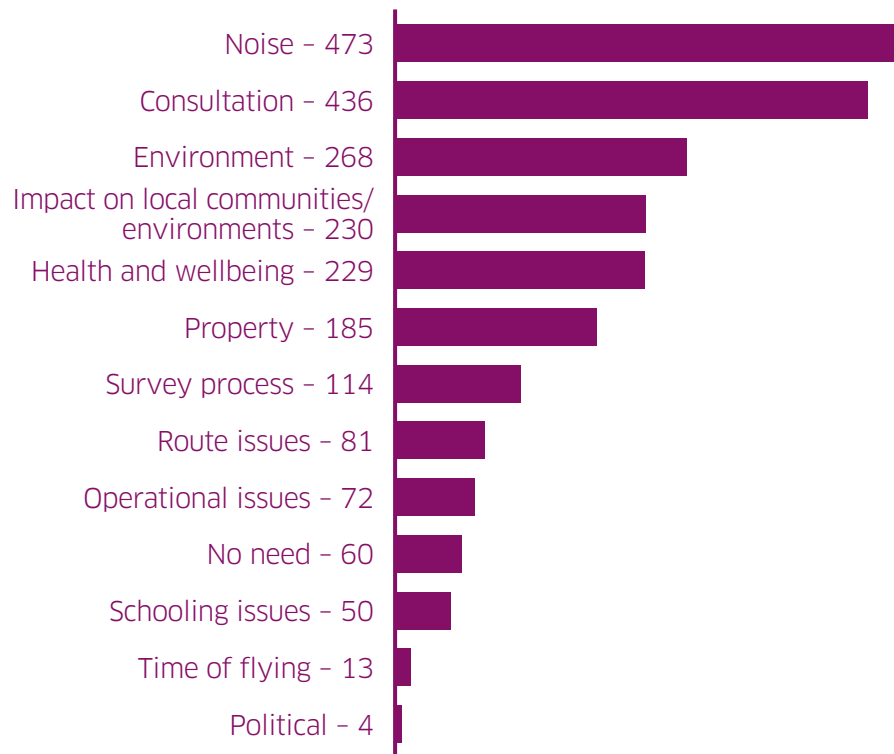
There were 1,528* respondents who provided opinion on flight path C, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

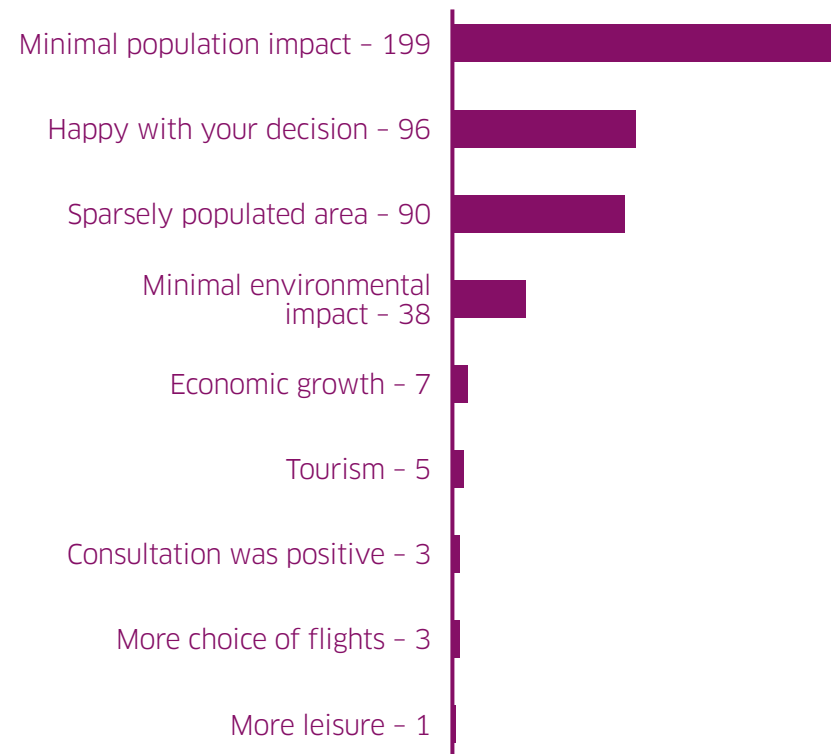
Sentiment expressed



Number of negative comments



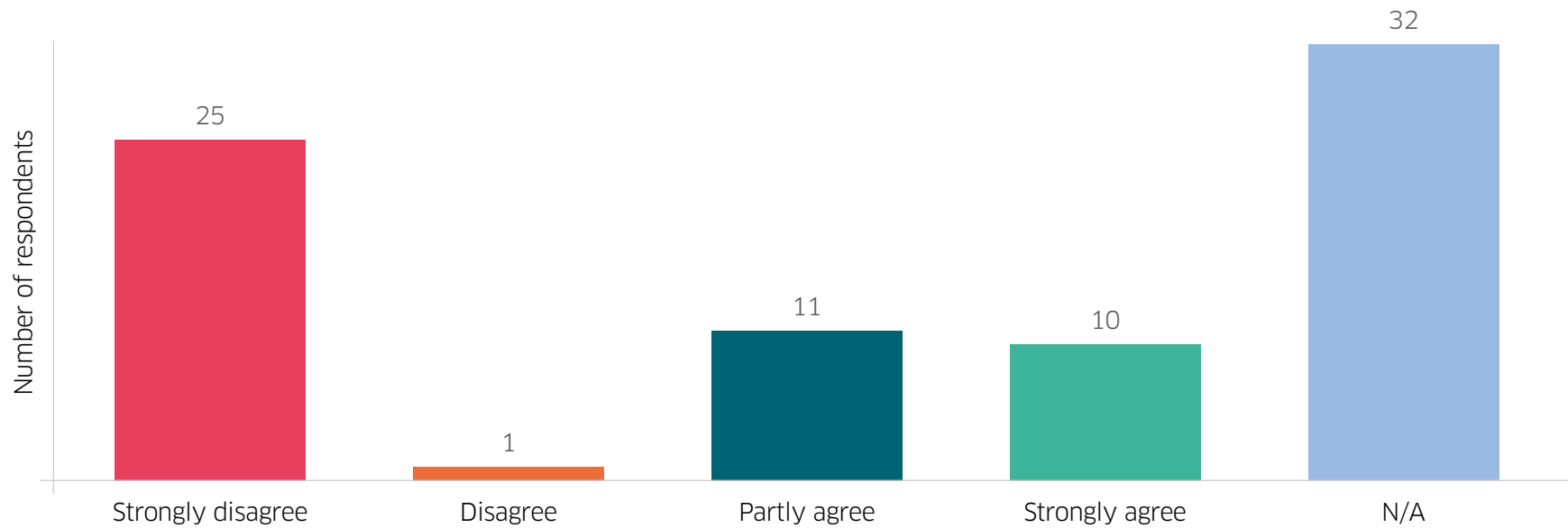
Number of positive comments



Base: 3,884

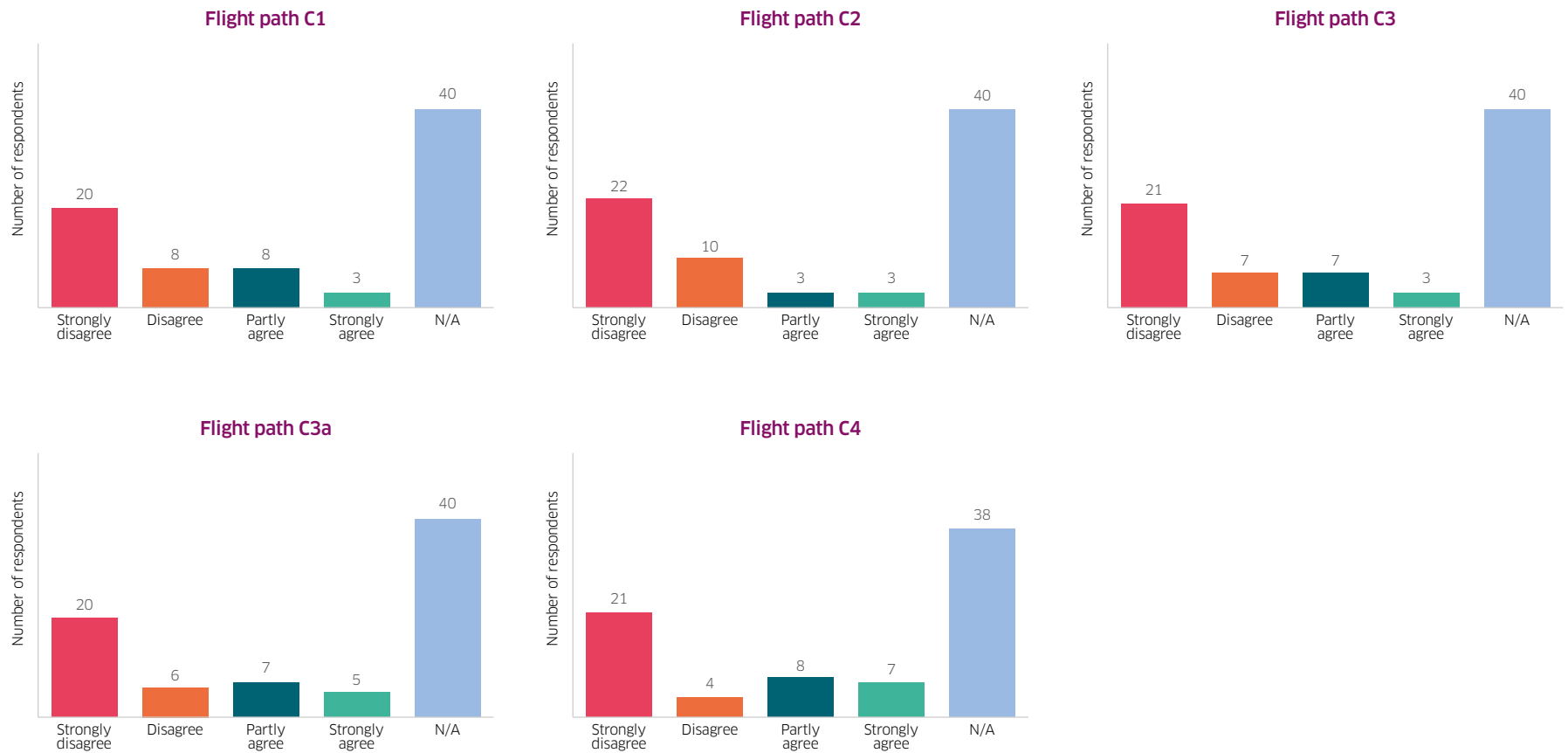
Organisations and elected members - Agreement to flight path C5*

Responses to flight path C5 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members - Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

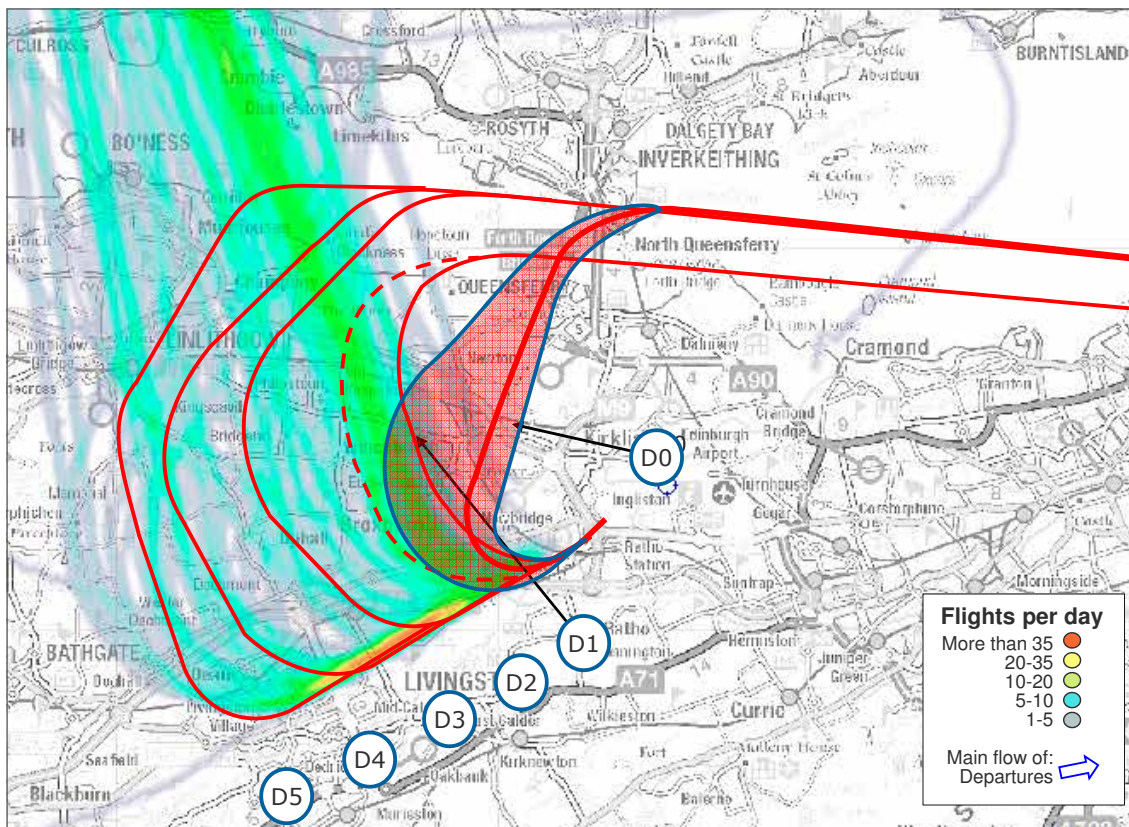
Base: 79

10.4.4 Responses to flight path D

Flight path D

Figure 6 shows the current flight tracks, overlaid with our flight path options (D0-D5).

Figure 6: Considered options for flight path D0



This map previously appeared on page 72 of the second consultation book.

Flight path D

Our preferred design option is D0. To show how options were evaluated, we tabled all of the options against our criteria.

Preferred optioneering

		D0	D1	D2	D3	D4	D5
Safety/ICAO design criteria		Compliant	Compliant	Non compliant	Compliant	Compliant	Compliant
CO ₂		Better climb	Better climb	Better climb	Better climb	Better climb	Better climb
Noise - population overflown		Less	Similar	Similar	Similar	Similar	Similar
Noise - new population impacted		Slightly more	Slightly more	Slightly more	Slightly more	More	More
Operational benefit - reduced delay		Yes	Yes	Yes	Yes	Yes	Yes
Populations impacted	Broxburn	Further away	Overflown	Overflown	Similar	Similar	Similar
	Uphall	Further away	Closer	Closer	Overflown	Similar	Similar
	Dechmont	Further away	Further away	Similar	Closer	Overflown	Overflown
	Ecclesmachan	Further away	Closer	Overflown	Closer	Similar	Similar
	South Queensferry - 9,026	Overflown	Closer	Closer	Similar	Similar	Similar
	Winchburgh - 2,000	Overflown	Overflown	Closer	Similar	Similar	Similar
	Livingston - 56,269	Further away	Further away	Further away	Further away	Similar	Overflown
	Linlithgow	Not overflown	Not overflown	Not overflown	Closer	Closer	Overflown
	Philpstoun	Further away	Closer	Overflown	Overflown	Closer	Not overflown
	Bo'ness - 14,490	Not overflown	Not overflown	Not overflown	Not overflown	Closer	Closer
	Blackness - 135	Further away	Closer	Closer	Closer	Overflown	Closer
	Limekilns - 1,430	Further away	Closer	Closer	Closer	Closer	Closer
	Rosyth - 12,850	Closer	Closer	Closer	Closer	Closer	Closer
	Inverkeithing/Dalgety Bay - 15,295	Closer	Closer	Closer	Closer	Closer	Closer

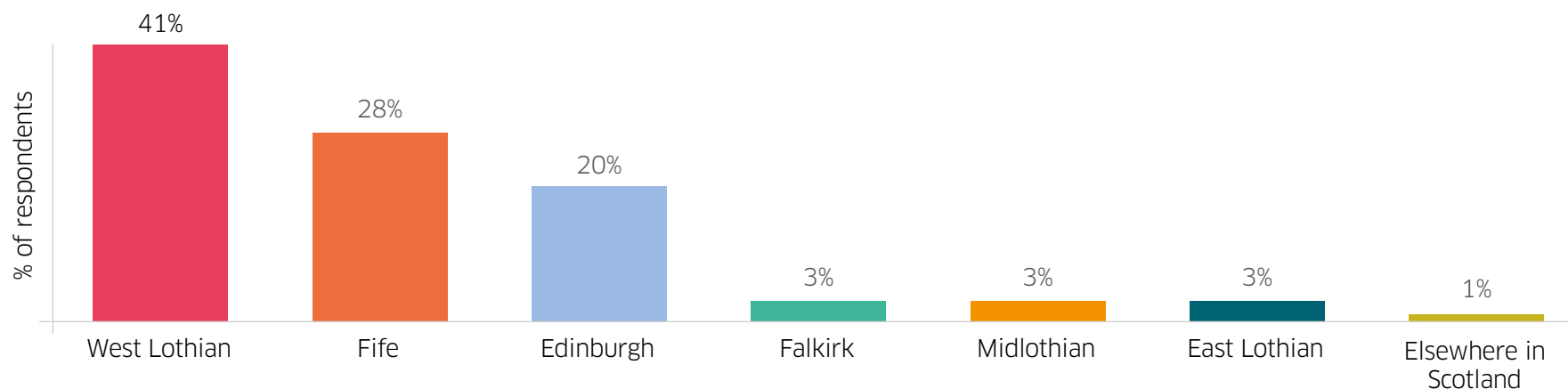
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 73 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



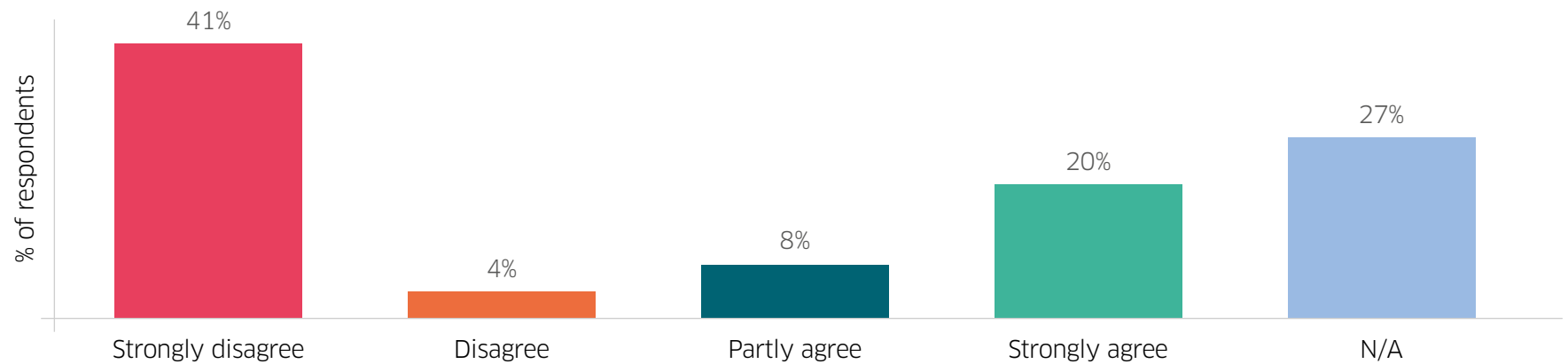
Responses from individual - locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

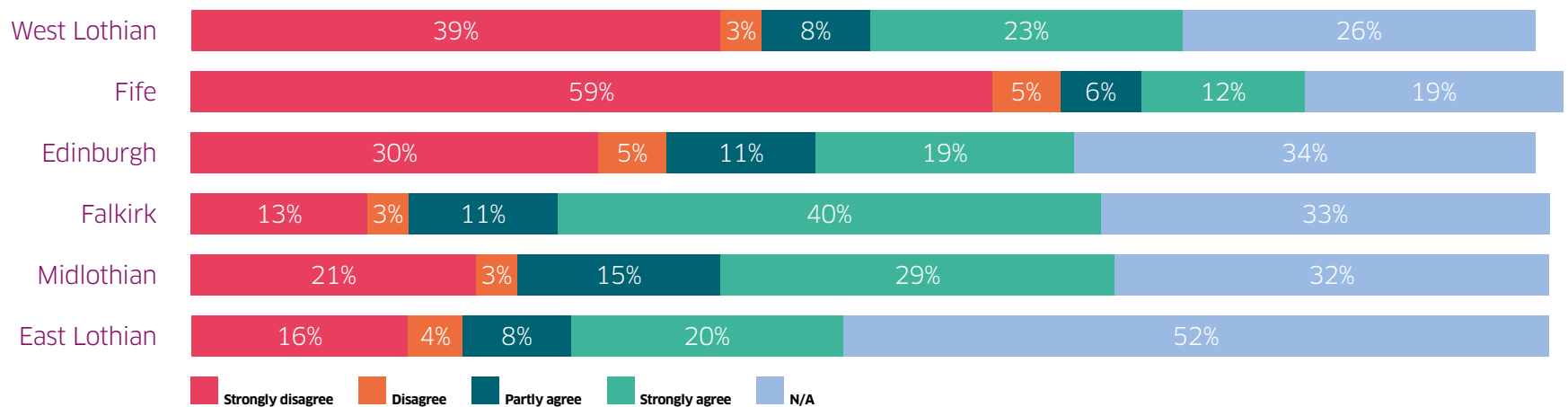
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path D0

