DfT Equality Monitoring Annual Summary

2010/11

In House Analytical Consultancy

13/01/2012

Department for Transport

GORS
GOVERNMENT OPERATIONAL RESEARCH SERVICE

Contents

Foreword

DfT is pleased to introduce its annual summary equality monitoring reports produced by DfTc and Agencies. The Department recognises that, in order to deliver transport that works for everyone and to meet our business objectives, staff need to be representative of the diverse communities we serve and reflect the working population.

The data presented in this report summarises detailed monitoring reports prepared for each of the Department's Executive Agencies:
- Driving Standards Agency (DSA);
- Vehicle Certification Agency (VCA);
- Vehicle and Operator Services Agency (VOSA);
- Driver and Vehicle Licensing Agency (DVLA);
- Highways Agency (HA);
- Maritime and Coastguard Agency (MCA);
- Government Car and Dispatch Agency (GCDA); and
- DfT Centre (DfT(C))

These enable us to examine trends, identify key issues and explore future action required in order to assess our progress in employment matters. This report is intended to provide people with the "bigger employment picture" in relation to equality monitoring for the DfT throughout the UK.

If you have any queries or comments on the contents of this report please contact the DfT Corporate Equality and Diversity Team through the following link
dftequality&diversityteam@dft.gsi.gov.uk

DfT Corporate Equality and Diversity Team
Human Resources Directorate

Chapter 1: Management Summary

1.1 Introduction

This report contains an analysis of the diversity of DfT family staff for 2010/11.

The aim of the analysis was to:

- identify differences between diversity groups within the DfT family ;

- compare the diversity of the DfT family staff with the diversity of the local population; and

- highlight any changes since previous years.

The analysis considers the diversity of the whole DfT family as well as highlighting common themes and differences between Executive Agencies.

Data related to staff in post at the end of 31st March 2011, and cessations between 1st April 2010 and 31st March 2011.

1.2 Key Findings: Year on year changes

DfT(C) and a number of Executive Agencies undertook restructuring during the year and offered voluntary exit schemes. A civil service-wide recruitment freeze also came into effect in May 2010.

As a result there has been a net 5.0% decrease in the staff employed across DfT, from 18,760[1] on 31st March 2010 to 17,863 on 31st March 2011.

There was no significant change in the proportion of female staff, Black or

Minority Ethnic (BME) staff or disabled staff.

The largest changes relating to race were in the number of unknowns, with a significant increase in the race declaration rate from 89.4% to 91.5%.

There was a significant increase in the proportion of part-time staff from 14.3% to 15.7%.

1.3 Key Findings: Sex

In all parts of the Department, the gender split was significantly different from that of local working-age populations.

Nearly 60% of DfT family staff were male (58.9%), and there were more males than females in each part of DfT except for DVLA where 62.5% were female. Just over half (52.6%) of DfT's female staff were in DVLA.

Female staff were more likely to occupy office-based jobs, support/administrative and process roles rather than more specialist roles (engineer, driving examiner etc).

Over three quarters of part-time staff were female: nearly 30% of female staff worked part-time compared with 6% of male staff.

Female staff tended to be in lower Pay Bands. Just over a quarter of staff in SCS and Feeder Pay Bands were female, whereas 42% of staff in the remaining Pay Bands were female.

Female staff tended to be younger as a group than male staff.

Female staff were more likely to have had sickness absence than male staff both in DfT as a whole and in most individual parts of DfT.

Across DfT, female staff recorded significantly less training, on average,

---

[1] 18,765 staff reported in 2009/10: further data checks during the year has led to some minor changes in the dataset.

than male staff, although for some individual Executive Agencies, the reverse was true. It is likely that amount of training undertaken and recorded is partly linked to job type.

More male staff were involved in discipline cases than expected, compared with the proportion of male staff in post.

1.4   Key Findings: Race

5.7% of those staff who had declared their race were from a Black or Minority Ethnic (BME) group. 8.5% of staff were of unknown or undeclared race.

The proportions of BME staff varied between Executive Agencies, as might be expected given the geographical spread of DfT's locations. At some Executive Agencies there were significantly fewer BME staff than expected compared with the local working-age population.

In some parts of DfT, there were more BME staff in lower Pay Bands than might be expected; and there was also evidence to suggest that in some parts of DfT, BME staff were receiving fewer top performance marks than expected.

There were fewer BME staff in the older age groups than expected.

1.5   Key Findings: Disability

10.4% of those who had declared a disability status had identified themselves as disabled. 13.0% of staff had an unknown or undeclared disability status.

Across DfT, there were fewer disabled staff than might be expected from local working-age populations.

The proportion of disabled staff varied by job type and Agency, and in some Executive Agencies, there were more

disabled staff in lower Pay Bands compared with the higher Pay Bands.

A significantly greater proportion of disabled staff worked part-time compared with non-disabled staff.

There were more disabled staff in the older age groups compared with the younger age groups.

More disabled staff were involved in grievance cases than expected, compared with the proportion of disabled staff in post.

Non-disabled staff recorded significantly more training, on average, per person than disabled staff.

Across DfT as a whole and in most parts of DfT, disabled staff were more likely to have had sickness absence than non-disabled staff.

In most parts of the Department, where disabled staff had had sickness absence, they took significantly more than expected.

1.6   Key Findings: Age

DfT staff tended to have an older age profile than local working-age populations. Nearly two-thirds of DfT staff were 40 years or over (64.5%) and only 3.4% of staff were under 25 years.

As might be expected, there were more younger staff in the lower Pay Bands compared with the higher Pay Bands.