Responses to Flight Path D0 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

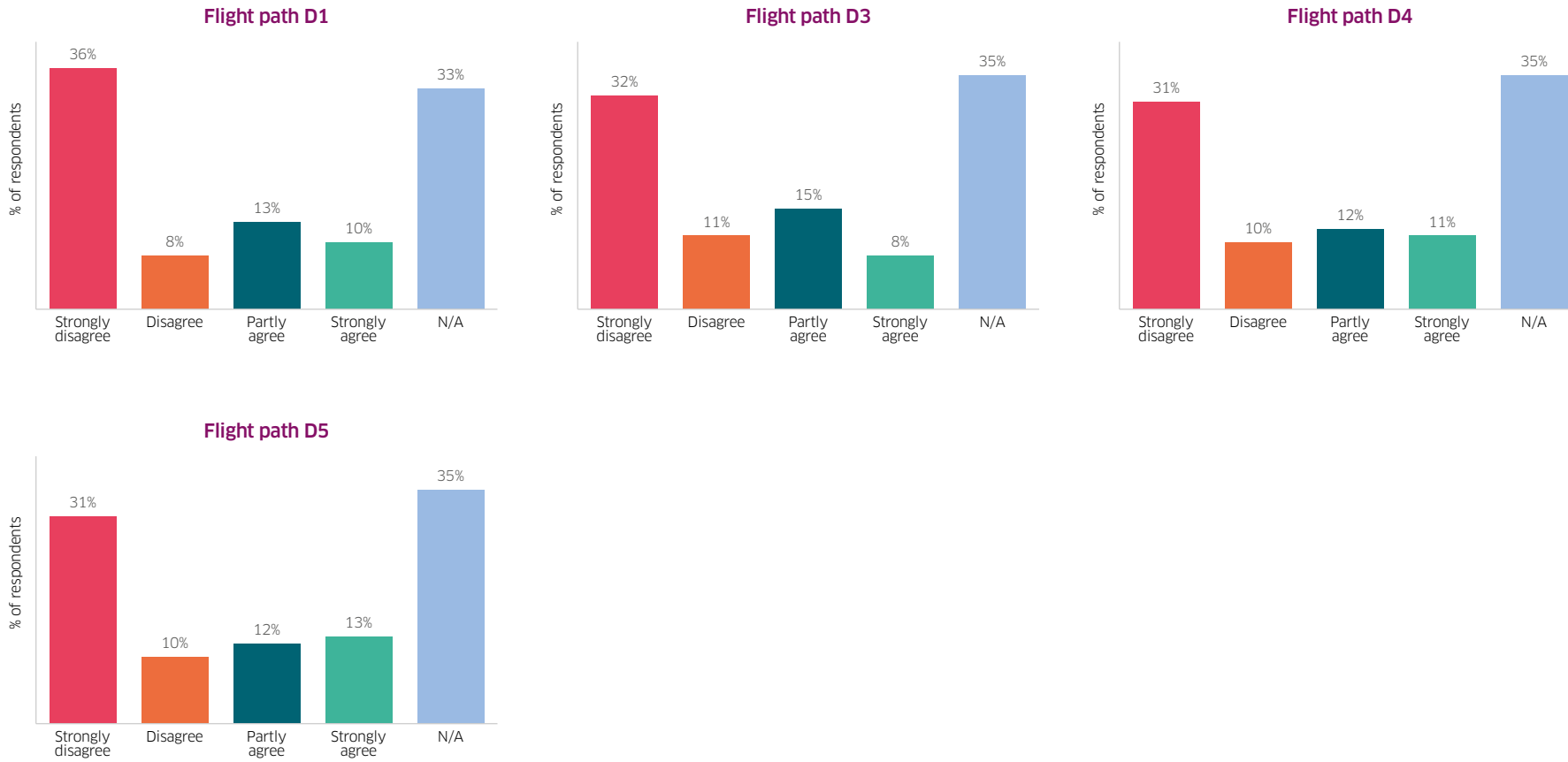


Agreement to flight path D0 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



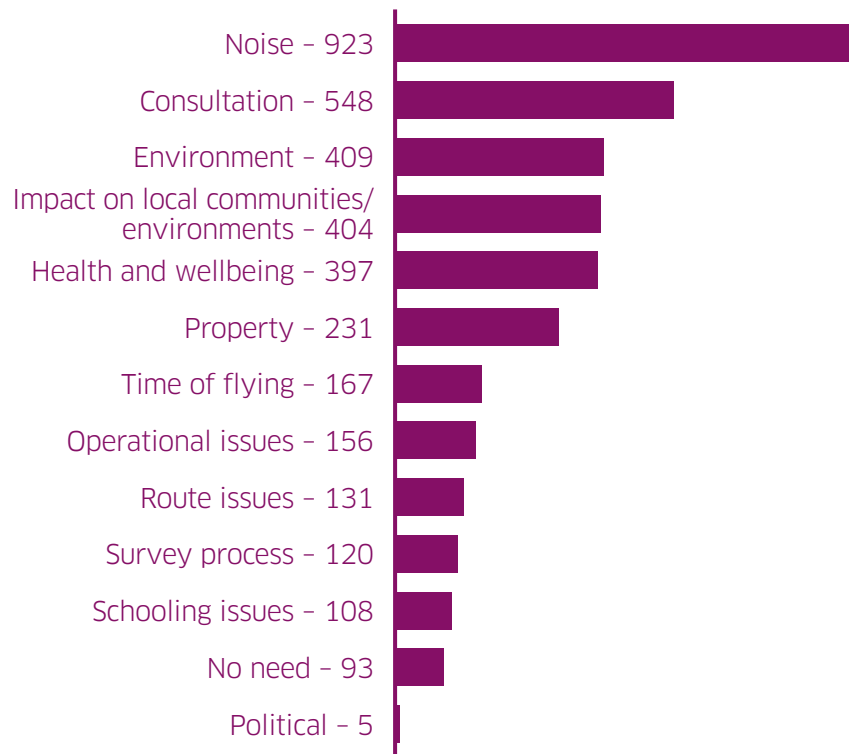
Base: 3,884

Individuals' opinion on path D

There were 1,883* respondents who provided opinion on flight path D, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

Number of negative comments

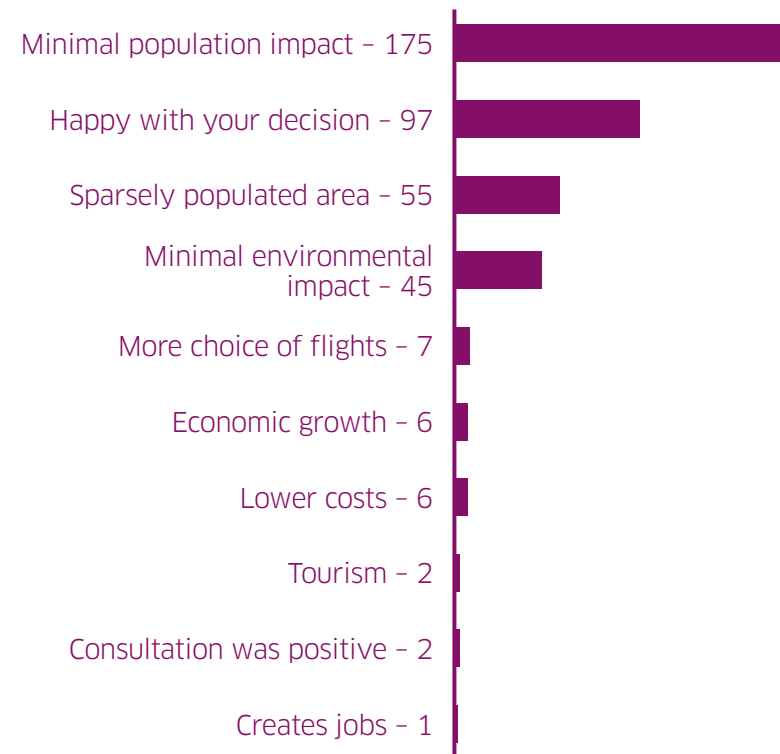


Base: 1,883

Sentiment expressed

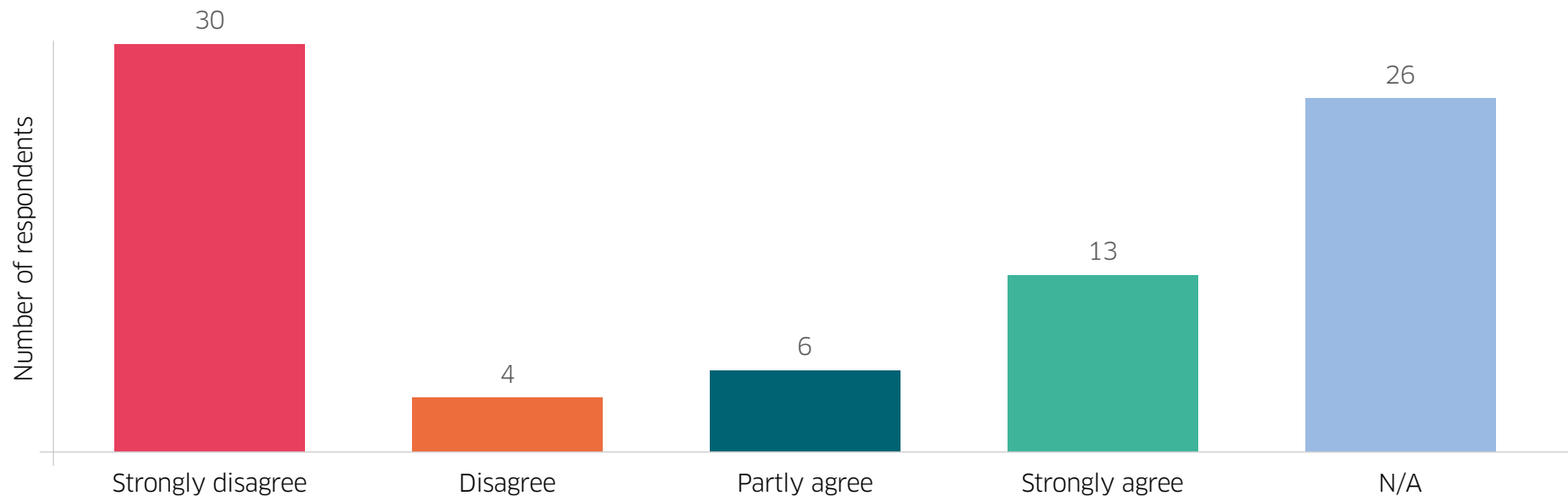


Number of positive comments



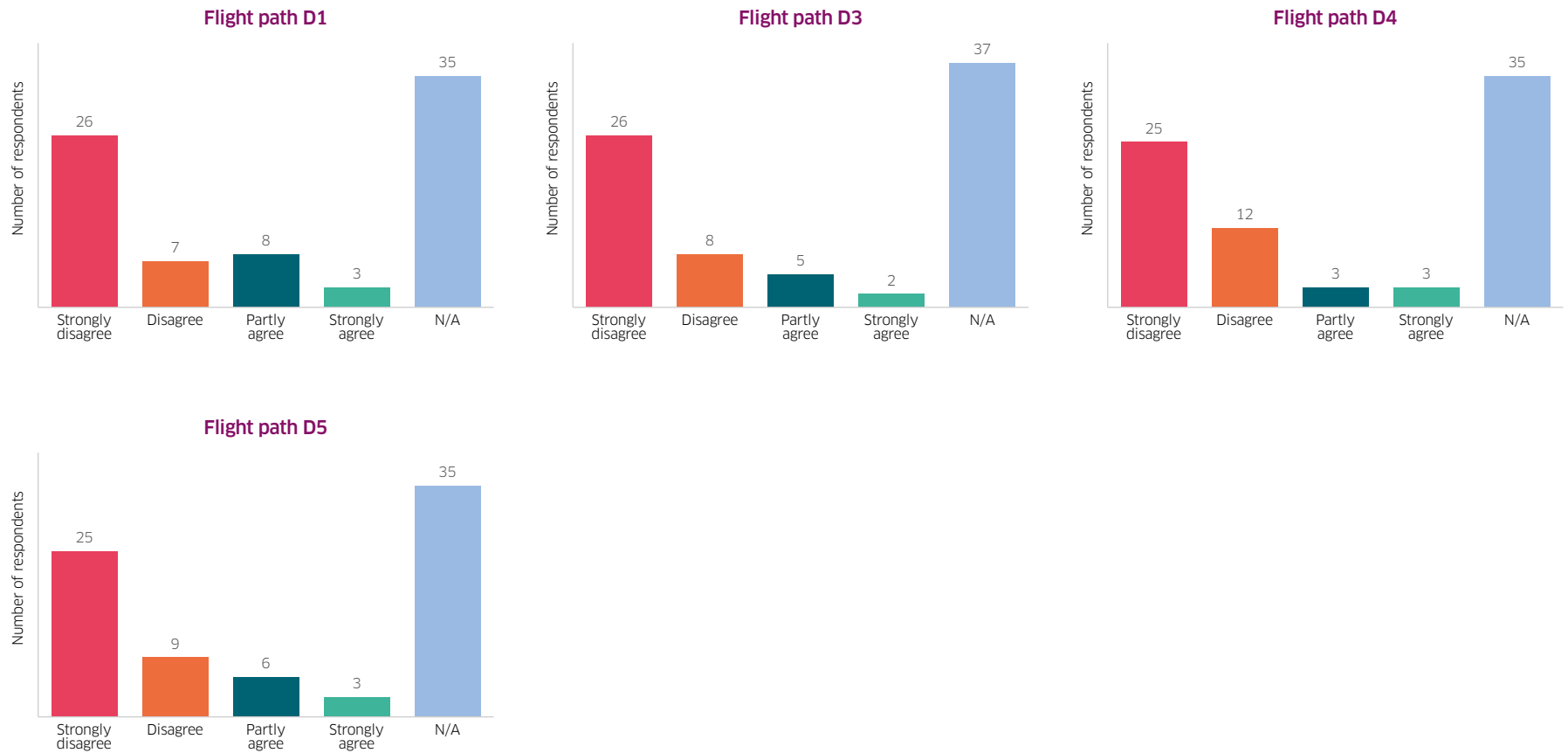
Organisations and elected members – Agreement to flight path D0*

Responses to flight path D0 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members – Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

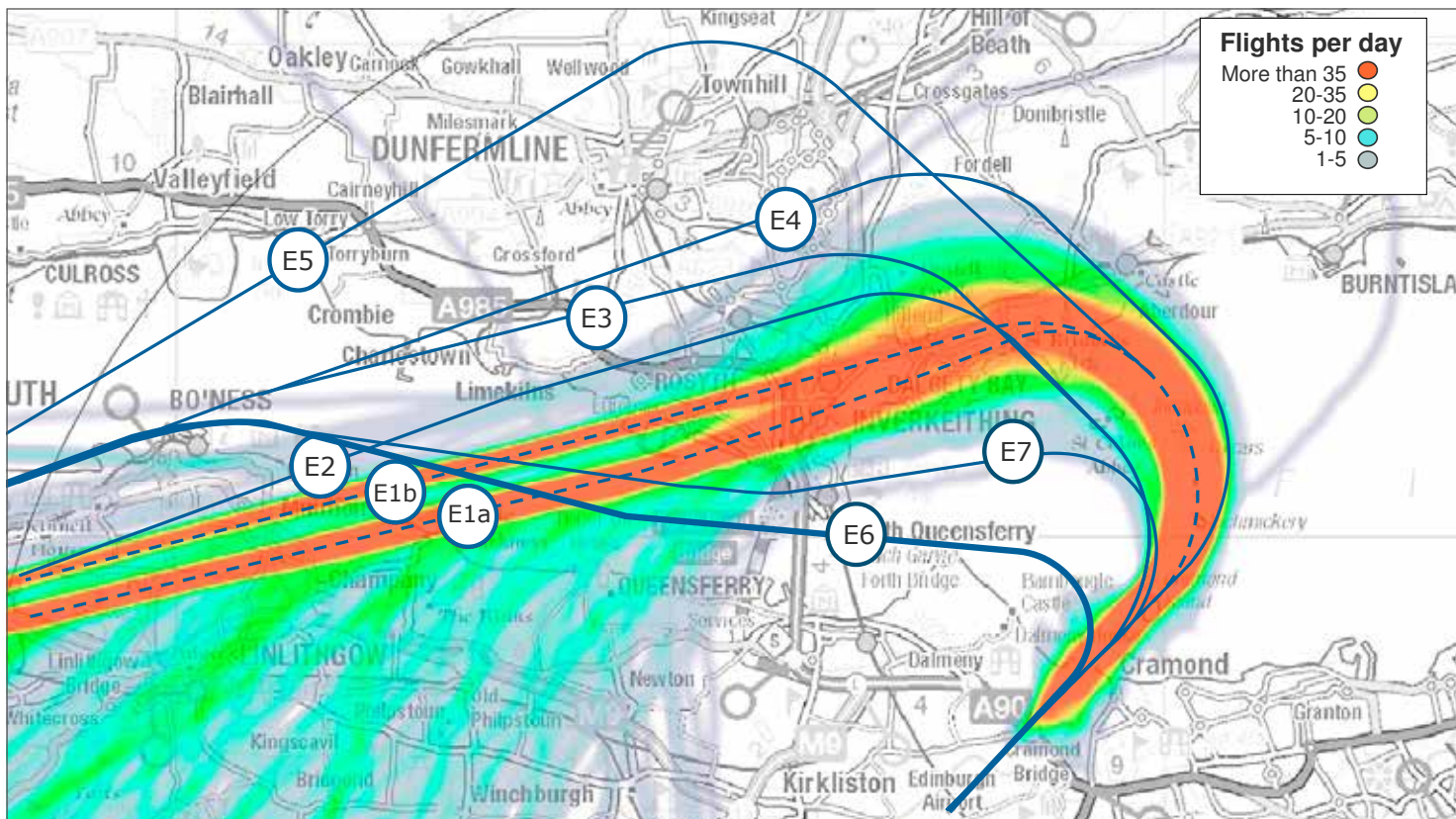
Base: 79

10.4.5 Responses to flight path E

Flight path E

Figure 7 shows the current flight tracks, overlaid with our flight path options (E1a-E7).

Figure 7: Considered options for flight path E



This map previously appeared on page 82 of the second consultation book.

Flight path E

Our preferred design option is E6. To show how options were evaluated, we tabled all of the options against our criteria.