In most Executive Agencies, younger staff were more likely to have had recorded training than older staff.

Across DfT, and in some individual parts of the Department, younger staff were more likely to have had sickness absence.

In some Executive Agencies, where older staff did have sickness absence, they were absent for significantly longer than expected.

1.7   Key Findings: Work Pattern

In most Executive Agencies, full-time staff were more likely to have had recorded training than part-time staff.

A significantly higher proportion of leavers were part-time than expected, compared with the proportion of part-time staff in post.

1.8   Key Findings: Other

The religion and belief status of only a quarter of staff was known. Of those, 81.5% indicated that they held a religious belief.

Just over a third of staff declared their sexual orientation. Of those, 2.9% declared themselves to be lesbian, gay or bisexual.

In DfT(C) and several Agencies, staff that had sickness absence were less likely to have received the top performance mark.

In general, staff in higher pay bands were less likely to have had sickness absence than those in lower pay bands, and less likely to have recorded training.

1.9   Information Recommendations

The race and disability declaration rates vary within the DfT family. It is recommended that efforts are continued to maintain or improve declaration rates of existing staff and that importance continues to be placed on recording this information throughout the recruitment process.

Information on sexual orientation and religion/belief was required for the second time this year however, in general was not complete enough for analysis. It is recommended that efforts are made to increase declaration rates across the whole of the DfT family.

Chapter 2: Introduction

2.1   Equality Monitoring

This report contains an analysis of the diversity of DfT family staff for 2010/11.

The aim of the analysis was to:

- identify differences between diversity groups within the DfT family ;
- compare the diversity of the DfT family staff with the diversity of the local population; and
- highlight any changes since previous years.

The analysis considers the diversity of the whole DfT family as well as highlighting common themes and differences between individual Executive Agencies.

2.2   Analysis and Reporting

This analysis has considered the following areas of diversity:

- Sex
- Race
- Disability
- Job Type
- Age
- Working pattern
- Sexual Orientation
- Religion and belief

And for the following datasets:

- Staff in post
- Recruitment
- Cessations
- Performance management reports
- Learning and development
- Disciplinary cases

- Grievance cases
- Sickness Absence

Data for this report was provided by the Human Resources functions in DfT(C) and each Executive Agency, and has been summarised in the annex tables provided with this analysis.

Results described in this report are based on the outcomes of statistical tests. These tests are used to identify statistically significant differences between groups – that is, differences larger than the likely range of natural variation.

Throughout this report any references to *declaration rates* or *staff who had declared their [e.g. disability] status* apply to staff who have identified with a particular diversity category – such as "disabled", or "White British". In other words, for the purposes of this report, staff who have declared that they prefer not to say have been grouped with those for whom no information is available and described as unknown/undeclared. So, if 10% of staff had chosen not to specify their race, and information was not available for a further 20%, we would quote 70% as the declaration rate, even though technically 80% had made a declaration.

Generally, where "Executive Agencies" or "Agencies" are referred to in the text, DfT(C) is also implied.

Separate reports for DfT(C) and each Executive Agency can be accessed from the DfT website.

2.3   Data coverage

Data related to staff in post across the DfT family at the end of 31st March 2011, and cessations between 1st April 2010 and 31st March 2011.

For the purpose of this report, Senior Civil Service (SCS) staff in DfT(C)'s Agencies have been included along with the SCS in DfT(C).

Staff on maternity leave and staff on career breaks are not included in the analysis, and nor are staff who are not civil servants (e.g. consultants, temporary administrators etc).

The DfT family consists of:
- DfT Centre (DfT(C)),
- Driving Standards Agency (DSA),
- Driver and Vehicle Licensing Agency (DVLA),
- Government Car and Despatch Agency (GCDA),
- Highways Agency (HA),
- Maritime and Coastguard Agency (MCA),
- Vehicle Certification Agency (VCA) and
- Vehicle and Operator Services Agency (VOSA).

2.4   Data groupings

DfT staff occupy a wide range of posts including administrators, coastguards, driving examiners, marine surveyors, operational staff, industrial staff and vehicle inspectors. Each type of role has its own diversity characteristics, and some summary information can be seen in this report. More detailed discussions of job type can be found in individual Executive Agency reports.

Pay Bands differ across the DfT family, so to compare the diversity at different levels of seniority, staff have been grouped into one of the following:
- Senior Civil Service (SCS);
- Feeder Pay Bands (i.e. generally the two Pay Bands below the SCS); and

- All the remaining Pay Bands.

Further information can be found in the Annexes: Annex A contains notes on the comparative data; Annex B outlines the analytical approach taken by IHAC; and Annex C contains key data tables. Further data tables can be seen in the accompanying spreadsheet.

2.5   Data quality

We have used the information from last year as a basis for comparison. Since producing last year's reports a number of corrections were made to the data. In this report the latest (i.e. corrected) data was used.

Data on staff sex, age and Pay Band are held for each member of staff, but data on disability, race, religion/belief and sexual orientation, are voluntarily provided. As a result, and because staff may be unwilling to provide this information, these data often have significant numbers of unknowns or undeclared statuses and consequently analysis was not always possible.

Percentages reported in this analysis are generally based only on data where information was declared and identified with a particular diversity category.

In 2010/11, 8.5% of staff had not declared their race and 13.0%, their disability status across the Department. Declaration rates had improved since 2009/10, when 10.6% and 13.2% had not declared their race or disability status respectively.

Some Executive Agencies had particularly low declaration rates, and this may have affected the quality of the analysis.

Chapter 3: Statistical Analysis

This chapter considers the diversity mix across the whole DfT family, and describes key results that are common across the family and that differ between Executive Agencies.

3.1   Overall staff numbers

Since the previous reporting year there has been a 5.0% decrease in the staff employed across DfT from 18,760[2] to 17,863. A staff breakdown by sex in DfT(C) and each Executive Agency is shown in Annex C.
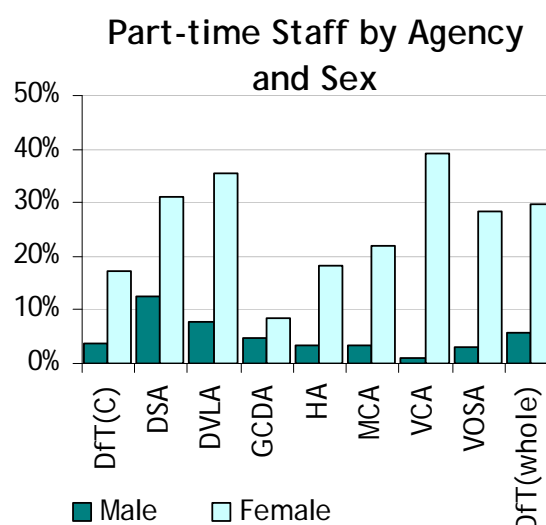
3.2   Sex

In DfT and in each separate part of the Department, with the exception of DVLA, there were significantly more males than females compared with the local working age populations. In DVLA the opposite was true, with significantly more females than males.

Overall, 41.1% (7,338) of staff in post were female, compared with 41.3% (7,754) in 2009/10. This change in the proportion of female staff was not statistically significant.

Just over half (52.6%) of DfT's female staff were in DVLA. Uniquely within DfT, DVLA had more female than male staff (62.5% or 3,860 female staff). In contrast, only 10.2% (24) of GCDA staff were female.
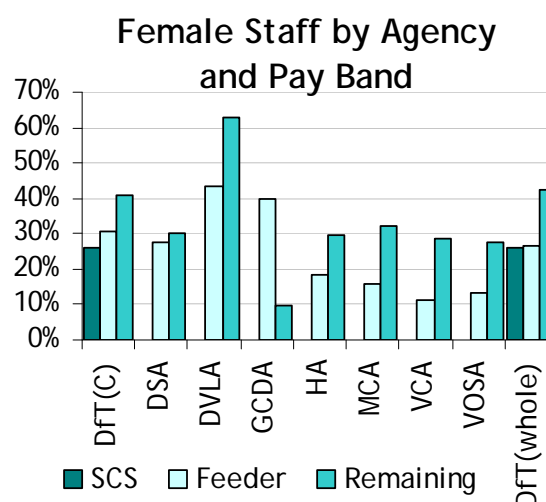
Over three quarters of part-time staff were female: 2,178 females and 620 males worked on a part time basis. As a proportion of staff in post, this equates to 5.9% of male staff and 29.7% of female staff working part time.

---

[2] 18,765 staff reported in 2009/10: further data cleaning during the year has led to some minor changes in the dataset.

The following chart shows the proportion of part-time male and female staff in each Executive Agency.

Part-time Staff by Agency and Sex

Female staff were significantly more likely to be in lower Pay Bands. Just over a quarter of staff in the SCS and Feeder Pay Bands were female (26.0% and 26.6% – 46 and 328, respectively), whereas 42.3% (6,964) of staff in the remaining Pay Bands were female.

The following chart shows the proportion of female staff in each Pay Band by Executive Agency. For the purpose of this report, SCS staff in the Executive Agencies have been included with the SCS staff in DfT(C).

Female Staff by Agency and Pay Band

3.3 Race

8.5% (1,515) of staff were of unknown or undeclared race. This was significantly lower than the previous year (10.6%).

Of the staff who had declared their race, 5.7% (935) had identified themselves as being from a Black or Minority Ethnic (BME) group compared with 6.2% (1,032) in 2009/10. This change in the proportion of BME staff was not statistically significant.

BME staff were not distributed evenly across DfT: GCDA had the highest proportion of BME staff (19.0%), and DVLA had the lowest proportion (2.4%).

These differences can be partially explained by the fact that the Executive Agencies are based in different parts of the country, with a different racial mix making up the local populations. The majority of GCDA staff were based in London, which has a much higher BME population than Swansea, for example, where most of DVLA's staff were based.

The proportion of BME staff in DfT(C), DSA, DVLA, VOSA and the Traffic Officer Service in HA was significantly lower than the proportion of BME people in the relevant local working-age populations.

For VOSA and DSA, many individual locations did not have a significantly different race profile than the local working-age population; only when all the Agency locations were analysed as a whole was the difference significant.

The following chart shows the proportion of BME staff in each Executive Agency.

BME Staff by Agency
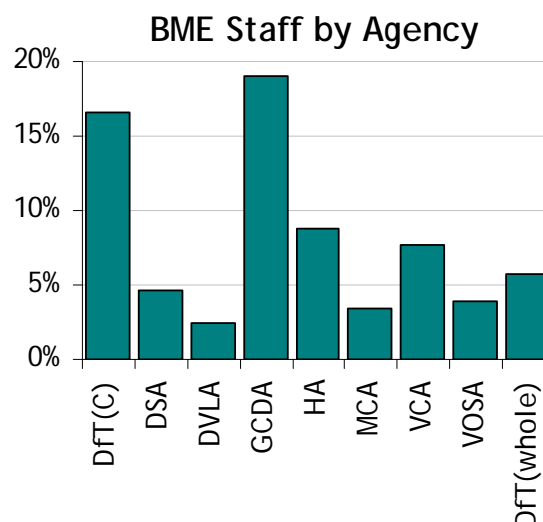
Overall, across DfT, the proportion of BME staff in the Feeder Pay Band was not significantly different from other Pay Bands.