Preferred optioneering

	E1a	E1b	E2	E3	E4	E5	E6	E7
Safety/ICAO design criteria	Non compliant	Non compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
CO ₂	Similar	Similar	Similar	Similar	Longer	Longer	Similar	Similar
Noise - population overflown	Similar	Similar	Similar	Similar	More	Less	Less	Less
Noise - new population impacted	None	None	More	Slightly more	More	Slightly more	None	None
Operational benefit - reduced delay	Similar	Similar	Yes	Yes	No	Similar	Yes	Yes
Populations impacted								
Cramond - 7,502	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Rosyth - 12,850	Overflown	Overflown	Overflown	Further away	Further away	Not overflown	Further away	Further away
Inverkeithing/Dalgety Bay - 15,295	Overflown	Overflown	Overflown	Overflown	Further away	Further away	Further away	Similar
Aberdour - 1,633	Overflown	Overflown	Further away	Further away	Overflown	Overflown	Further away	Further away
Burntisland - 6,269	Similar	Similar	Not overflown	Not overflown	Closer	Similar	Not overflown	Not overflown
South Queensferry - 9,026	Similar	Similar	Further away	Further away	Further away	Further away	Closer	Closer
Cowdenbeath - 14,081	Similar	Similar	Further away	Further away	Closer	Closer	Not overflown	Not overflown
Dunfermline - 50,380	Similar	Similar	Closer	Overflown	Overflown	Similar	Not overflown	Not overflown
Blackness - 135	Similar	Similar	Further away	Further away	Further away	Further away	Further away	Further away
Bo'ness - 14,490	Similar	Similar	Similar	Similar	Similar	Further away	Similar	Similar
Linlithgow - 19,000	Similar	Similar	Similar	Further away	Further away	Further away	Further away	Further away

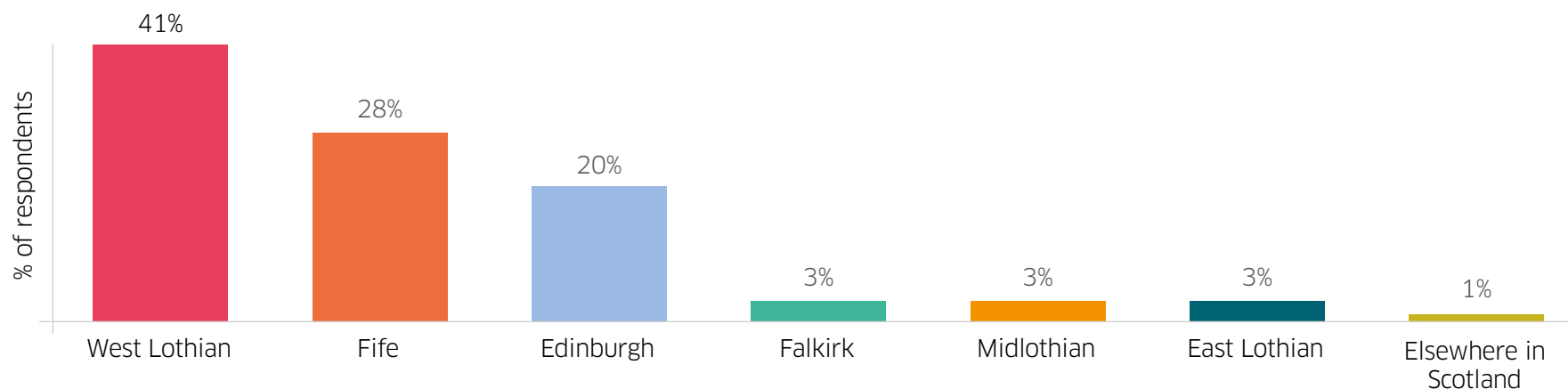
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 83 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



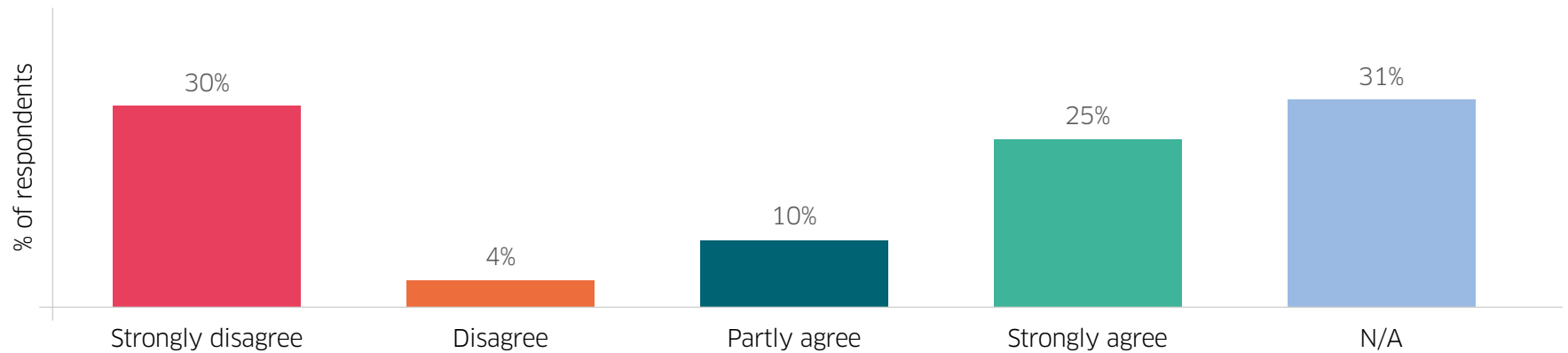
Responses from individual - locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

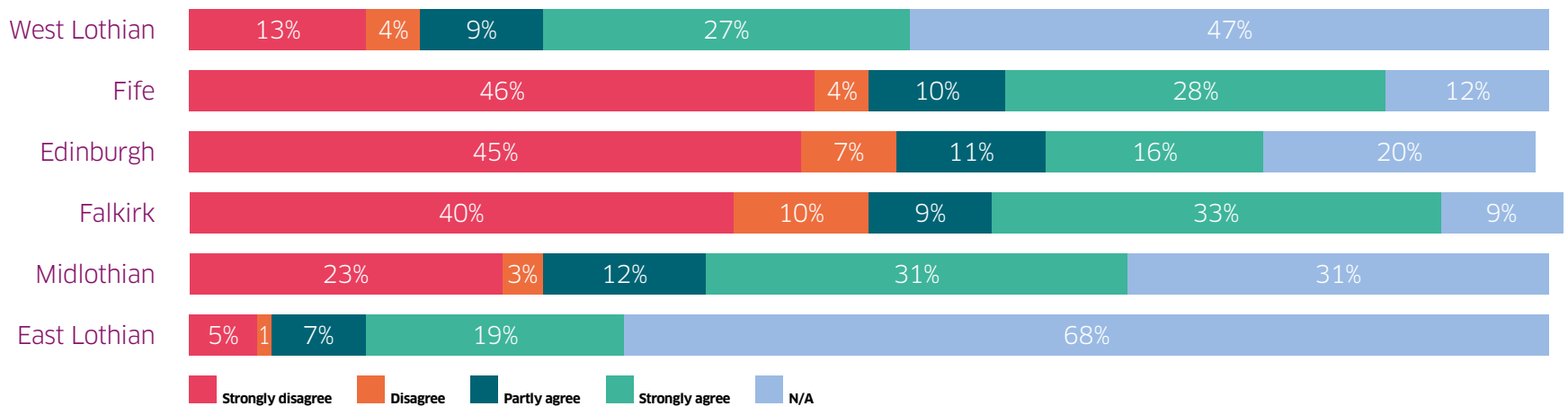
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path E6

Responses to flight path E6 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

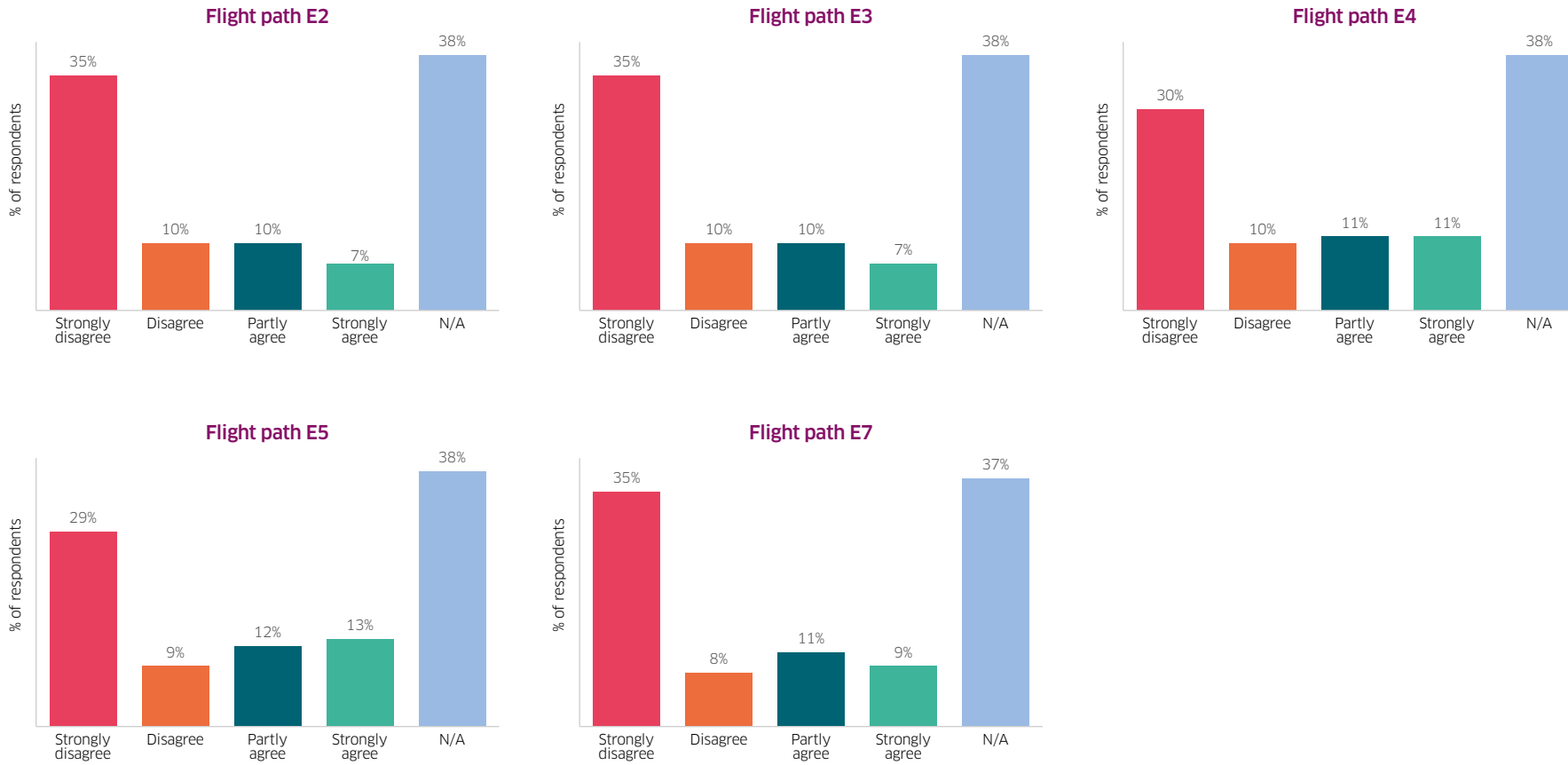


Agreement to flight path E6 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



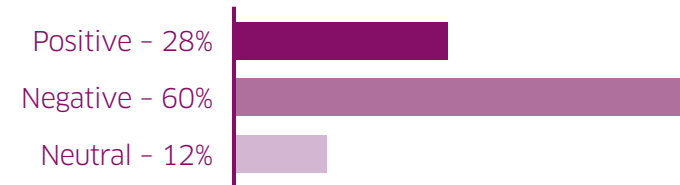
Base: 3,884

Individuals' opinion on path E

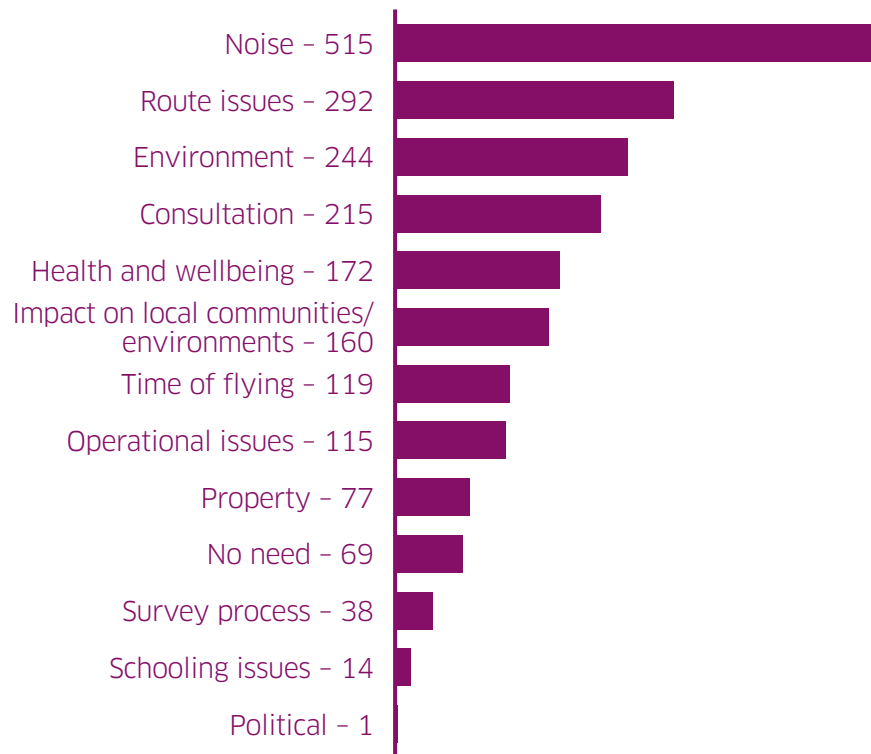
There were 1,742* respondents who provided opinion on flight path E, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

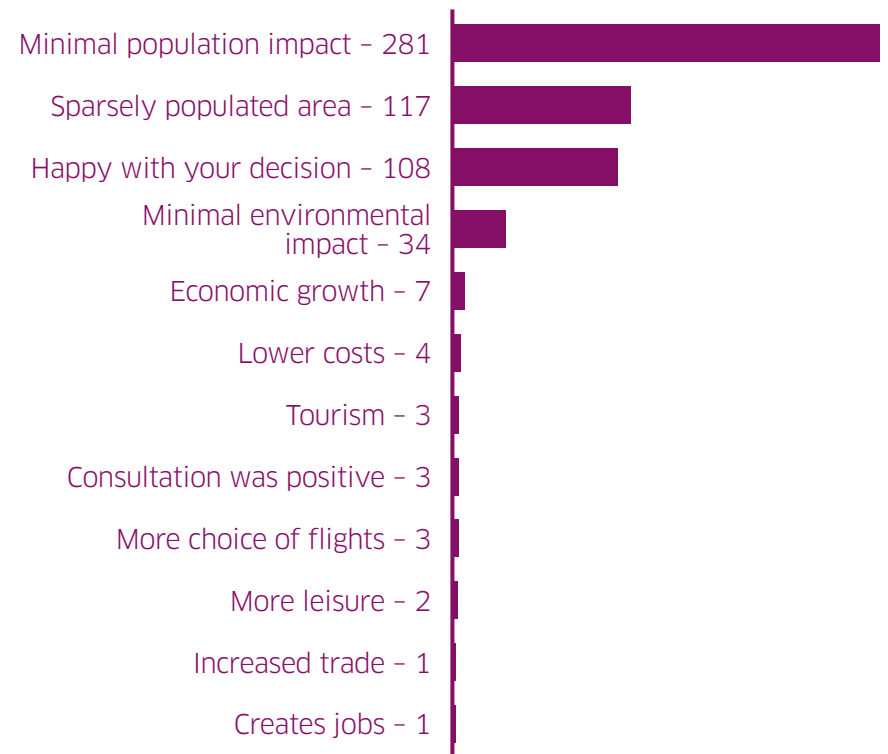
Sentiment expressed



Number of negative comments



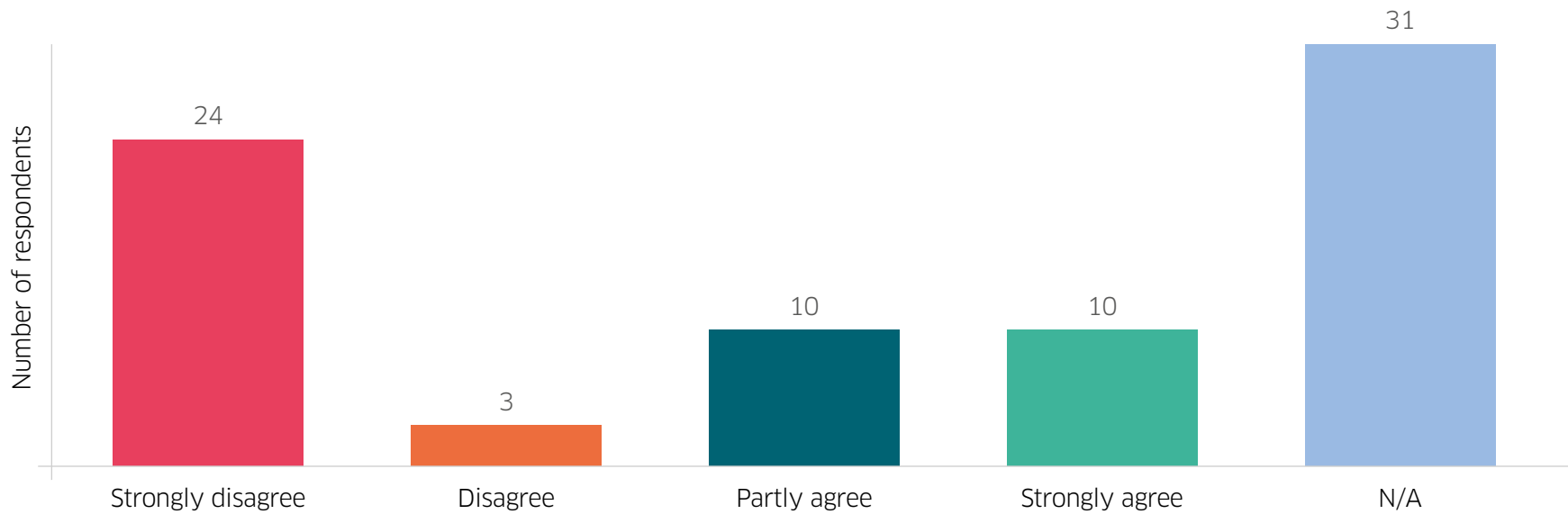
Number of positive comments



Base: 1,742

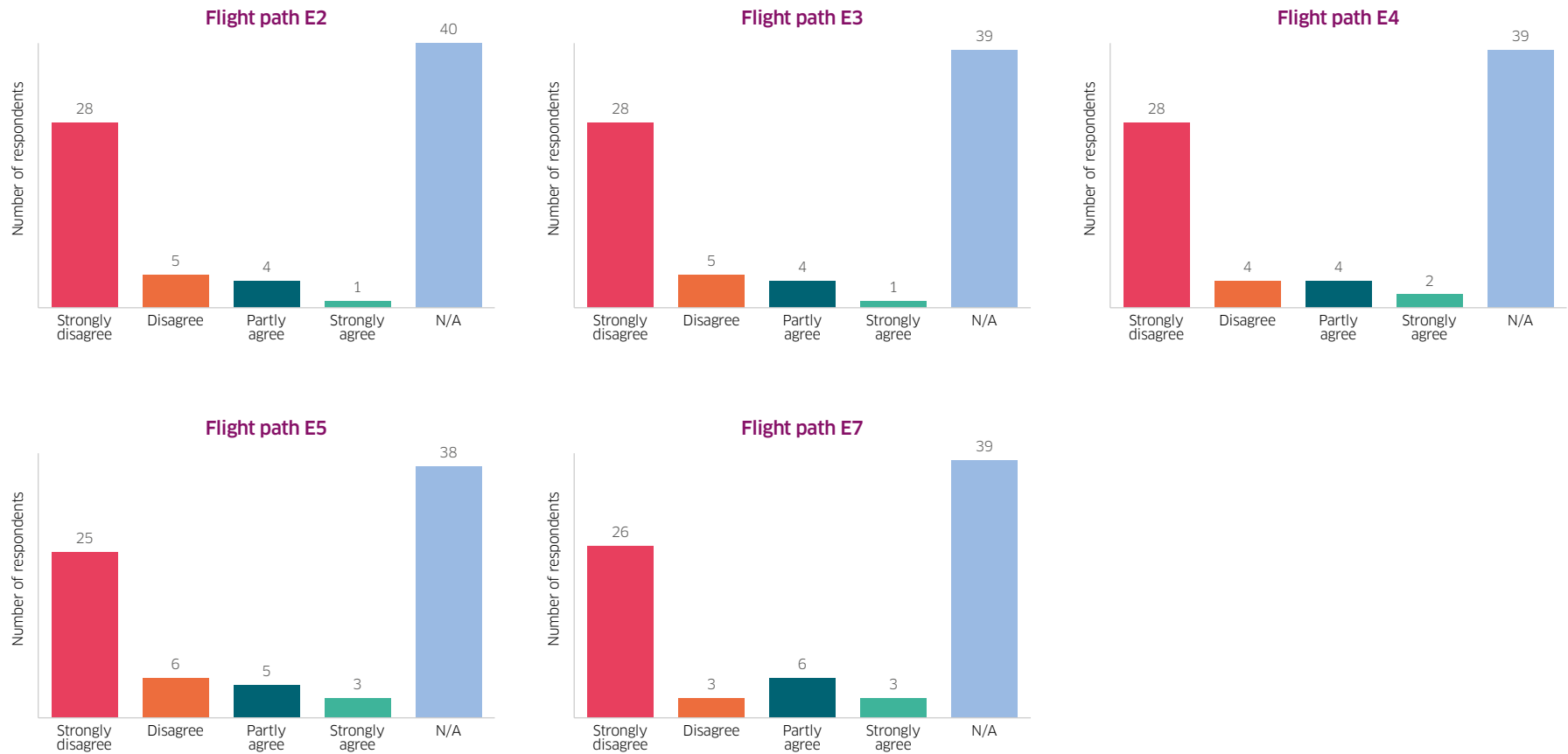
Organisations and elected members - Agreement to flight path E6*

Responses to flight path E6 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members - Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

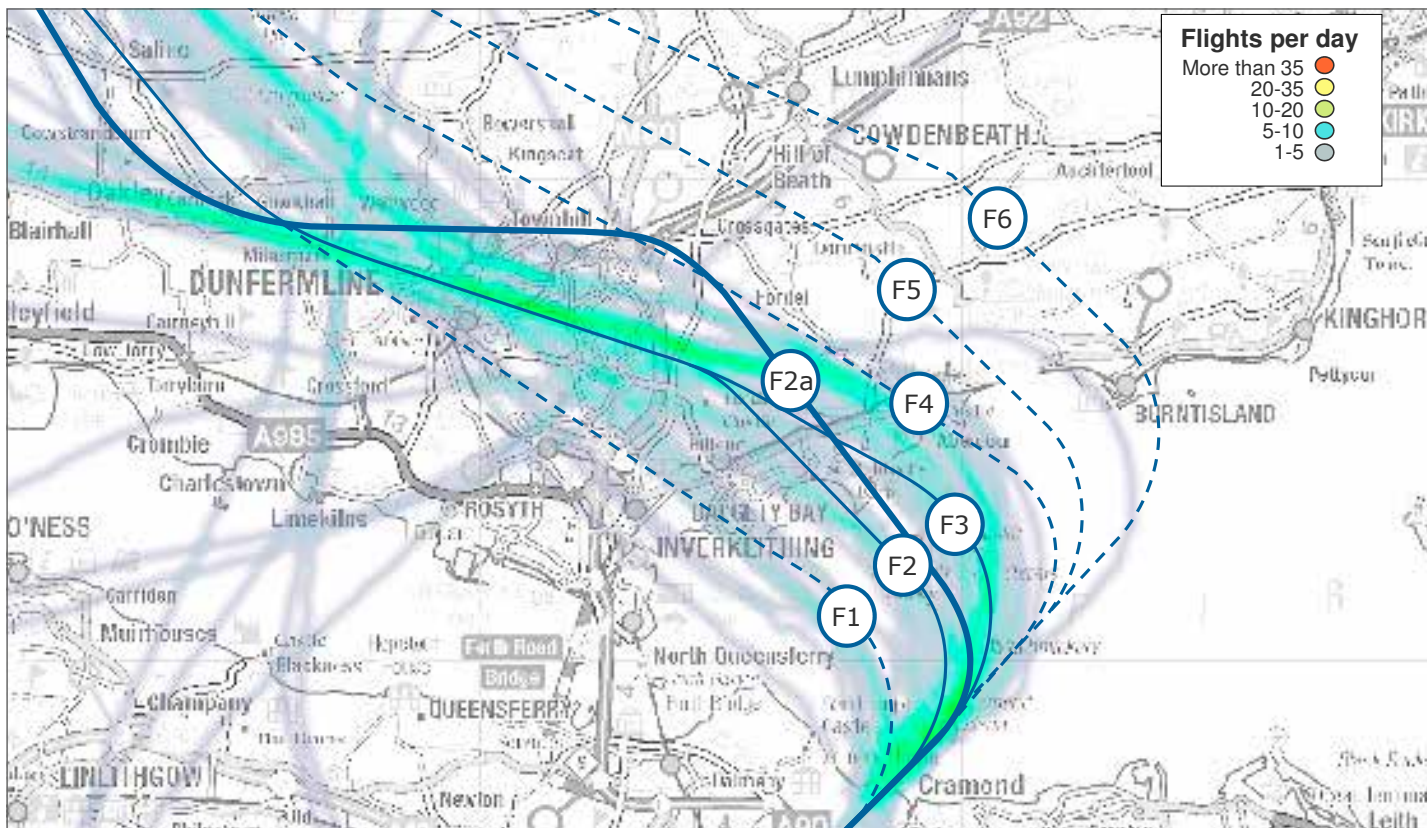
Base: 79

10.4.6 Responses to flight path F

Flight path F

Figure 8 shows the current flight tracks, overlaid with our flight path options (F1-F6).