Of those who had declared their race, 3.2% of SCS staff had identified themselves as BME, as had 7.3% and 5.6% of staff in Feeder and remaining Pay Bands.

The following chart shows the proportion of BME staff in each Pay Band by Executive Agency.

BME Staff by Agency and Pay Band
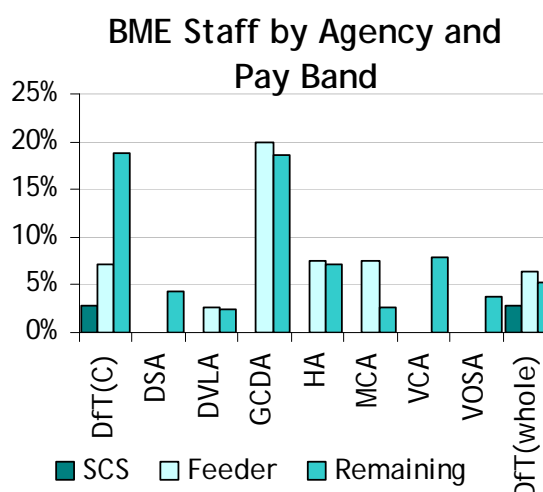
In some individual parts of DfT, there were more BME staff in lower Pay Bands than expected (DfT(C), VOSA and within both the Traffic Officer and non Traffic Officer Service in HA). In this context

Pay Bands were considered in more detail than the broad groups described above. Further details can be seen in the individual Executive Agency reports.

3.4 Disability

2,314 staff had an unknown or undeclared disability status (13.0%); similar to the previous year (13.2%).

The following chart shows the proportion of staff who had declared themselves disabled and the proportion that had no known disability status (undeclared or those that stated they preferred not to say) in each Executive Agency.

Disability Status by Agency
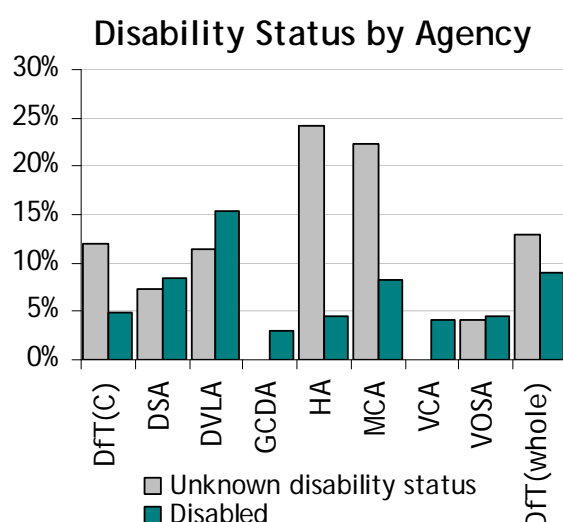
Of the staff who had declared their disability status, 10.4% (1,621) had indicated that they were disabled. This is not a statistically significant increase from 9.8% (1,599) in 2009/10.

The highest proportion of disabled staff was in DVLA, where 17.4% of those who had declared their disability status had indicated that they were disabled. The lowest proportion of disabled staff was 3.0% in GCDA.

Although the DVLA figure does seem unusually high, part of the explanation might be that Swansea (where most DVLA staff were based) has a particularly high proportion of disabled

people in the local working-age population[3] (25.0% compared with the national figure of 20.0%).

In DfT and in each separate part of the department, there were fewer disabled staff than expected, compared with the local working-age populations.

The proportion of disabled staff varied across the Pay Bands. Only 5.0% (54) of staff in the Feeder Pay Bands (who had declared their disability status) were disabled, significantly fewer than would be expected, compared with 10.9% (1,562) of staff declaring themselves disabled in the remaining Pay Bands. 3.3% (5) of the SCS declared themselves to be disabled.

The proportion of disabled staff working part time was significantly greater than non-disabled staff, with 22.9% (371) of disabled staff working part time, compared with 15.2% (2,116) of non-disabled staff.

3.5 Religion and Belief

The religion and belief status of nearly three quarters of staff (13,294) was unknown.

Of the staff who had declared their religion and belief status, 81.5% (3,723) indicated that they held a belief.

3.6 Sexual Orientation

Nearly two thirds of staff (64.9%, 11,601 staff) had an undeclared sexual orientation status.

Of staff declaring their sexual orientation, 2.9% (180) declared themselves to be lesbian, gay or bisexual.

---

[3] For the disability status of the working-age populations, the definition of disabled includes both those with a disability covered by the Disability Discrimination Act and those with a work-limiting disability.

3.7   Job Type

Executive Agencies were asked to provide information on their staff's job types.

Analysis by job type is a powerful way of understanding the differences in staff diversity across DfT, and many of the individual Executive Agency reports include analysis within job type.

The following table shows how each diversity group was distributed throughout the different job types (ordered by percentage of female staff).