Figure 8: Considered options for flight path F



This map previously appeared on page 92 of the second consultation book.

Flight path F

Our preferred design option is F2a. To show how options were evaluated, we tabled all of the options against our criteria.

Preferred optioneering

	F1	F2	F2a	F3	F4	F5	F6
Safety/ICAO design criteria	Non compliant	Compliant	Compliant	Compliant	Non compliant	Non compliant	Non compliant
CO ₂	Shorter	Shorter	Longer	Similar	Similar	Longer	Longer
Noise - population overflown	More	Similar	Similar	Similar	Less	Less	Less
Noise - new population impacted	More	Slightly more	Slightly more	Slightly more	Slightly more	Slightly more	Slightly more
Operational benefit - reduced delay	Yes	Yes	Yes	Similar	No	No	No
Populations impacted							
Cramond - 7,502	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Rosyth - 12,850	Closer	Similar	Similar	Similar	Not overflown	Not overflown	Not overflown
Inverkeithing/Dalgety Bay - 15,295	Overflown	Similar	Similar	Similar	Further away	Not overflown	Not overflown
South Queensferry - 9,026	Closer	Similar	Similar	Similar	Further away	Further away	Further away
Aberdour - 1,633	Further away	Similar	Overflown	Overflown	Overflown	Further away	Further away
Burntisland - 6,269	Not overflown	Not overflown	Similar	Similar	Closer	Overflown	Overflown
Cowdenbeath - 14,081	Not overflown	Similar	Closer	Similar	Closer	Overflown	Overflown
Dunfermline - 50,380	Overflown	Overflown	Further away	Overflown	Further away	Further away	Not overflown

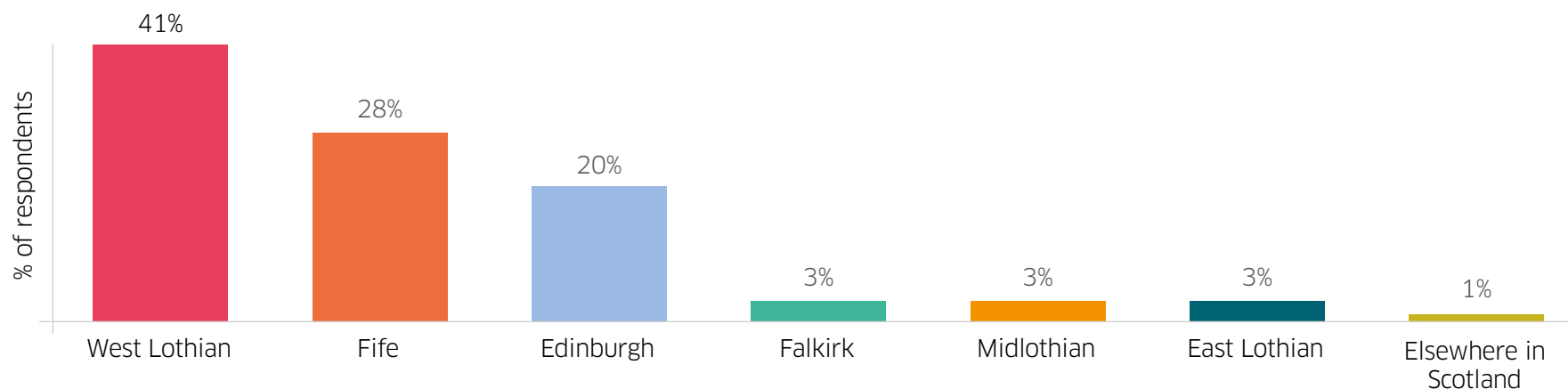
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 93 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



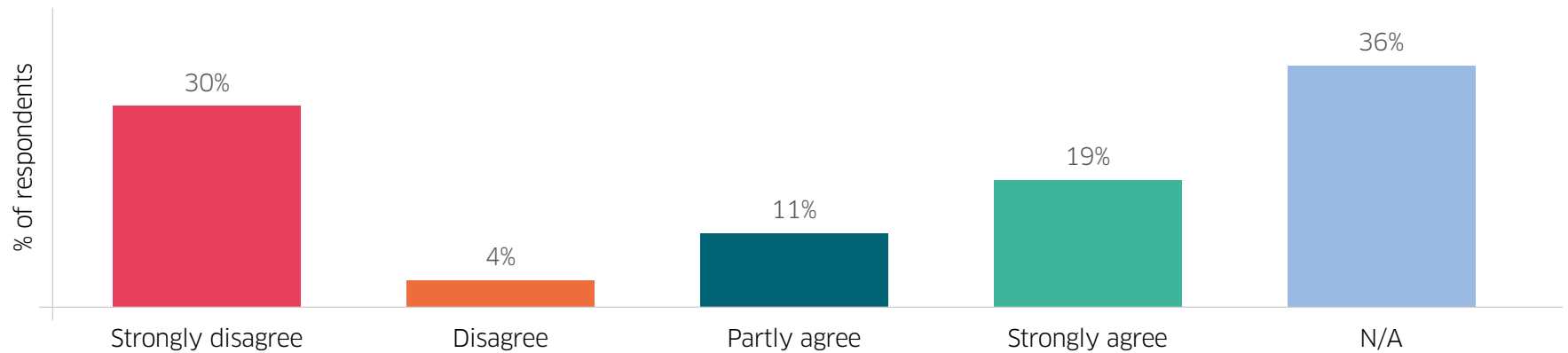
Responses from individual – locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

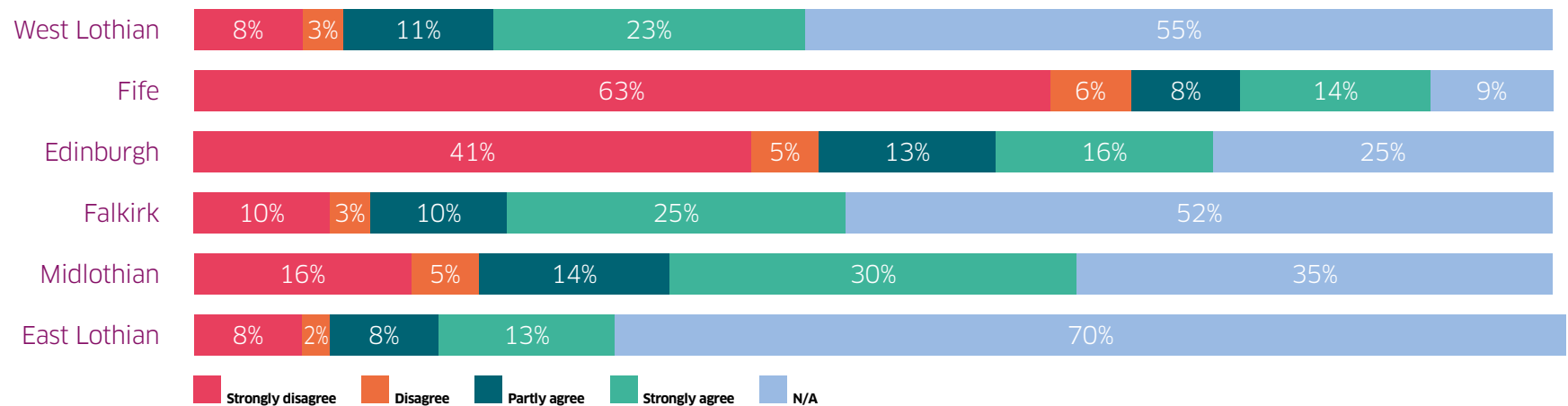
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path F2a

Responses to flight path F2a are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

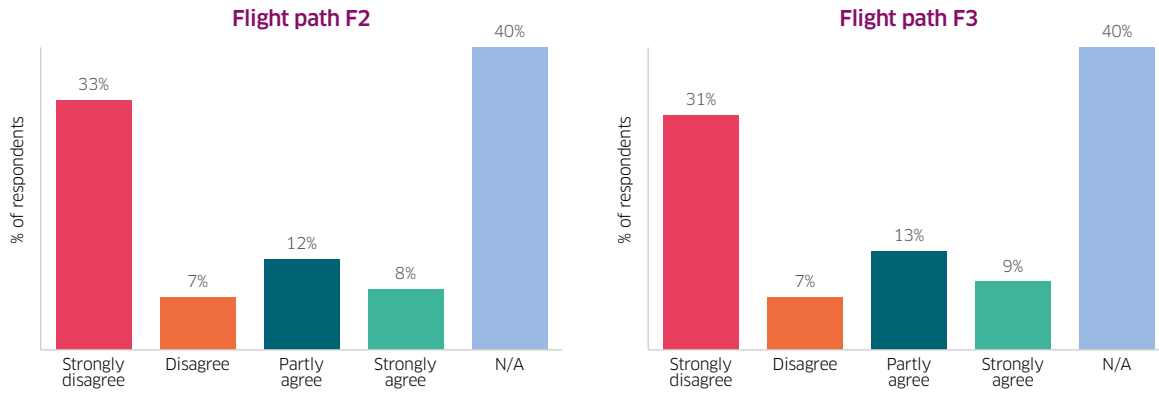


Agreement to flight path F2a by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



Base: 3,884

Individuals' opinion on path F

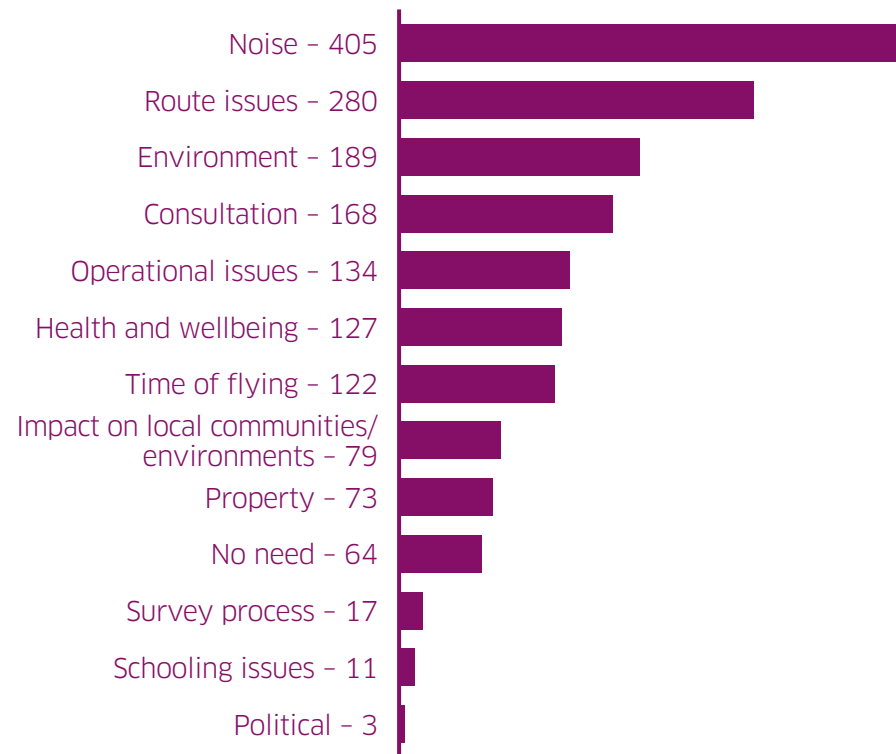
There were 1,605* respondents who provided opinion on flight path F, these were graded as a positive, negative or neutral sentiment.

*not every respondent left an opinion.

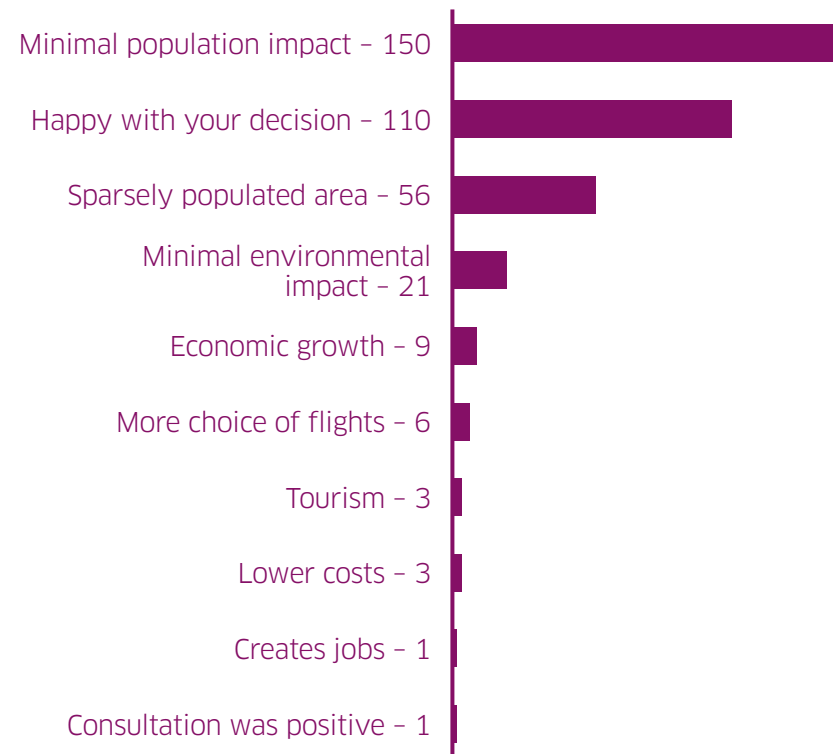
Sentiment expressed



Number of negative comments



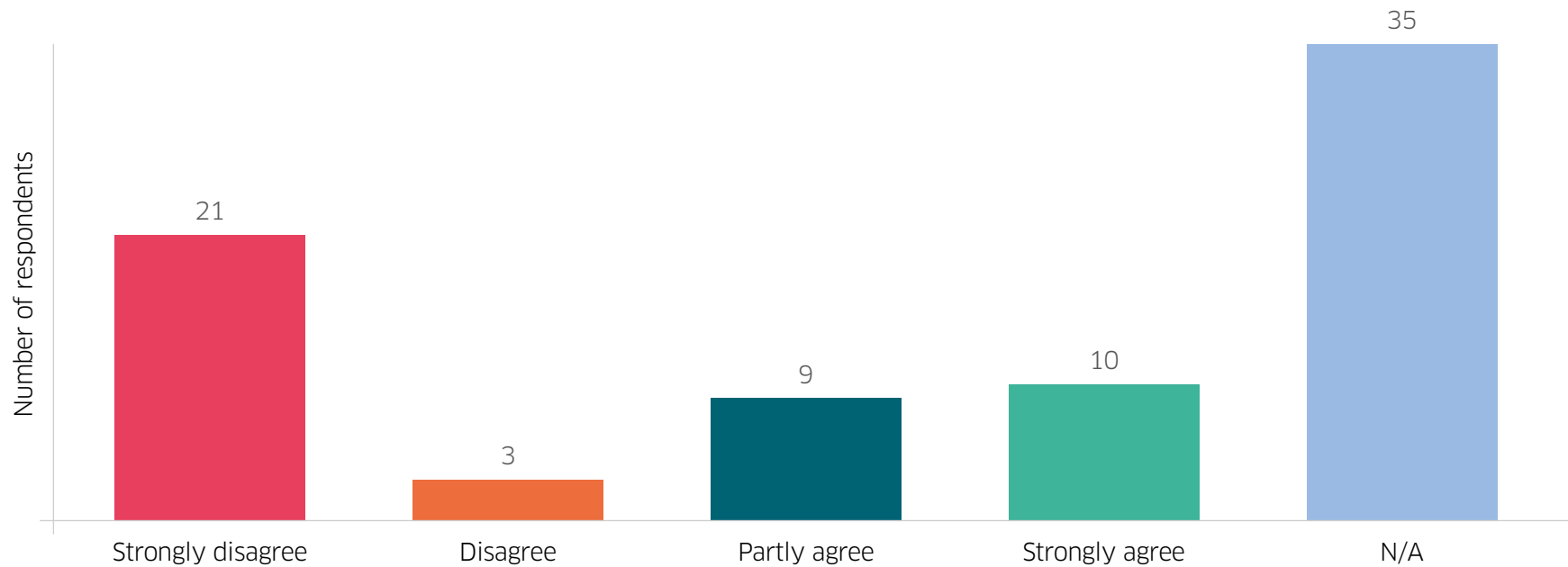
Number of positive comments



Base: 1,605

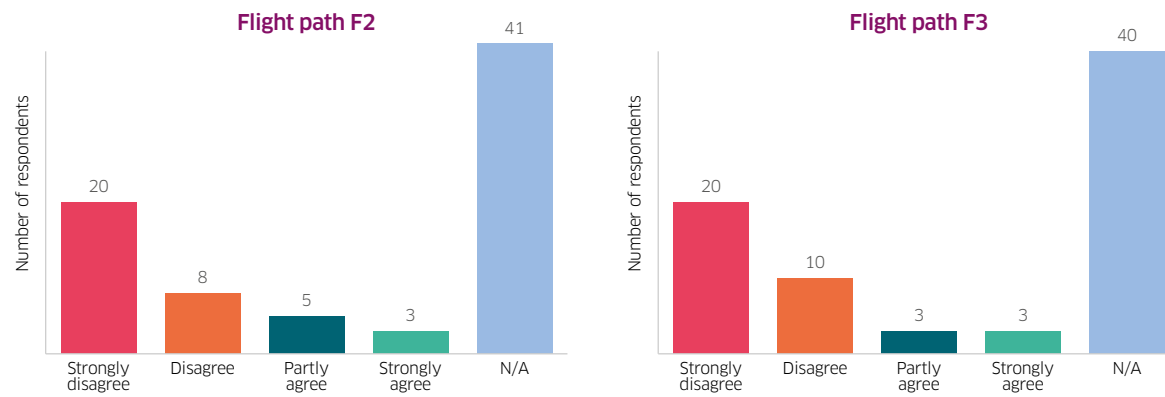
Organisations and elected members - Agreement to flight path F2a*

Responses to flight path F2a are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members – Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

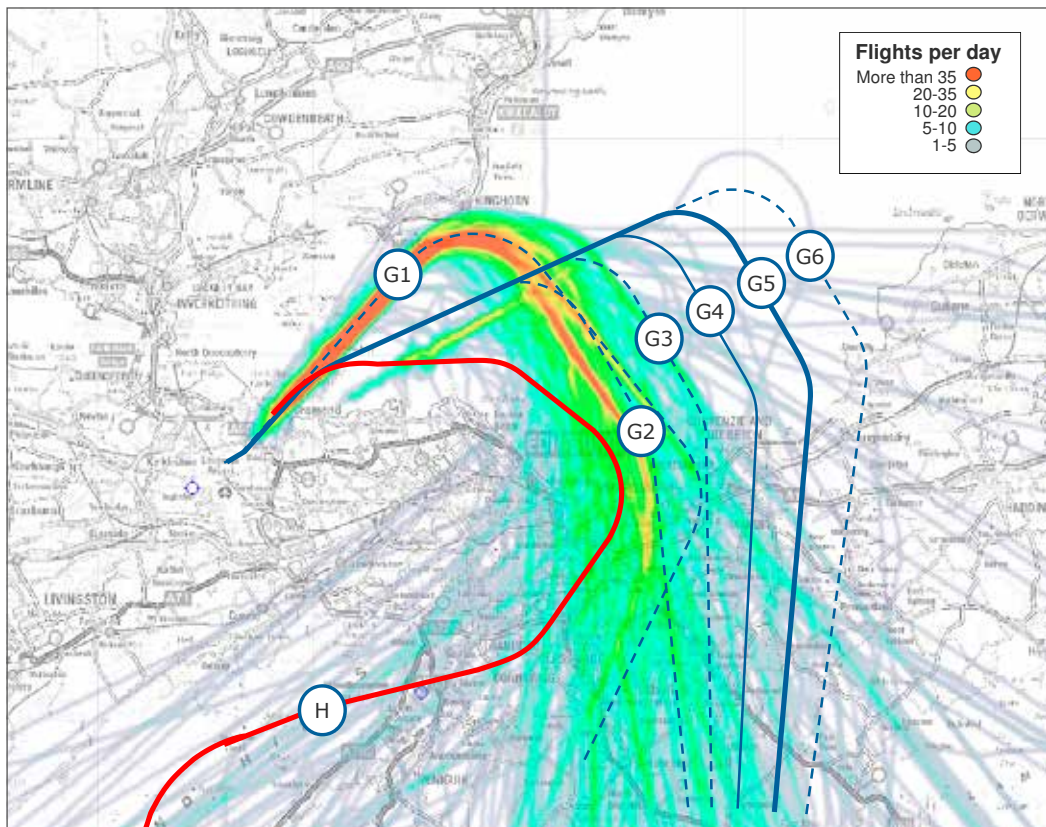
Base: 79

10.4.7 Responses to flight path G

Flight path G

Figure 9 shows the current flight tracks, overlaid with our flight path options (G1-G6). Flight path option 'H' is in red to show the relationship between the two flight paths.).