	% Female	% BME	% Disabled
DSA Support	91.4%	0.0%	0.0%
DVLA Operational	63.7%	2.7%	17.7%
VOSA Non-technical	59.9%	4.9%	5.0%
DSA Admin	56.7%	4.6%	14.1%
DVLA Non-operational	56.5%	1.2%	15.7%
MCA Administrator	53.4%	2.7%	12.8%
VCA Admin	41.4%	8.2%	5.7%
HA Asset	39.7%	12.6%	7.8%
DfT(C)	36.1%	13.7%	4.8%
GCDA Non-industrial	28.0%	14.3%	10.0%
MCA Coastguard	22.6%	0.4%	9.2%
DSA Examiner	18.6%	4.7%	7.4%
HA Traffic	16.1%	4.2%	4.0%
VCA Engineers	8.2%	6.9%	1.6%
GCDA Industrial	5.4%	20.3%	1.1%
VOSA Technical	5.3%	3.3%	4.5%
MCA Marine Surveyor	3.7%	13.1%	9.3%

Females were more likely to occupy office-based jobs – support / administrative / process roles and less likely to be found in engineering/technical roles.

The proportions of BME staff and disabled staff varied considerably by job type. Some variation is likely to arise from non-declaration. Non-declaration may be due to staff unwilling to make a declaration or the Executive Agency not providing sufficient encouragement to staff to declare.

The analysis undertaken for each Executive Agency indicated that in most locations the proportions of BME staff were reflective of the local working-age population. For job types that require a high level of expertise/training, sex/race/disability proportions may be less dependent on local working-age populations and more related to the wider population with the required skills.

Some variation in the disability across job types is probably due to some job types being less attractive to people with some kinds of disability.

3.8   Age

Overall, the Department has a workforce that tends to be older than the people in the local working-age populations – nearly two-thirds of staff (64.5%) were aged 40 years or older and only 3.4% (608) of staff were under 25 (of which, the majority were in DVLA (388)).

Staff Age Distibution
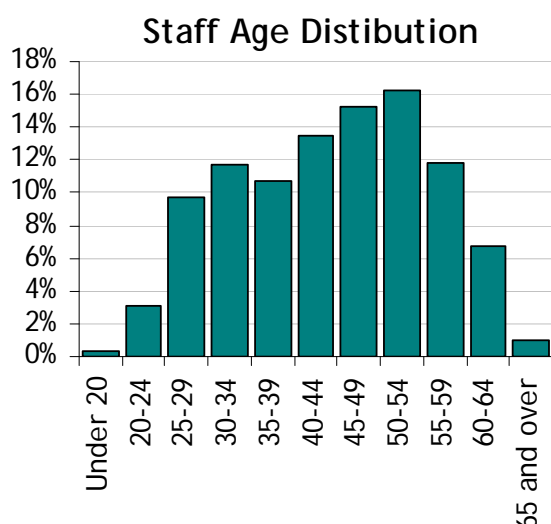
A higher proportion of males than females were 55 years or older – 23.9% of male staff and 13.3% of female staff.

In three Executive Agencies over a third of male staff were 55 years or older: GCDA (38.4%), DSA (37.2%) and MCA (34.1%).

Staff Age Distibution by Sex
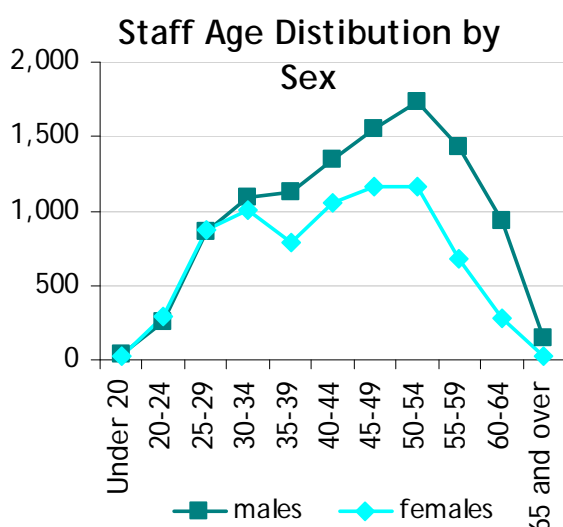
Analysis was performed on other age categories; 25 years and over, 40 years and over, and 55 years and over. It was found that there were significantly fewer female staff among each of these age groups, implying that the age demographic of female staff is younger than that of male staff.

Similarly, there were significantly fewer BME staff than expected aged 55 years and over (13.4% of BME staff and 20.0% of white staff).

A significantly higher proportion of disabled staff (23.0%) than expected were 55 years or over, compared with non-disabled staff (19.7%).

In general, younger staff tended to be in the lower Pay Bands compared with the higher Pay Bands in each Executive Agency.

3.9   Recruitment

A Civil Service-wide recruitment freeze came into effect in May 2010. As a result, numbers of applicants were lower than in the previous year.

From the recruitment data collected, 5,721 applications were received in response to campaigns advertised within and outside DfT, and 440 staff (new or existing) appointed across DfT.

The majority of appointments (71.4%, 314 staff) were to posts at DVLA. DSA made 41 appointments and all the other Executive Agencies made fewer than 30 appointments each. GCDA had no recruitment during the year.

Diversity analysis of applicants was limited due to small numbers and low declaration rates. Where analysis was possible, the following were significant (compared with the local or GB working-age population):

• fewer female applicants than expected (DSA, MCA, VCA);

• more BME applicants than expected (DSA); and

• more non-disabled applicants than expected (DSA, DVLA, VOSA);

Across the DfT family, where analysis was possible, there was no consistent

pattern of success for any particular equality group throughout the recruitment process.

3.10 Cessations

DfT(C) and a number of Executive Agencies undertook restructuring and offered voluntary exit schemes during the year, some of which were partially complete by 31st March 2011. Please refer to the reports produced by the DfT(C) and its Executive Agencies for fuller details.

In total, 1,475 staff left DfT - 7.9% of those who had been in post at the beginning of the year (similar to the cessation rate in the previous year – 7.4%).