Figure 9: Considered options for flight path G



This map previously appeared on page 102 of the second consultation book.

Flight path G

Our preferred design option is G5. To determine this decision we tabled all of the options against our criteria.

Preferred optioneering

	G1	G2	G3	G4	G5	G6
Safety/ICAO design criteria	Non compliant	Non compliant	Non compliant	Compliant	Compliant	Non compliant
CO ₂	Similar	Shorter	Similar	Similar	Longer	Longer
Noise - population overflown	Similar	Similar	Similar	Less	Less	Less
Noise - new population impacted	None	Slightly more	None	Slightly more	Slightly more	Slightly more
Operational benefit - reduced delay	No	Yes	Yes	Yes	Yes	Yes
Populations impacted						
Cramond - 7,502	Similar	Similar	Similar	Similar	Similar	Similar
Burntisland - 6,269	Similar	Further away	Further away	Further away	Further away	Further away
Kinghorn - 15,295	Similar	Further away	Further away	Further away	Further away	Further away
Edinburgh - 464,990	Similar	Similar	Further away	Further away	Further away	Further away
Musselburgh - 21,900	Similar	Similar	Similar	Further away	Further away	Not overflown
Cockenzie and Port Seton - 5,460	Similar	Similar	Overflown	Overflown	Overflown	Similar
Longniddry and Aberlady - 3,486	Not overflown	Not overflown	Not overflown	Closer	Overflown	Overflown

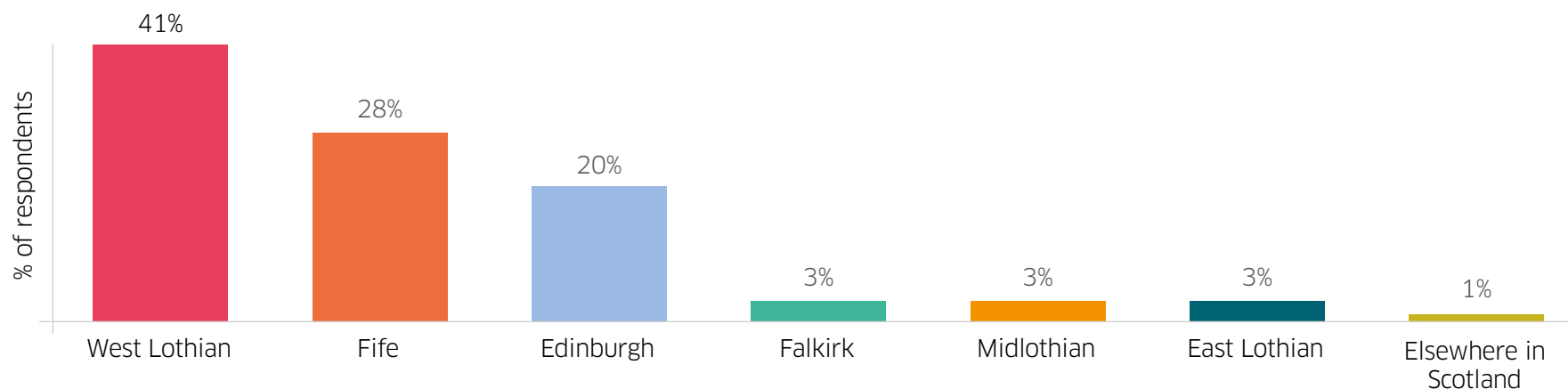
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 103 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



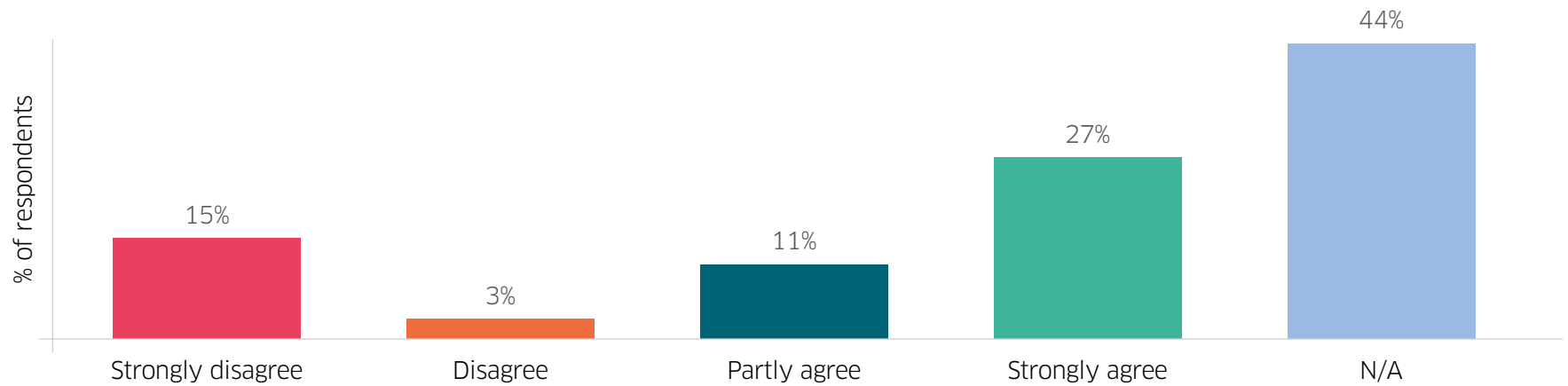
Responses from individual – locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

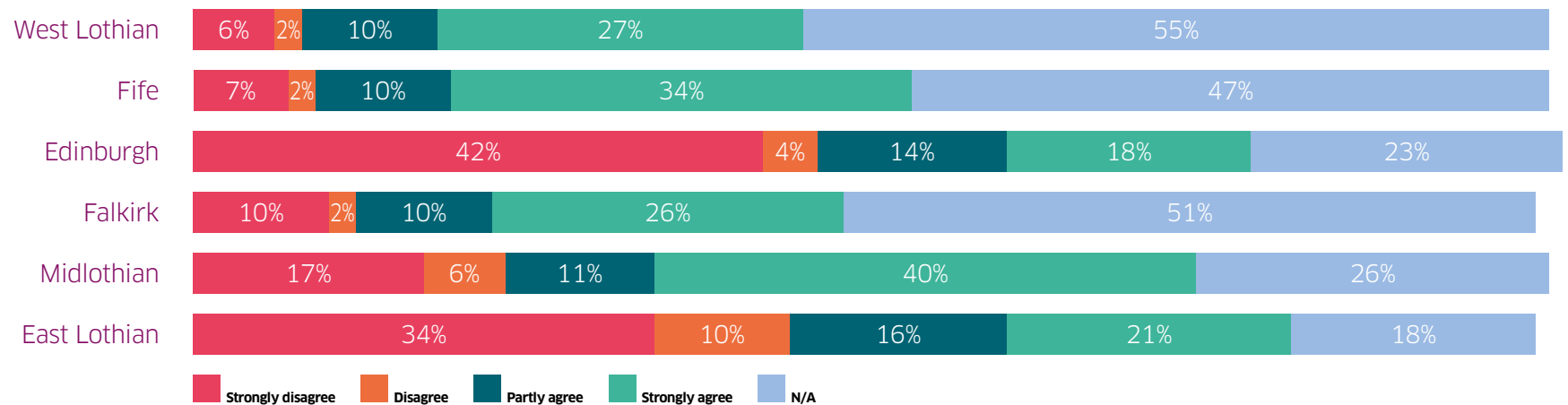
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path G5

Responses to flight path G are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

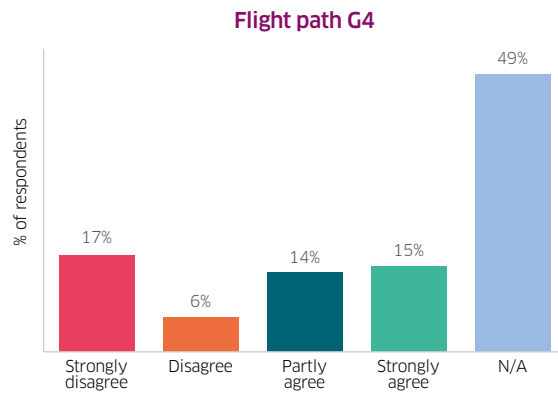


Agreement to flight path G5 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



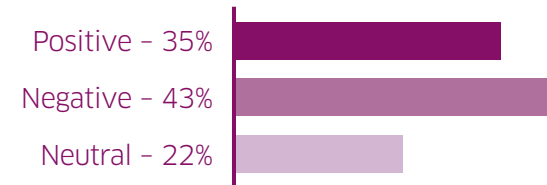
Base: 3,884

Individuals' opinion on path

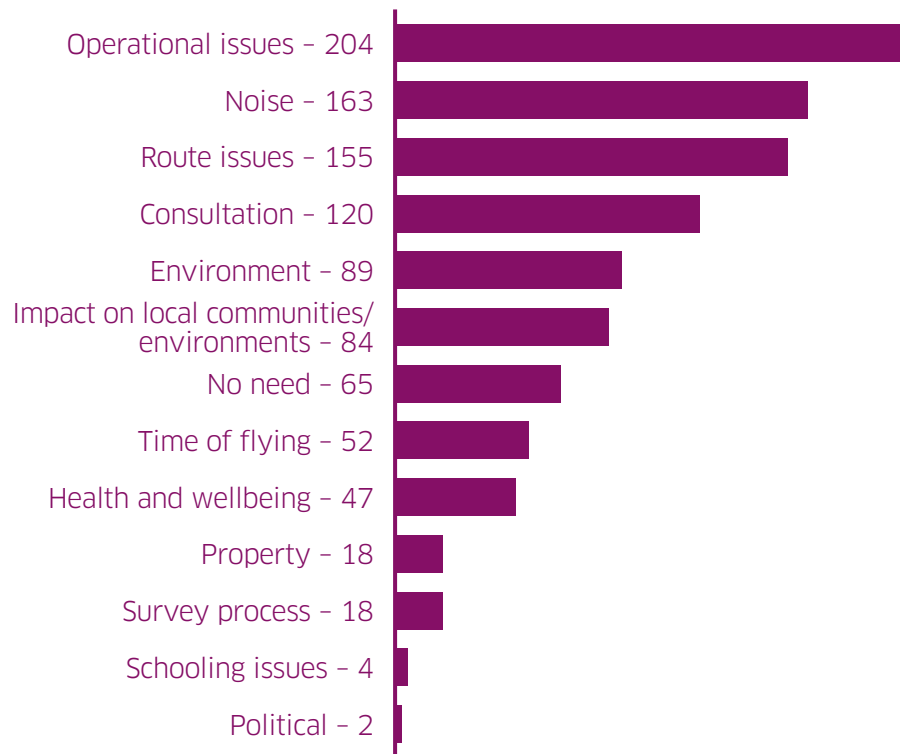
There were 1,283* respondents who provided opinion on flight path G, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

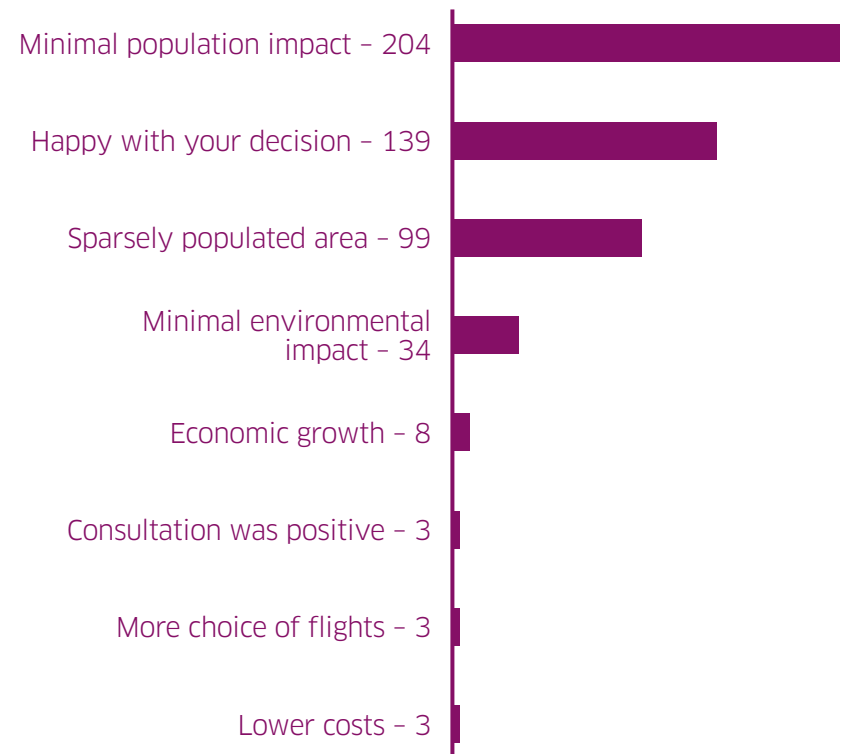
Sentiment expressed



Number of negative comments



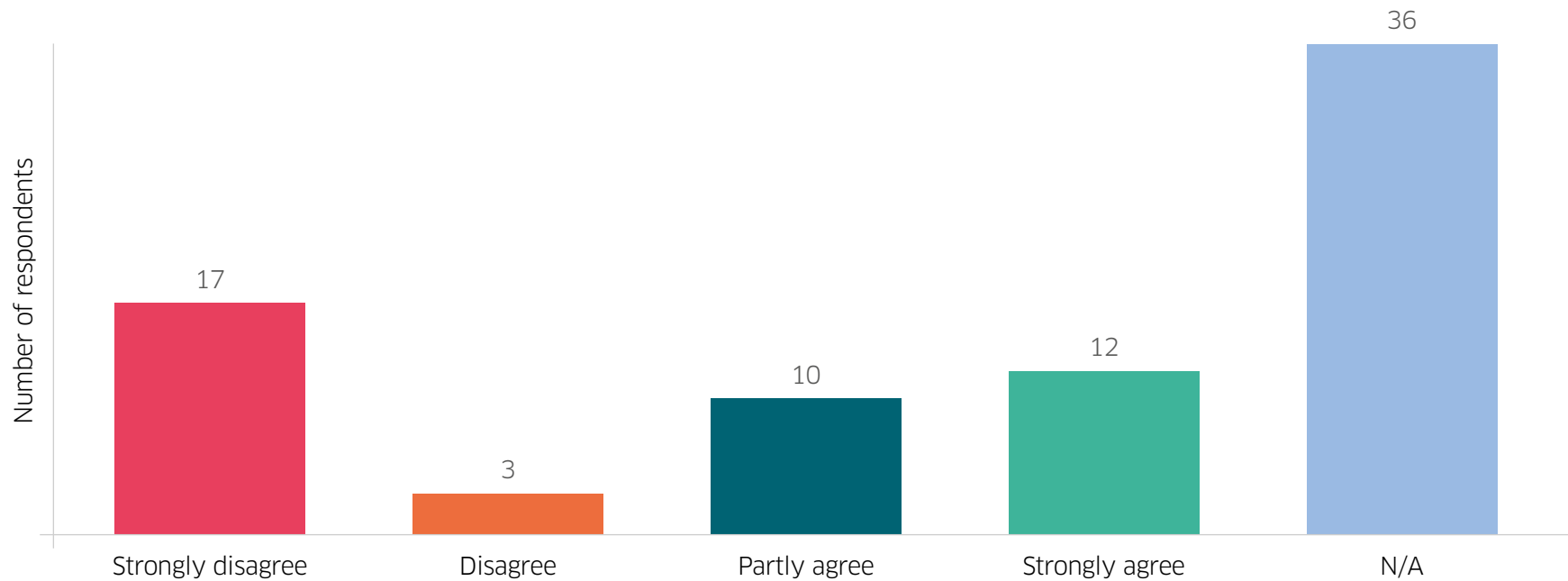
Number of positive comments



Base: 1,283

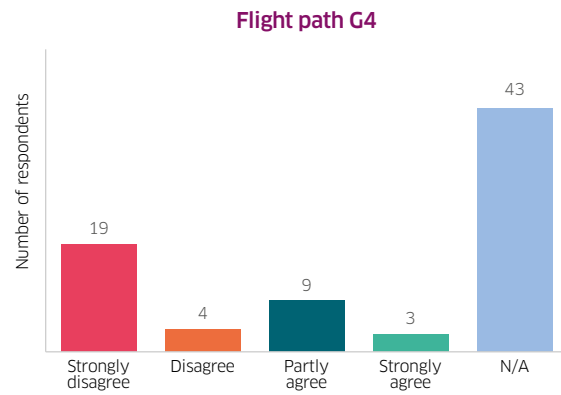
Organisations and elected members - Agreement to flight path G5*

Responses to flight path G are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members – Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

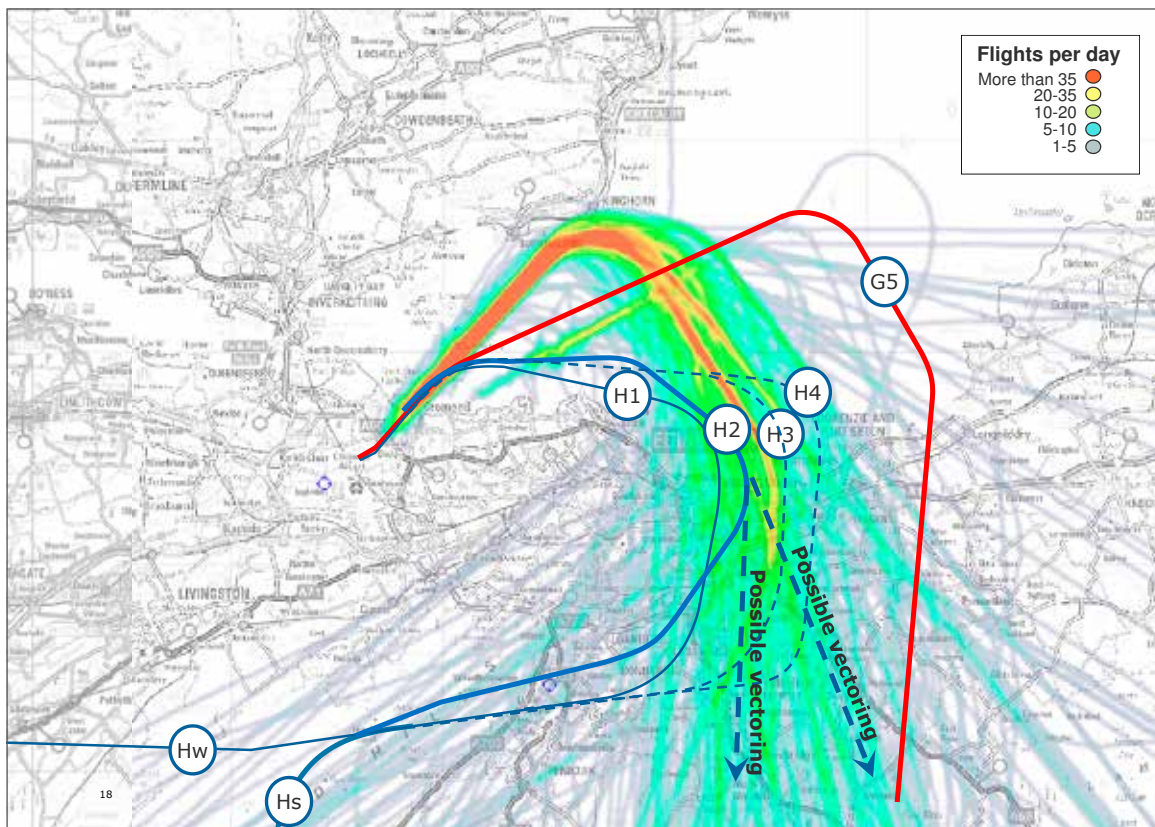
Base: 79

10.4.8 Responses to flight path H

Flight path H

Figure 10 shows the current flight tracks, overlaid with our flight path options (H1-H4). Flight path option 'G' is in red to show the relationship between the two flight paths.