A significantly higher proportion of leavers were part-time (21.7%) than expected, compared with the proportion of part-time staff in post (15.7%).

Overall, across DfT, there was no other significant difference in the equality characteristics of leavers and staff in post, although less information was held about leavers than those remaining in post.

In some individual parts of DfT, there were significant differences in the characteristics of leavers compared with staff in post:

- leavers had a older age profile (most Executive Agencies, due to retirement);

- more female leavers than expected (HA and VOSA); more male leavers than expected (DVLA);

- fewer BME leavers than expected (DfT(C) and the Traffic Officer Service in HA), and more BME leavers than expected (DSA).

3.11 Performance Management

As DfT(C) and its Executive Agencies operate different systems, it was not possible to consolidate and analyse the performance management data as a whole.

However, for each Executive Agency that had performance management marking, the proportion of staff achieving the highest (or higher) marks was analysed by equality group.

There were some differences between equality groups, although no consistent pattern across the Executive Agencies.

For individual reports, the most common differences found were in job type, pay band and sickness absence.

In most Executive Agencies, the proportion of staff receiving the top performance mark varied by job type (which varied with equality groups) and with pay band.

In DfT(C) and several of the Executive Agencies, there was evidence to suggest that staff that had had sickness absence were less likely to have received top performance marks.

Additionally, there were differences by race, age and sex at some Executive Agencies:

- BME staff were less likely to have achieved the highest performance mark (consistently achieves all requirements) than their colleagues (DSA);

- female staff were more likely to have achieved a higher mark than male staff (DVLA); and

- younger staff were more likely to have received an "exceeded" mark than older staff (DfT(C)).

Please refer to the reports produced by the DfT(C) and its Executive Agencies for fuller details.

3.12 Learning and Development

For DfT overall, 32,029 days of training and development were recorded: an average of 1.8 days per staff member.

The training analysed here only includes training booked and recorded centrally. Therefore it is likely that recorded training understates the total amount of training actually undertaken.

All reference to "training" in this chapter means recorded training as described above.

3.12.1 Total amounts of training

For DfT as a whole, significant differences were seen in the total amounts of training by sex, working pattern, disability status and age:

- Female staff recorded, on average, significantly fewer days training compared with male staff;

- Disabled staff recorded, on average, significantly fewer days training compared with non-disabled staff;

- Younger staff recorded, on average, significantly fewer days training compared with older staff.

It is likely that the amount of training recorded is linked with job type, which varies between equality groups and is specific to Individual Executive Agencies.

3.12.2 Staff with Training

For all individual reports except DfT(C), the analysis of whether staff had undertaken training or not was performed separately for each job type, since

training requirements appear to differ by job type.

Across all of the DfT family and the job types analysed, pay band was a significant factor relating to training. In general, staff in lower pay bands were more likely to have had recorded training than staff in higher pay bands.

Age was a factor in whether or not staff had undertaken training for five of the Executive Agencies (DSA, DVLA, HA non-Traffic Officer Service staff, MCA coastguards and VOSA non-technical staff), with younger staff more likely to have had training.

Full-time staff were more likely to have had training compared with part-time staff in most Executive Agencies (DSA examiners, DVLA, HA non-Traffic Officer staff, MCA coastguards, VCA admin staff and VOSA).

In DfT(C) and the HA non-Traffic Officer Service, female staff were more likely to have had training than male staff. The opposite was true for MCA coastguards.

For HA Traffic Officer Service staff, sickness absence was the most important factor, with staff who had sickness absence less likely to have had training compared with staff who had no absence. This was also true for DSA driving examiners.

For staff in the HA non-Traffic officer Service, white staff were less likely to have had training compared with their colleagues (BME staff and those of unknown race).

3.13 Grievance cases

A total of 138 grievance cases were recorded.

- 36.6% (49) came from females,
- 11.8% (15) from BME staff,

- 26.1% (30) from disabled staff, and

- 11.9% (16) from part-time staff

(In each case there were a number of unknowns, so proportions are of those for whom data was available).

There were more grievance cases involving disabled staff than expected. However, none of the other proportions were significantly different from the proportions of staff in post in each equality group.

3.14 Discipline cases

The disciplinary procedure was invoked for 211 members of staff. Of these:

- 28.4% (60) were against females,

- 10.0% (19) were against BME staff,

- 16.1% (29) were against disabled staff, and

- 11.4% (24) were against part-time staff.

(The percentages were based only on staff for whom race or disability status were known).

There were more discipline cases involving male staff than expected but none of the other proportions were significantly different from the proportions of staff in post, in each equality group.

3.15 Sickness Absence

Like other aspects of the reports, the sickness absence reported applies to staff who were in post at the end of 2010/11, excluding staff on long term leave (except for staff on long term sick who are included in the analysis). Data presented here does not precisely match the official sickness absence figures reported quarterly to the Cabinet Office, which should remain the official source. The main difference with the Cabinet Office returns is that no adjustments for

available working time have been made – e.g. staff who have worked for less than the full year.

Sickness absence was not recorded in exactly the same way across the DfT family, so an overall DfT analysis of days taken has not been possible.

However, an analysis of whether staff had had sickness absence or not was performed across DfT, together with an analysis of the amount of absence for those staff who had been absent within individual Executive Agencies.

3.15.1 Staff with Sickness Absence

The analysis of likelihood of having had sickness absence indicated that for DfT overall, female staff, disabled staff and staff under 40 years were more likely to have had some sickness absence compared with their colleagues (male staff, non-disabled staff and staff 40 years or over, respectively).