Figure 10: Considered options for flight path H



This map previously appeared on page 112 of the second consultation book.

Flight path H

Our preferred design option is H2. To determine this decision we tabled all of the options against our criteria.

Preferred optioneering

	H1	H2	H3	H4
Safety/ICAO design criteria	Compliant	Compliant	Non compliant	Non compliant
CO ₂	Longer	Longer	Longer	Longer
Noise - population overflown	More	Similar	Similar	Similar
Noise - new population impacted	More	Slightly more	Slightly more	No
Operational benefit - reduced delay	Yes	Yes	Yes	Yes
Populations impacted				
Cramond - 7,502	Similar	Similar	Similar	Similar
Burntisland - 6,269	Further away	Further away	Further away	Further away
Kinghorn - 15,295	Further away	Further away	Further away	Further away
Edinburgh - 464,990	Closer	Closer	Closer	Closer
Musselburgh - 21,900	Overflown	Overflown	Overflown	Overflown
Cockenzie and Port Seton - 5,460	Similar	Further away	Further away	Further away
Longniddry and Aberlady - 3,486	Not overflown	Not overflown	Not overflown	Not overflown

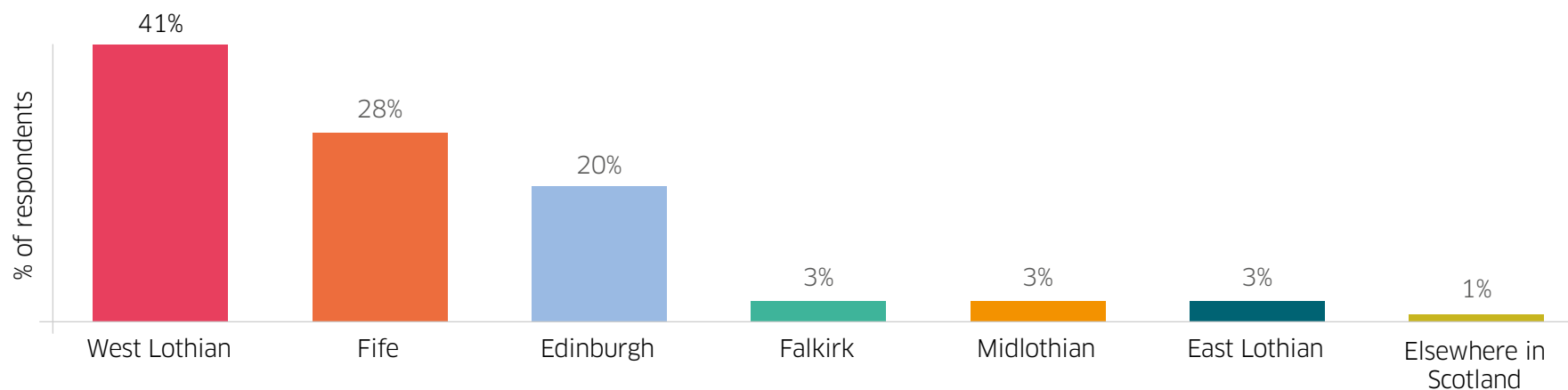
■ Positive impact
 ■ No change/neutral
 ■ Negative impact

Note: Difference relative to today's impact.
 Not overflown = route centreline more than 2nm away from community.

This table previously appeared on page 113 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of individual respondents



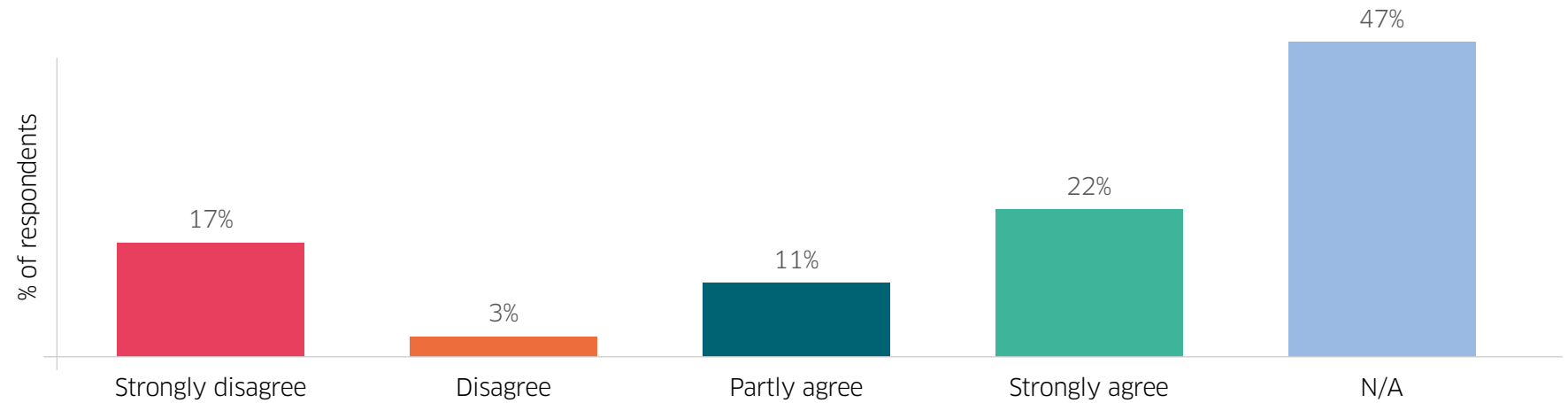
Responses from individual – locations

Area	Number	Number - Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

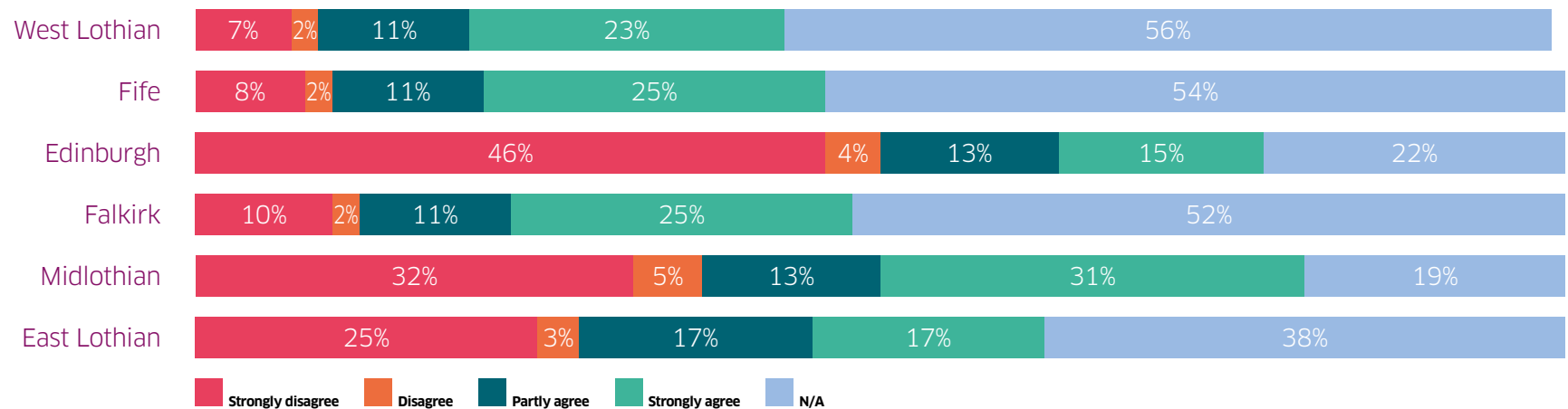
*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Responses from individuals - Agreement to flight path H2

Responses to flight path H are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

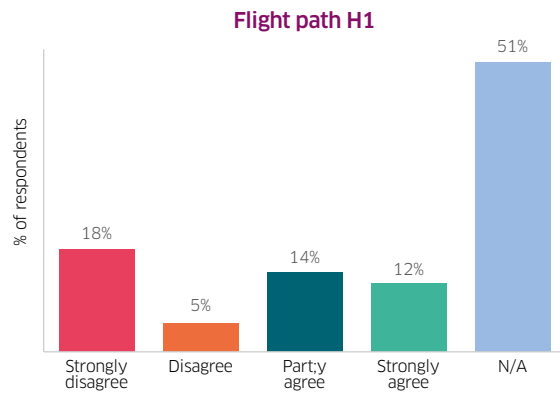


Agreement to flight path H2 by area



Base: 3,884

Responses from individuals - Agreement with all other flight path options



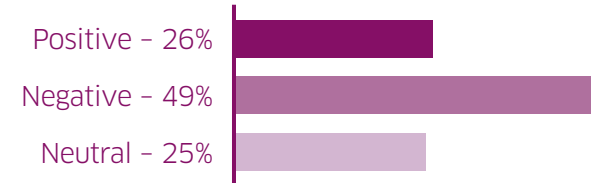
Base: 3,884

Individuals' opinion on path H

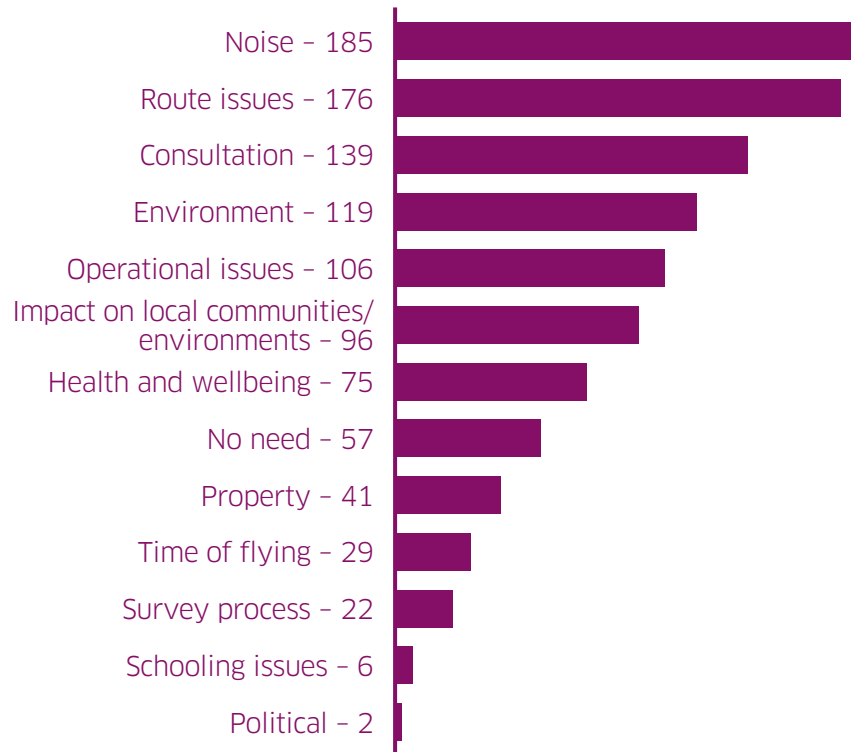
There were 1,193* respondents who provided opinion on flight path H, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

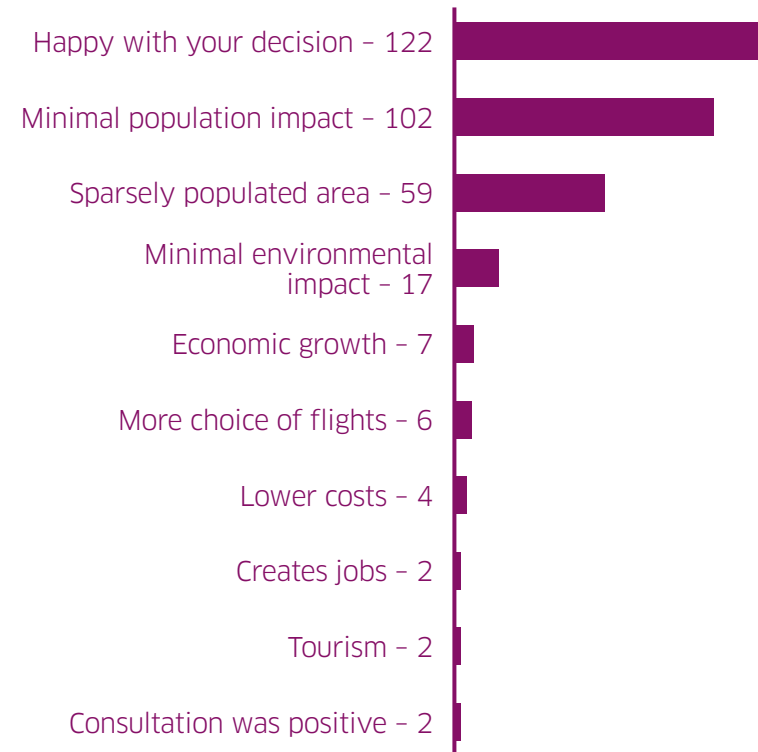
Sentiment expressed



Number of negative comments



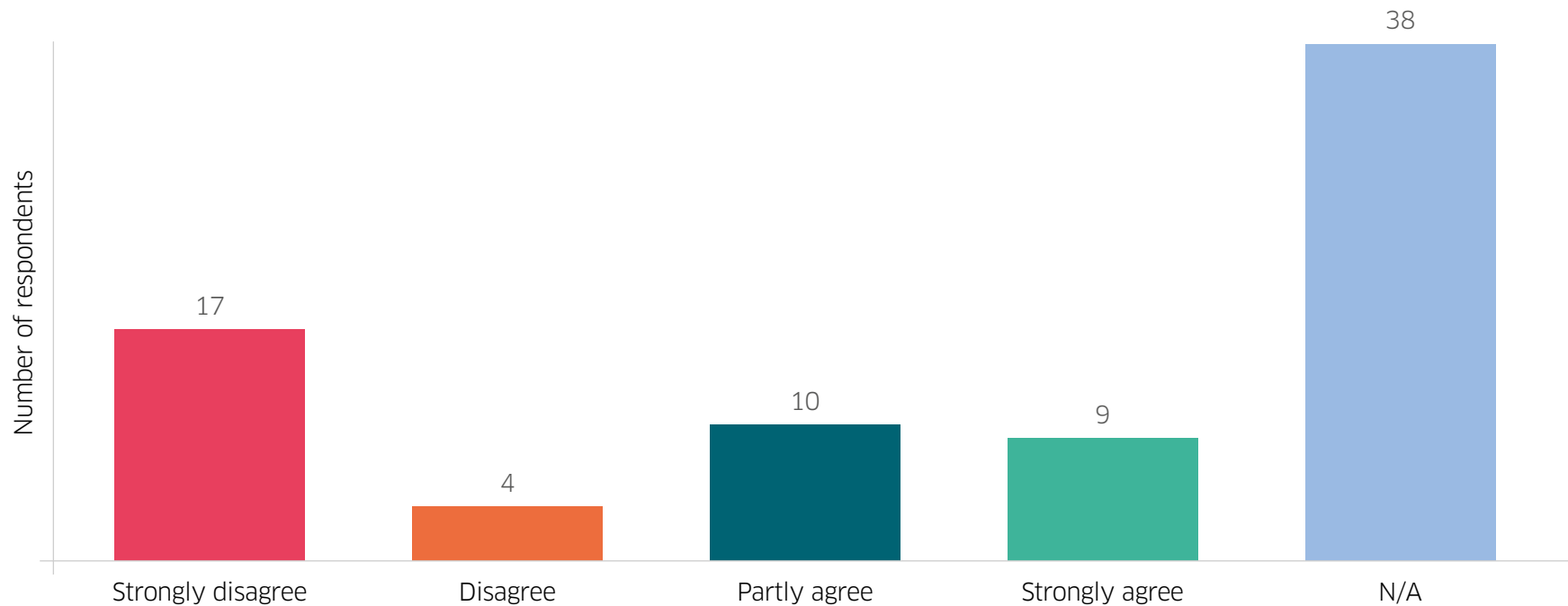
Number of positive comments



Base: 1,193

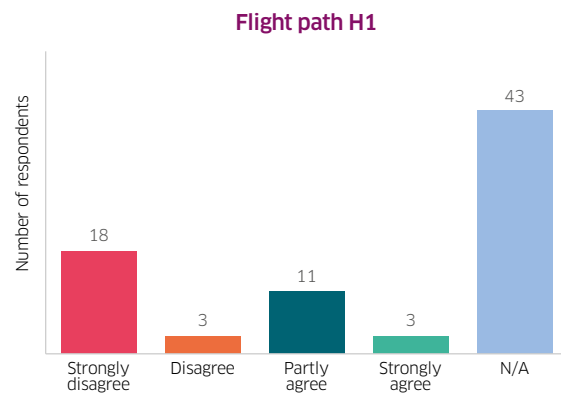
Organisations and elected members - Agreement to flight path H2*

Responses to flight path H are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.



*Data displayed as absolutes. Not all respondents answered every question.

Organisations and elected members - Agreement with all other flight path options*



*Data displayed as absolutes. Not all respondents answered every question.

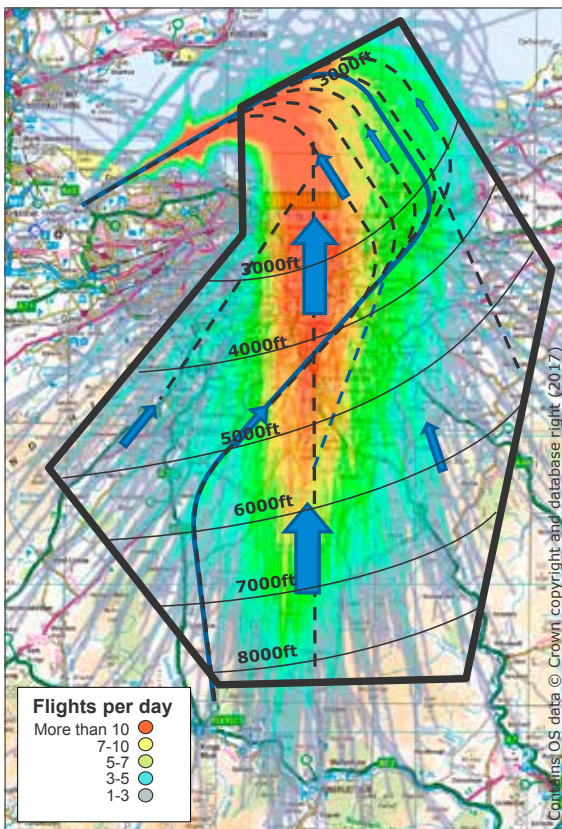
Base: 79

10.4.9 Responses to runway 24

Runway 24

Figure 11 shows the proposed RNAV flight path (shown in blue) and associated vectoring area for arrivals to runway 24 and gives an indication of approximate altitudes of aircraft within the arrivals envelope. The dotted blue lines and arrows represent how actual flight paths may vary from the published flight path.