For most individual equality monitoring reports except DfT(C), the analysis of likelihood of having sickness absence was undertaken separately for each job type, as sickness absence appeared to vary by job type.

Aside from job type, pay band was an important factor relating to sickness absence across most of the DfT family (DfT(C), DSA, DVLA, HA, MCA, VOSA). Generally, staff in higher pay bands were less likely to have had sickness absence than those in lower pay bands.

The factors identified for DfT overall were also commonly identified at an individual Executive Agency level. In particular, in most Executive Agencies female staff were more likely to have had sickness absence (DSA, DVLA, GCDA, HA, MCA coastguards, VOSA) as were disabled staff (DfT(C), DSA, DVLA, HA

and VOSA). Age was a factor in five of the Executive Agencies, in all but one younger staff were more likely to have had sickness absence (DSA, DVLA, HA Traffic officer Service and VOSA) and the opposite was true at VCA.

In addition, at GCDA and HA non-Traffic Office Service, full-time staff were more likely to have had sickness absence than part-time staff.

3.15.2 Amount of sickness absence

For the individual reports, analysis was carried out on the amount of sickness absence for those staff who had been absent.

Across most of the DfT family (DfT(C), DSA, DVLA, HA, VOSA), the disabled staff who had been absent due to sickness had been absent for longer than expected. The only other diversity characteristic that was a factor in the amount of sickness absence taken was age (DSA, DVLA, HA). Older staff who had been absent due to sickness had been absent for longer than expected, compared with younger staff.

Chapter 4: Next Steps

The analysis in this report is a summary. The more detailed individual monitoring reports will enable the Department for Transport to identify areas of good practice and those in need of improvement.

The next steps will be for DfT(c) and each of the Executive Agencies to take action and develop appropriate objectives to address issues of under-representation and progression, work to attract a wider pool of talent, act on relevant feedback from staff engagement surveys and improve declaration rates.

As a result of these measures we aim to attract, retain and develop a workforce which reflects the customers we serve.

Annex A: Notes on Data

A.1   Working-age populations

A.1.1 Reporting locations

To compare the diversity of staff in post with local working-age populations, we attached each building where staff were located to a Reporting Location, e.g. London, Swansea, etc. This means that all of the staff based in London, for example, were considered as being in one location, irrespective of which part of London they were located in.

For each Reporting Location we identified a catchment area and generated local working-age population figures based on data for that catchment area.

A catchment area would typically include the relevant Local Authority area for the Reporting Location, plus neighbouring Local Authorities, as agreed with each Agency. For the London Reporting Location, we used the working-age population of all the London boroughs as well as those counties that border them.

A.1.2 Data sources

The UK population data at Local Authority[4] level is from the **Annual Population Survey (APS).** This survey is a combined survey of households in Great Britain, updated quarterly and available at Local Authority level and above. It is a residence-based labour market survey which includes population and economic activity, broken down by sex, age, race, industry and occupation[5] .

The majority of DfT agencies have staff based only in Great Britain, but the Maritime and Coastguard Agency (MCA) also has staff working in Northern Ireland. In previous years, data for Northern Ireland was taken from the **Northern Ireland Labour Force Survey (NI LFS)**; however, this year, this data was also available as a part of the APS dataset.

Where a nationwide population comparison was required, for all agencies other than MCA, the GB working-age population (i.e. not including Northern Ireland) was used. For MCA, the UK working-age population was used.

APS data used in the 2010/11 Equality Monitoring reports was based on the one year period October 2009 - September 2010, and downloaded from www.nomisweb.co.uk ("Nomis") on 23rd May 2011.

A.1.3 Population

Population data at local authority level from the APS was combined with **mid-year** (30 June) **population estimates** for 2009 – the most recent year available. These were also available at Local Authority level and were based upon results from the 2001 Census with allowance for under-enumeration. These figures covered the entire population, not

---

[4] Local authorities including County Councils rather than District Councils.

[5] Further information on the survey can be found at http://www.ons.gov.uk/ons/about-ons/who-we-are/services/unpublished-data/social-survey-data/aps/index.html

just the working-age population, so to estimate the working-age population we took the number of males and females aged 15-64 years[6] (only five year age bands were available).

A.1.4 Disabled status

The APS asks respondents whether they are currently DDA disabled, work-limiting disabled, both DDA disabled and work-limiting disabled, or not disabled. For this report, we have combined data on DDA disabled, work-limiting disabled, and both DDA and work-limiting disabled to calculate proportions of the working-age populations that are disabled.

Northern Ireland disability statistics from the NI LFS were obtained via Nomis.

A.1.5 Race

APS data was available for the following ethnic groups:

- Mixed;

- Indian;

- Pakistani/Bangladeshi;

- Black/Black British; and

- Other.

For our analysis we have combined all the above into a single BME category.

A.1.6 Sickness absence data

For DfT(C) and all Agencies, data was available on the number of days of recorded sickness absence for each member of staff, with one record per incidence.

Working pattern

No adjustment has been made to absence records for part-time staff. The analysis has been performed on the number of days absent (i.e. how many days of work were recorded as missed).

If the analysis suggests that part-time staff had significantly more sickness absence, then we can be confident that this finding is correct. i.e. we are saying that they were absent for more actual calendar days than other staff- not making any allowance for the fact that they may have been due to work fewer calendar days in the first place.

Conversely all being equal, we might expect part-time staff, say, working three days a week to have a lower chance of being ill on any given standard work day than full-time staff, so the reverse result (part-time staff having significantly less absence) may not be relevant.