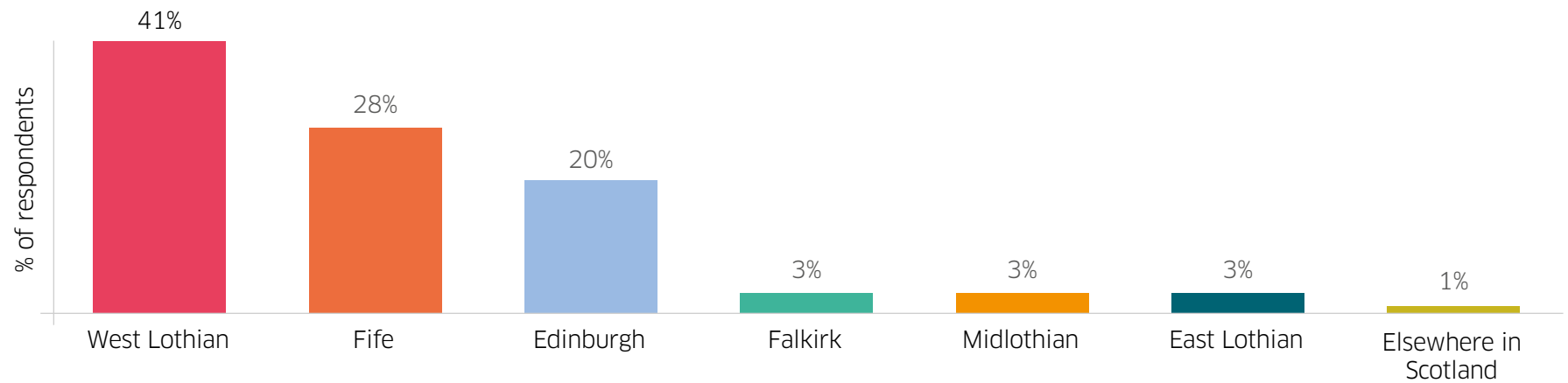
Figure 11: Considered options for runway 24



This map previously appeared on page 122 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of respondents



Responses from individual – locations

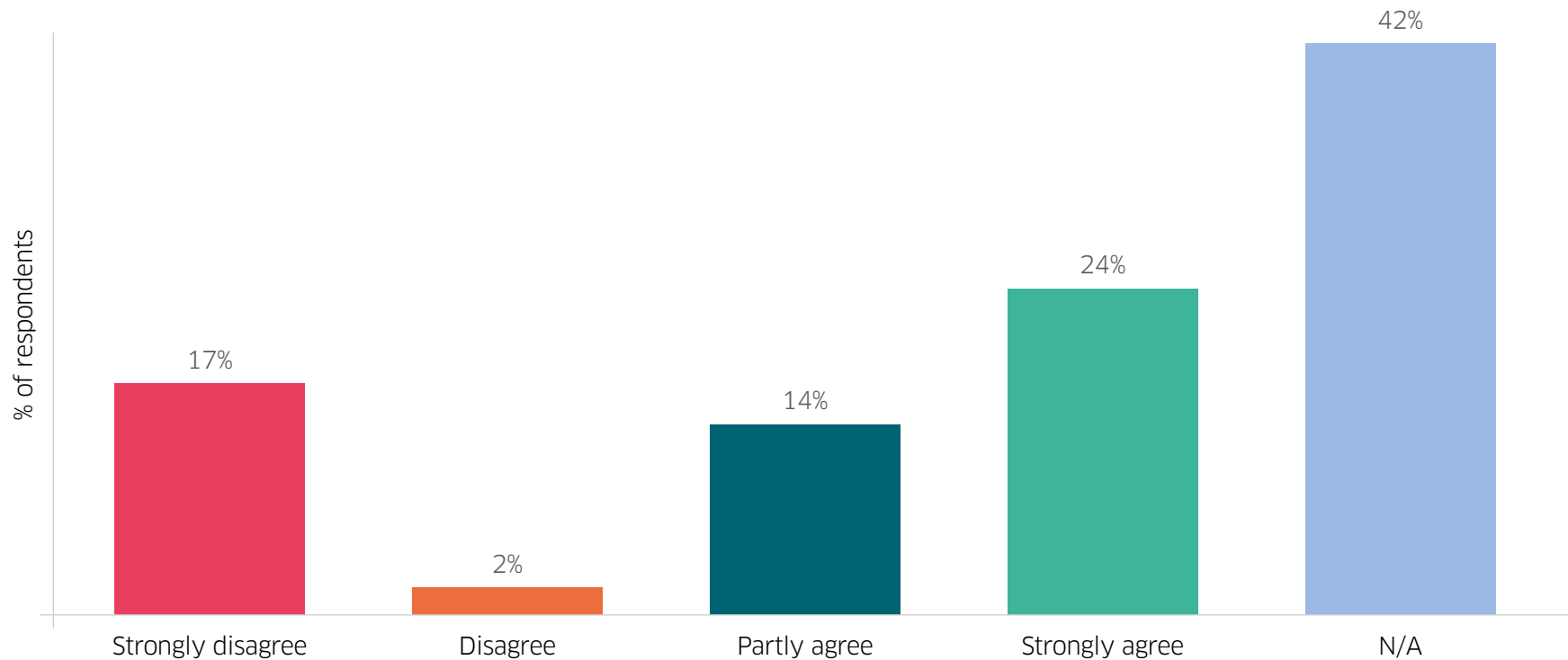
Area	Number	Number – Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Base: 3,881

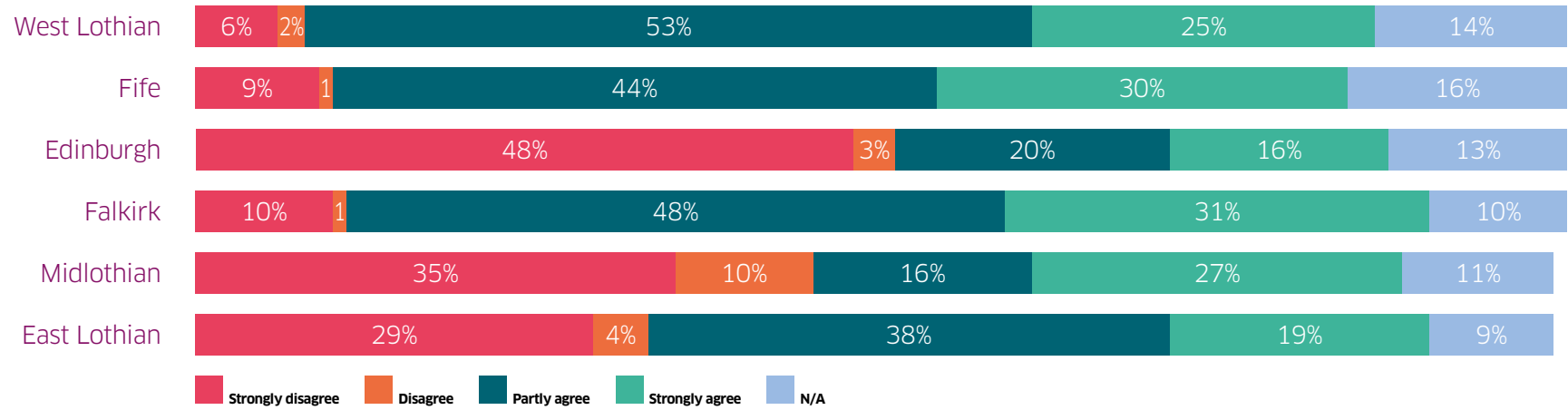
Responses from individuals - Agreement to runway 24

Responses to runway 24 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents. There were 3,881 responses to this question.



Base: 3,881

Agreement to runway 24



Base: 3,881

Individuals' opinion on runway 24

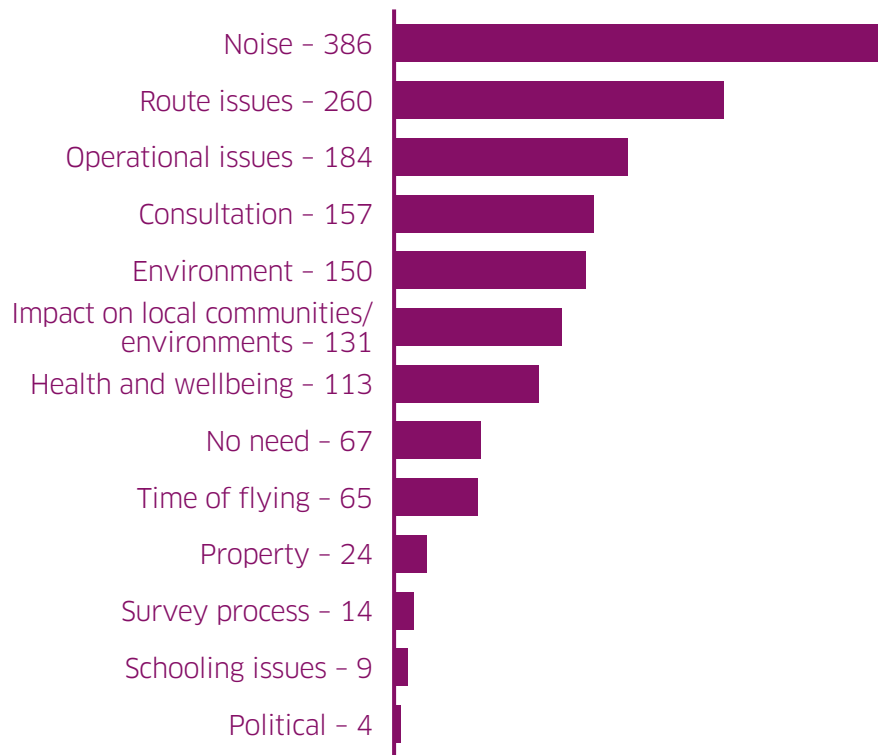
There were 1,199* respondents who provided opinion on runway 24, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

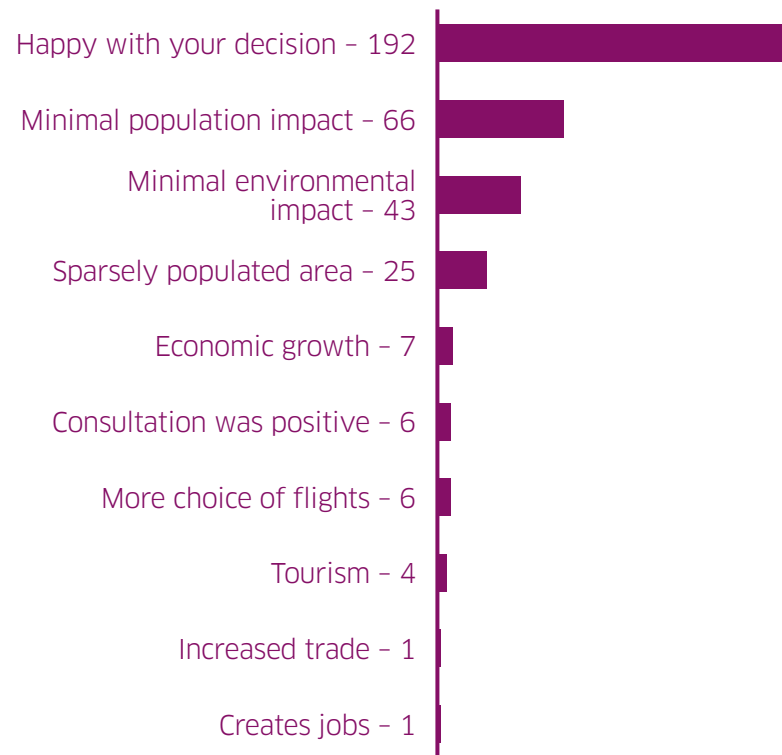
Sentiment expressed



Number of negative comments

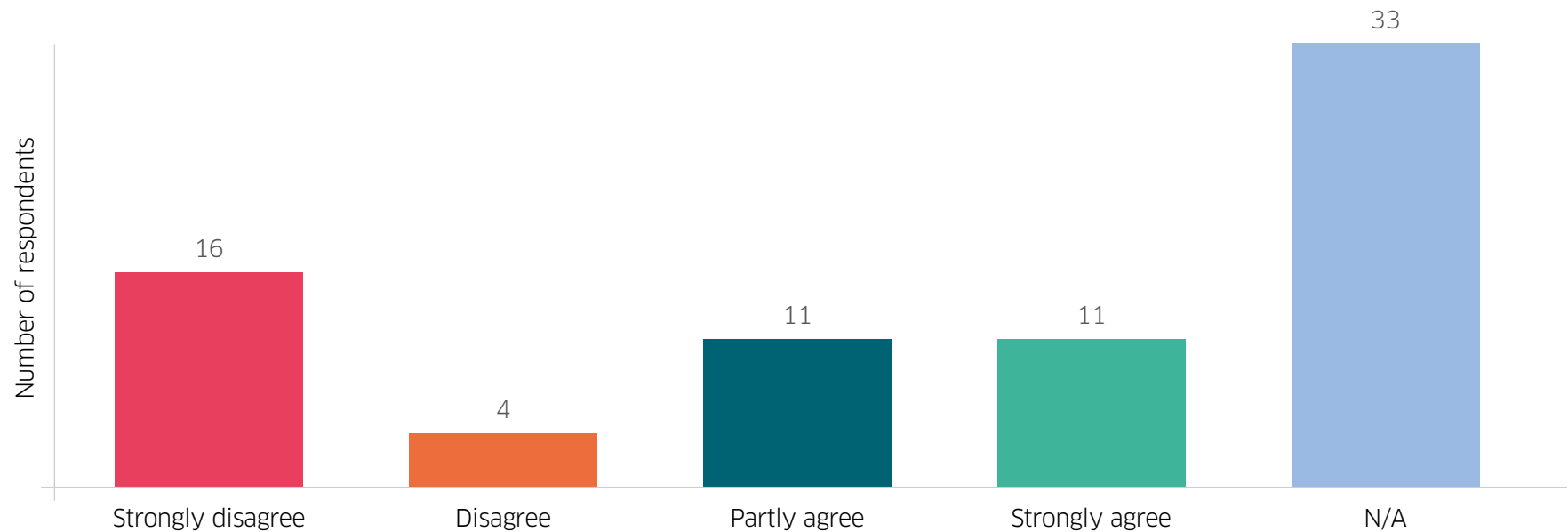


Number of positive comments



Organisations and elected members - Agreement to runway 24*

Responses to runway 24 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents. There were 75 responses to this question.



*Data displayed as absolutes. Not all respondents answered every question.

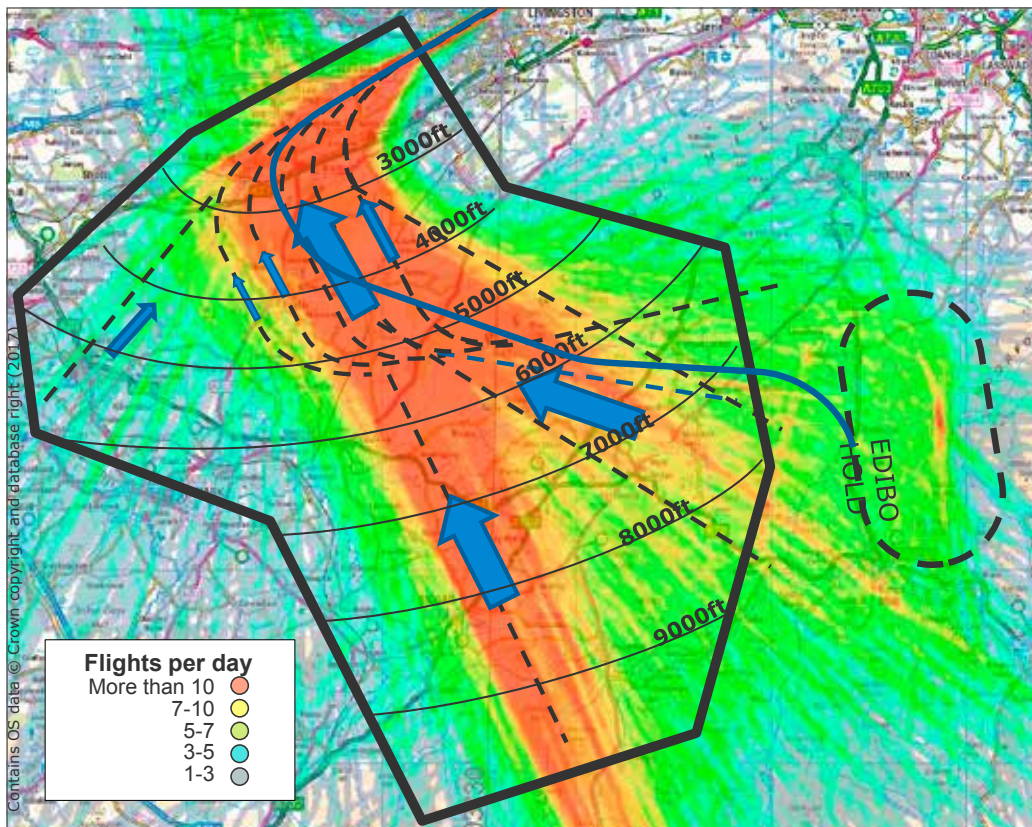
Base: 75

10.4.10 Responses to runway 06

Runway 06

Figure 12 shows the proposed RNAV flight path (shown in blue) and associated vectoring area for arrivals to runway 06 and gives an indication of approximate altitudes of aircraft within the arrivals envelope. The dotted blue lines and arrows represent how actual flight paths may vary from the published flight path.

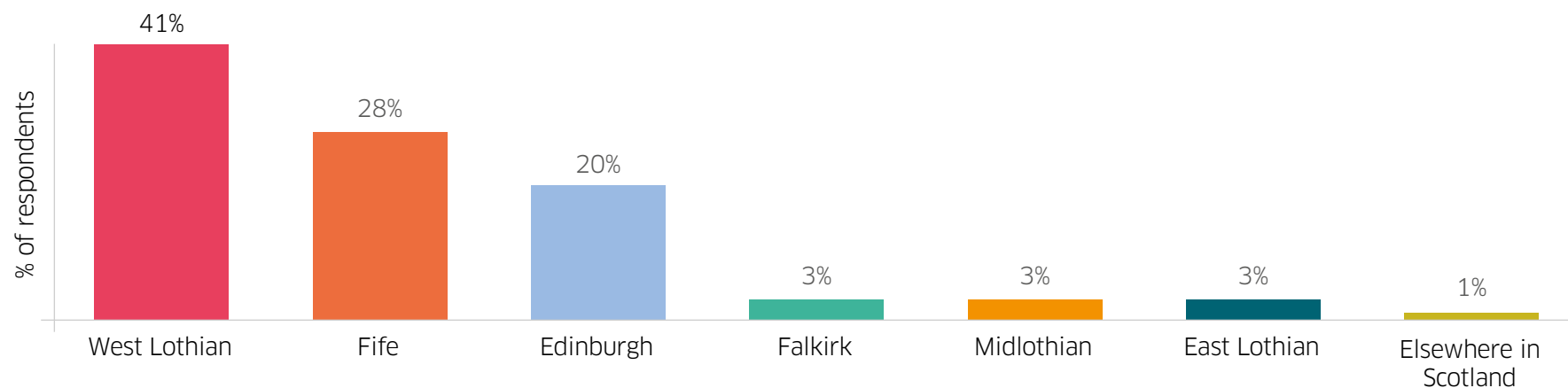
Figure 12: Considered options for runway 06



This map previously appeared on page 131 of the second consultation book.

The following pages report on responses made and are broken down to show individual responses as well as responses by organisations and elected members.

Locations of respondents



Responses from individual – locations

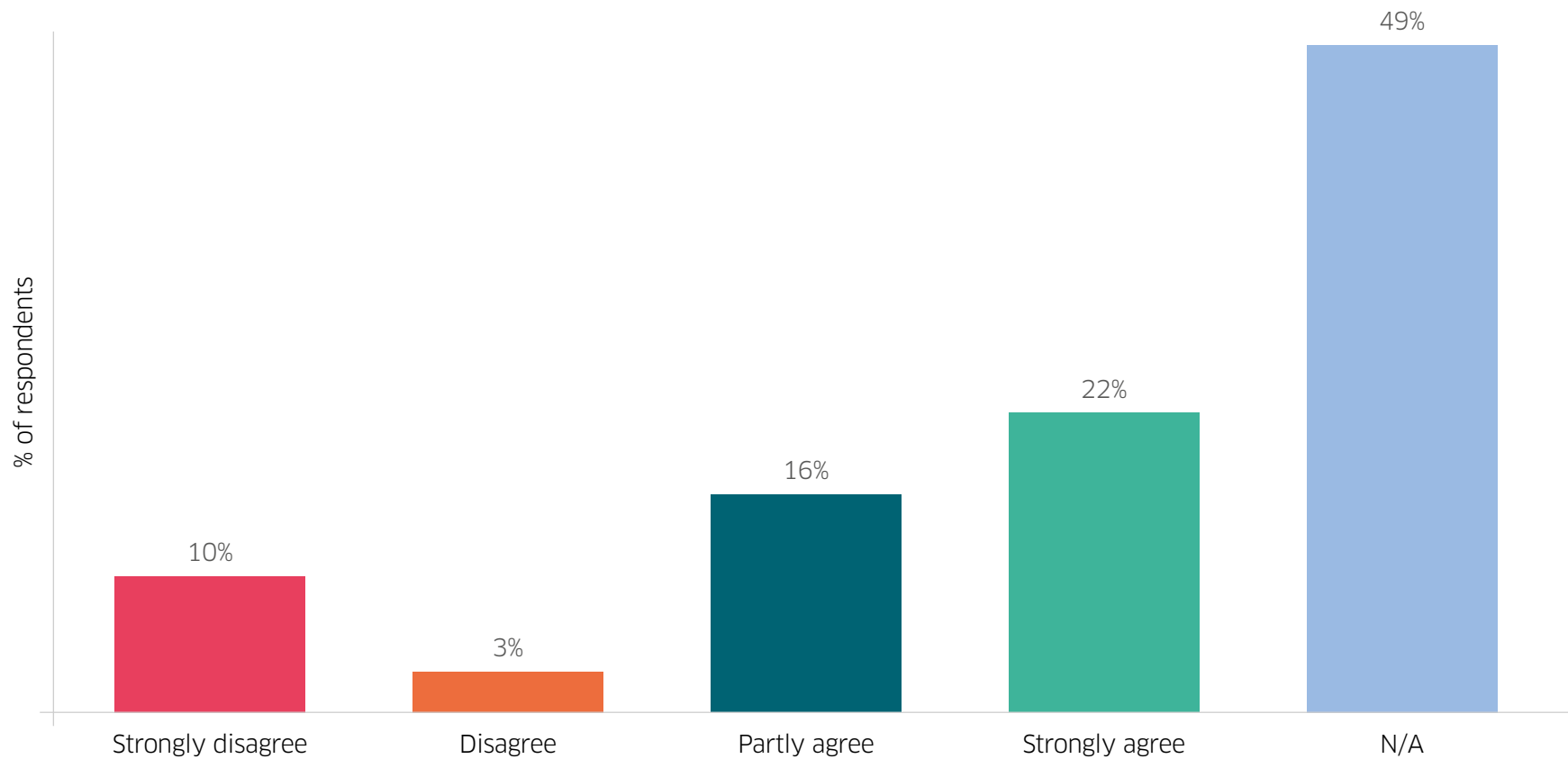
Area	Number	Number – Population*	% of the local population
West Lothian	1,579	179,442	0.87%
Fife	1,085	369,793	0.29%
Edinburgh	794	508,675	0.15%
Falkirk	126	159,581	0.07%
Midlothian	117	88,656	0.13%
East Lothian	119	104,049	0.11%

*Population figures taken from NRS projections published in 2016. <https://www.nrscotland.gov.uk/files//statistics/population-projections/2014-based-euro-var/pop-proj-scot-areas-14-corrected.pdf>

Base: 3,879

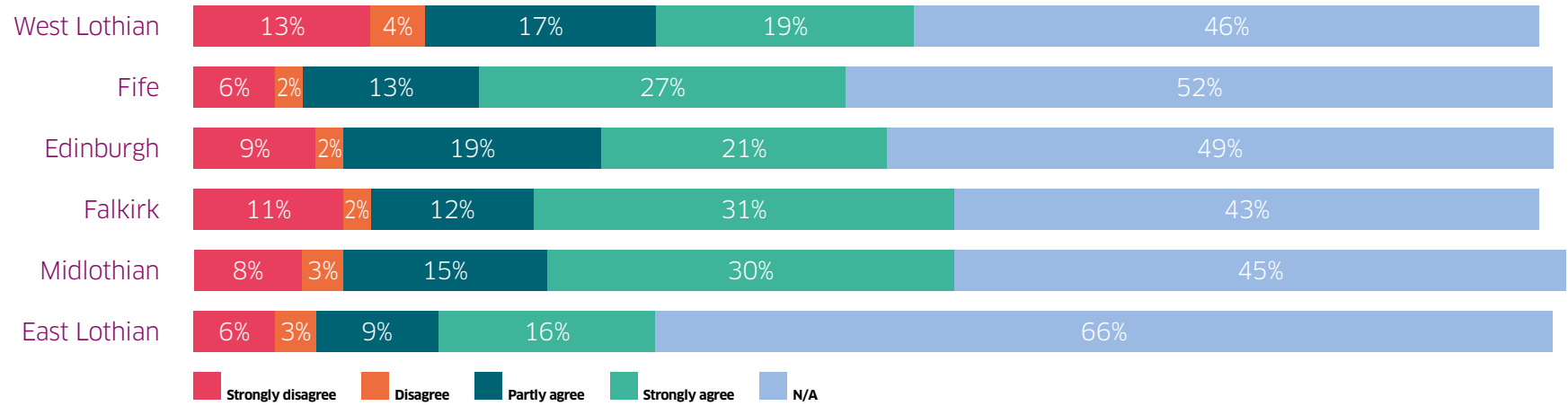
Responses from individuals - Agreement to runway 06

Responses to runway 06 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents. There were 3,879 responses to this question.



Base: 3,879

Agreement to runway 06



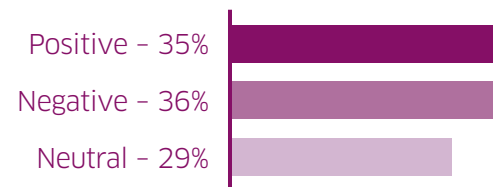
Base: 3,879

Individuals' opinion on runway 06

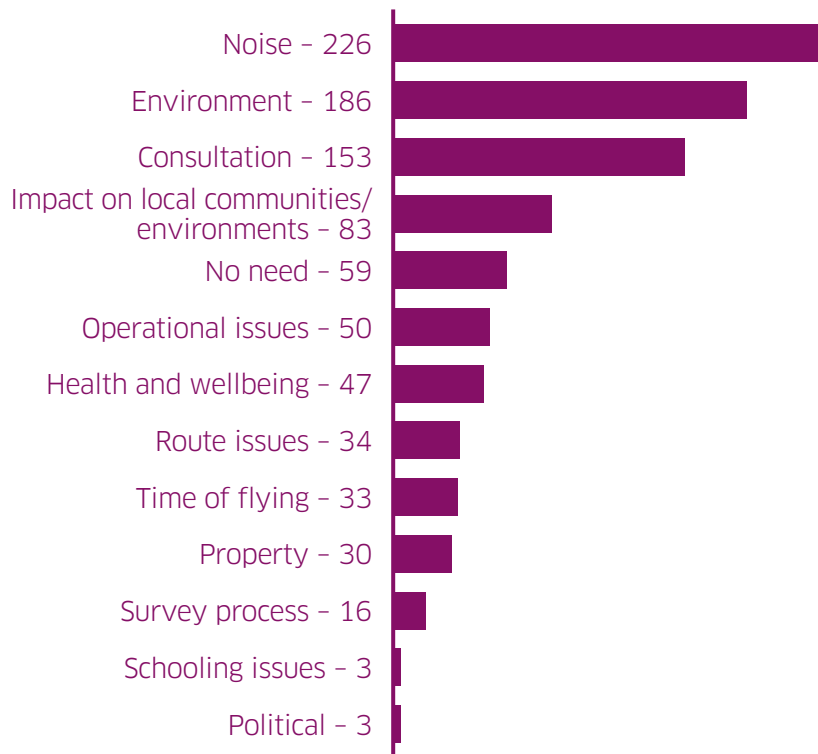
There were 984* respondents who provided opinion on runway 06, these were graded as a positive, negative or neutral sentiment. Some respondents commented on more than one theme, therefore the figures regarding comments can be greater than the number of respondents.

*not every respondent left an opinion.

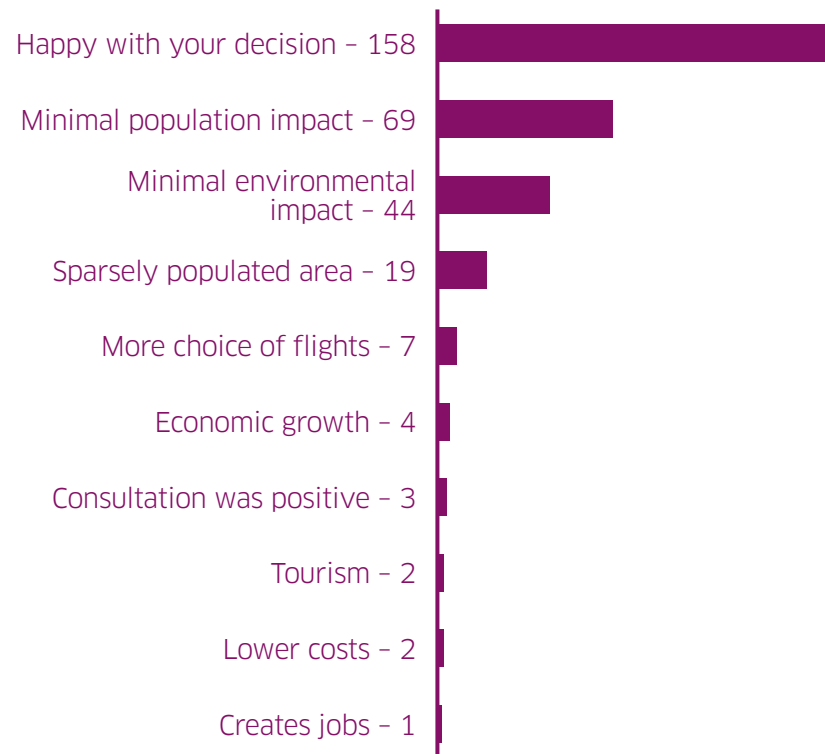
Sentiment expressed



Number of negative comments

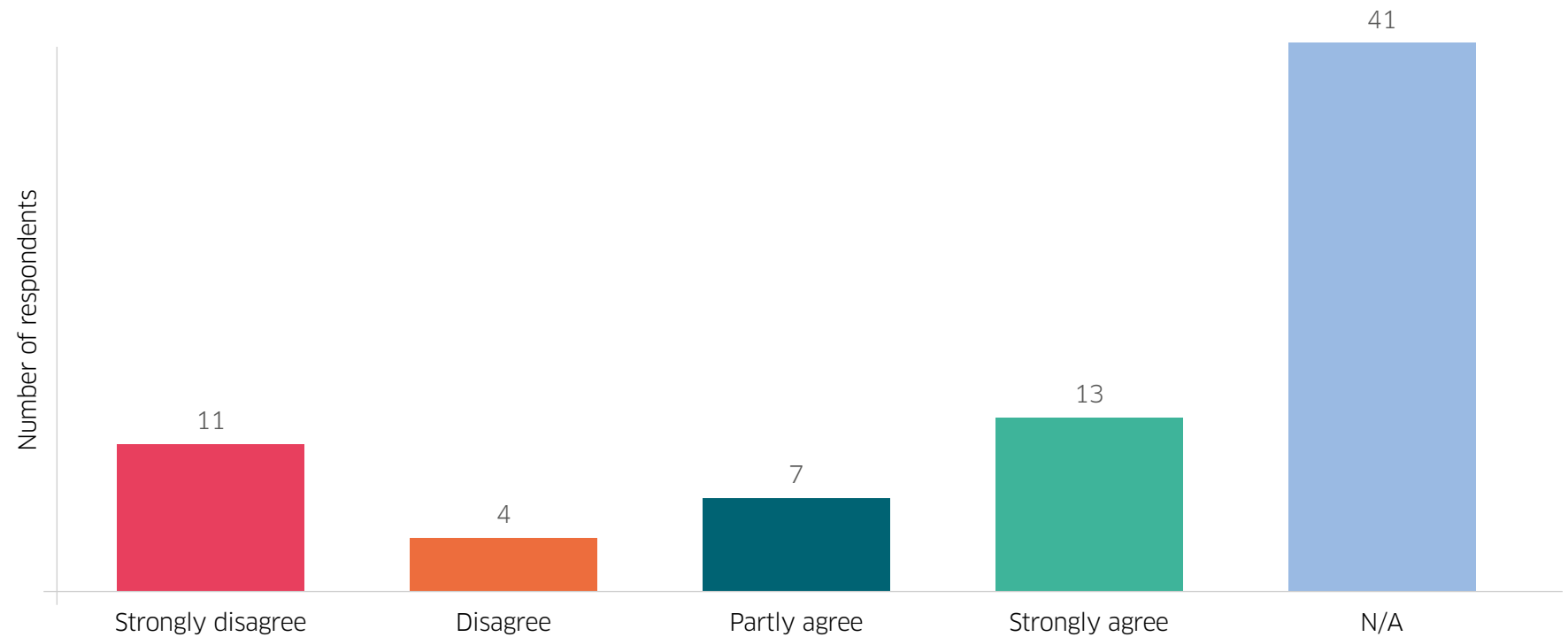


Number of positive comments



Organisations and elected members - Agreement to runway 06*

Responses to runway 06 are broken down by individual, elected member and organisational responses to flight paths. Issues raised are the top 5 issues raised from each audience. There were 76 responses to this question.



*Data displayed as absolutes. Not all respondents answered every question.

Base: 76

Next steps

Timeline

Milestone	Start date	Duration	End date
Initial consultation	6 June 2016	14 weeks	19 September 2016
Data analysis and route development	20 September 2016	16 weeks	29 January 2017
Second consultation	30 January 2017	14 weeks	7 May 2017
Data analysis and route refinement	8 May 2017	-	-
Develop application to submit to CAA	End of summer 2017	-	-
Lodge application with CAA	End of summer 2017	-	-
Publication of Executive Summary	End of summer 2017	-	-
CAA review of application	-	17 weeks	-
Airspace change related activities, including simulator-based training	December 2017-March 2018	-	-
Start to fly new routes (subject to CAA approval)	April 2018	-	-

Population data

We used population density mapping to determine existing populations and future populations that may be overflowed within the design envelope. The population information was taken from the most recent Census and known areas of housing developments were also identified. For each proposed flight path we have compared those overflowed today, to those who may be overflowed under the proposed flight path. This has allowed us to determine if the population may be a new community to be overflowed.

Equality, health, habitats regulation and environmental assessments

We are reviewing the work we did regarding equality, health, habitats and environment and updating assessments to include in our Application for Airspace Change submission to the CAA.

Appendices

Appendix A:

List of organisations that responded

1. Airport Action Group
2. Airth Parish Community Council
3. Blackness Area Community Council
4. Charlestown, Limekilns and Pattiesmuir Community Council
5. City of Edinburgh Council
6. Cockenzie and Port Seton Community Council
7. Cramond and Barnton Community Council
8. Cramond Boat Club (Commodore)
9. Cramond Noise Action Group
10. Dalgety Bay and Hillend Community Council
11. Dalgety Bay Radiation Contamination Group and Cooper Property
12. Dalkeith and District Community Council
13. Ecclesmachan and Threemiletown Community Council
14. Edinburgh Airport Watch
15. Eskbank and Newbattle Community Council
16. Fossoway and District Community Council
17. Friends of the Earth Scotland
18. Glendevon Farm Residents Association
19. Grangemouth including Skinflats Community Council
20. Harbour Green Residents Association
21. Harwood Crofts Residents Association
22. Hilly Cow Wigwams
23. Ineos Chemicals Grangemouth Ltd
24. Ineos Infrastructure Grangemouth Ltd
25. Kirknewton Community Council
26. Linwater Caravan Park
27. LJR Accounting Ltd
28. Loanhead and District Community Council
29. Milesmark and Baldrige Community Council
30. Muckheart Community Council
31. Murieston Community Council
32. Musselburgh Conservation Society
33. Inveresk Village Society
34. North Queensferry Community Council
35. Peebles Community Council
36. Pencaitland Community Council

37. Physio Ecosse Ltd
38. Queensferry Heritage Trust
39. Regent Motors
40. Robson Forth Ltd
41. Roslin and Bilston Community Council
42. Royal Burgh of Kinghorn Community Council
43. RSPB Scotland
44. Scottish Passenger Agents' Association
45. Southside Community Council
46. Stirling Developments Ltd
47. The Ecology Centre
48. Transform Scotland
49. Urbantu Ltd
50. West Lothian Council
51. Winchburgh Community Council
52. Winchburgh Developments Ltd
53. Winchburgh Plane Spotters

Appendix B: **List of aviation stakeholders that took part**

1. Edinburgh Aviation Consultants
2. Flight Operations and Safety Committee
 - easyJet
 - Etihad
 - FlyBe
 - Jet2
 - NATS Edinburgh Airport
 - Ryanair
3. General Aviation Alliance
4. Glasgow Airport
5. Guild of Air Traffic Control Officers (GATCO)
6. National Air Traffic Service (NATS)
7. Royal Air Force
8. UK Flight Safety Committee

Appendix C: **List of airlines included in flyability testing**

1. British Airways
2. easyJet
3. FlyBe
4. Ryanair

Appendix D: The Consultation Institute's Commentary

The Institute was founded in 2003 as a not-for-profit, best practice body dedicated to improving public and stakeholder consultation.

Part of its work is to undertake a formal Quality Assurance of high-profile exercises where the integrity of the process is considered to be important. In 2016, Edinburgh Airport commissioned the Institute to provide a Quality Assurance of the initial consultation on its Airspace Change Programme.

In January 2017, a second consultation was launched providing the public with an opportunity to express their views on specific route options, and once again the Institute was invited to provide an independent quality assurance.

We appointed Quintin Oliver and Mike Bartram to act as Advisers to the Airport, and Rhion Jones LL.B to act as Assessor. They were able to build upon the knowledge and insights obtained in the 2016 exercise, and were assisted by having an independent Stakeholder Reference Group (SRG) that had been established for the initial consultation. This ensures that the Airport's conduct of the consultation is subject not just to the Institute's QA process but to the opinions and views of a forum of well-informed local stakeholders, including some who are sceptical of the Airport's proposed changes. The Group is chaired by Dame Sue Bruce and has met on several occasions to be kept fully briefed on the course of the consultation and to offer its informed advice to the consultor, Edinburgh Airport, and to the Institute.

The QA process requires the Institute to sign off each of six separate 'interventions', each of which places onerous requirements upon the consultor.

- The Institute signed off the Scope of the consultation, which was as foreshadowed by the 2016 exercise. We ensured that appropriate pre-consultation discussions had taken place, that the consultation covered all viable options and met the requirements of the Civil Aviation Authority, the Airport's Regulator.
- The Institute examined the Project Plan in detail, and required that lessons were learned from the 2016 exercise, particularly in relation to gathering demographic information, and (having regard to the loss of some data in the earlier consultation), the availability and resilience of its online questionnaire platform before it was signed off.
- The Consultation document is a particular challenge for Airports, and the experience of 2016 was that whilst some people complained there was too much detail and complexity, others sought more information and background studies. We assisted the Airport in seeking to strike the right balance, so that we were able to sign-off the Documentation in January this year.
- On 30 March, we conducted a full Mid-Review of the consultation, and identified a range of issues that had emerged in the weeks since the launch of the exercise. In particular, we considered the situation that arose when, in response to the initial Consultation, the Airport widened the area within which route options were considered, leading to proposals being included this time around that affected some communities that had been advised in 2016 they would be less affected (i.e. no new over-flying at low levels). We needed to be sure that residents in those areas were consequently given the fullest possible opportunity to express their views. We also looked at a range of other process-related issues that had been raised by the SRG and by others, before a conditional sign-off was issued in late April.

- On 9th May, the Institute conducted a Closing Date review, and used the opportunity to review a range of issues that had affected the consultation. This included a debate in the Scottish Parliament on 27th April at which robust criticism had been made and which the Airport, at least in part, strongly refuted. The Institute initiated further investigations leading to a re-convened Review on 1st June at which it was satisfied that the Airport was responding adequately to the issues that had been raised.
- Also on the 1st June, the SRG was invited to see a preliminary analysis of the data gathered by the Airport during the course of the consultation. This gave the Group an opportunity to consider and comment upon the proposed publication of the Final Report. It also provided the Group with an occasion to raise other matters of concern about the consultation, and discuss with the Institute and Airport Managers the steps necessary to reassure local people that the consultation was fair.
- Since that time, an error has emerged affecting those who chose to respond using the freepost service, and to date the numbers affected, although believed to be small, is unknown, due to the extent of the data available from Royal Mail. This will not affect the overall thrust of the Final Report, which the Institute has signed off as being a fair reflection of the views gathered in the exercise. It has, however clearly had a further impact on the public perception of the consultation.
- In the coming days, the Airport will need to take full account of the consultation output as it takes decisions about its submission to the Civil Aviation Authority, who is the ultimate decision-maker. The Institute will be seeking to ensure that the requirements for 'conscientious consideration' will be fulfilled as it determines its final view of the consultation.

In the meantime, we need to determine whether the consultation has, overall, met its objectives, and the extent to which it has met standards of good or best practice. We are conscious of several process errors affecting the questionnaires, the availability of hard

copy documents, the arrangements for some public meetings, and most recently, the use of an invalid Freepost address. We have also been aware of significant disputes about the use of past and future population statistics, and a feeling that the Airport's case for change could have been better articulated. A number of these mistakes should not have happened and the Airport, aware of this, has apologised to consultees. The Airport also recognises that it is not therefore possible for the Institute to award it a good practice designation without qualification.

Nevertheless, the fact remains that in our view, the Airport, with very limited experience of consultations on this scale, has been a commendable effort to share an unprecedented level of detailed information with relevant communities and we are fully satisfied that they have been afforded a fair opportunity to be heard. We do not believe that the errors complained of will have prevented arguments from being properly presented and will therefore be endorsing the exercise as having fulfilled its main objective.

In doing this, the Airport has demonstrated much that is best practice in the industry. For this particular consultation, the ultimate test will be the extent to which the Airport will be able to demonstrate that it has heeded the views of local people when taking its decisions, as it did, after the first 2016 Consultation.

The Institute believes that the Airport will have important lessons both about its relations with local communities and also about the conduct of future public consultations, and the Institute will make recommendations accordingly.

Quintin Oliver, Michael Bartram – Advisers
Rhion H Jones LL.B – Assessor

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THANK YOU

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Where Scotland meets the world