---

[6] Please note that as of August 2010, the official definition of "working age" expanded to include both males and females aged 16-64 years old; this reflects a planned change in the female state pension age. All have been included in our working-age populations.

Annex B: Analytical Approach

In the individual Agency Reports two statistical approaches have been used to test for differences in the data: univariate methods such as chi-squared and proportions tests and multivariate methods such as multiple regression and logistic regression.

B.1   Univariate methods Chi-squared and Proportions tests

These tests were employed to test whether the proportion of staff by each diversity grouping was significantly different from that found within the local working-age population. For example, in considering whether the sex split of the staff based in a location would have been expected - all things being equal. They were also used to investigate recruitments to check if the proportion of candidates by each diversity grouping was significantly different from that of the local working-age population.

The results of these statistical tests give an indication of whether the pattern observed in the data was "significantly different from what would have been expected" or conversely whether any difference in proportions could be explained by natural variation.

For example, in the case of the working-age population, if there had been 100 staff, and 40 of them were male, and the local working-age population was split 50:50, the tests would tell you whether your group was statistically different from any random sample of 100 from the working-age population.

For these tests we used the 95% confidence level. This means that if we have reported a difference as being significant there was only a 5% chance that the difference could have occurred by chance. We have also reported on differences that were significant at the 99% level – i.e. a 1% chance that the differences would have occurred randomly.

A certain amount of variation is expected, even with completely random samples, and so it should not be assumed that something that is statistically significant indicates that there is a bias – the significance only indicates the likelihood of something occurring given the level of significance being used. For example, a significant result at the 99% level would indicate something which is more unusual than something that is only significant at the 95% level.

One of the drawbacks of multiple univariate testing is that the more tests that are undertaken the higher the probability of finding false significant results. To reduce this risk, we have used the Bonferroni adjustment to the significance levels.

A further drawback with univariate approaches is that they do not take into account all of the other factors simultaneously. In practice an individual staff member has several characteristics: their sex, race, grade etc. In comparing just one of these characteristics with an outcome, the effect of another characteristic is not taken into account and results can be misleading. It is possible to use multi-dimensional contingency tables for chi-squared tests, but the interpretation of the results can be difficult.

It is still, however, an appropriate approach in many circumstances – particularly when the group of staff should be reasonably comparable with the rest of the population (e.g. staff ages compared with working-age population; or the sex split across pay bands).

B.2   Multiple Regression and Logistic Regression

Two techniques were used to analyse data taking into account several factors simultaneously: multiple regression and logistic regression.

Multiple regression attempts to predict a dependent variable (such as amount of sickness absence taken) using one or more independent variables (such as sex, age etc). The basic principle is to find the 'line of best fit' by minimising the sum of the squared distance from the fitted line to each observation. (This approach is sometimes referred to as ordinary least squares regression). The aim is to find independent variables that have a statistically significant relationship with the dependent variable.

Much of the data that was analysed had a simple binary output, for example, was in a pay band or not; obtained the top performance rating or did not; was selected for interview or was not etc. The staff data had descriptors such as sex, age, pay band etc. This type of data more easily lends itself to being analysed using logistic regression.

Logistic regression is analogous to ordinary least squares regression, with the exception that the dependent variable is binary (or can be made binary). In both approaches, the first step of the process, is for each characteristic to be tested in turn to see if it is significant against the outcome (e.g. passed a recruitment stage or not). By significant, we mean that a staff characteristic accounted for an unusually high proportion of the variation seen in the dependent variable. For example, if sex appeared to have a significant relationship with whether people had passed their interviews.

In this case we would say something was successful or significant in "explaining the variation", to mean that if you knew the characteristic of the staff member, you would have a better chance of predicting the outcome (for example if you knew the sex, you would also know something about the likely interview outcome). The starting assumption, of course, was that prior knowledge of someone's sex; race; age etc should not enable the model to predict whether they were more likely to have received the highest performance rating or were interviewed etc. Again, as with the univariate approach, significance does not necessarily equate to bias but gives the relative likelihood of it occurring.

The next step in the modelling process was to include the characteristic that explained the majority of the remaining variation after taking account of the first variable. This step was repeated until the variables outside the model could explain no further variation.

Generally an outcome could not simply be explained by a single characteristic. Often, it was several characteristics together that were important. For example, age, sex and race were quite often found to be a powerful combination in explaining variation. A major advantage of the multivariate approach, compared with univariate, is that it is easier to see the relative importance of the characteristics.

There was an element of judgment involved in deciding which variables to include. In some cases variables were highly correlated, e.g. sex and full time equivalence: females were more likely to be part-time than males. Where both were statistically significant and improved the amount of variation that could be explained, both were included.

Annex C: Tables and charts

C.1   Year on year comparison – all staff

Staff Type	March 31st 2010			March 31st 2011			% point change	% change from 2010
	2009/10	% of total	% of total declared	2010/2011	% of total	% of total declared		
All staff	18760			17,863				
Males	11006	58.7%	58.7%	10,525	58.9%	58.9%	0.3	-4.4%
Females	7754	41.3%	41.3%	7,338	41.1%	41.1%	- 0.3	-5.4%
White	15743	83.9%	93.8%	15,413	86.3%	94.3%	2.4	-2.1%
BME	1032	5.5%	6.2%	935	5.2%	5.7%	- 0.3	-9.4%
Unknown race	1985	10.6%		1,515	8.5%		- 2.1	-23.7%
Non-disabled	14693	78.3%	90.2%	13,928	78.0%	89.6%	- 0.3	-5.2%
Disabled	1599	8.5%	9.8%	1,621	9.1%	10.4%	0.6	1.4%
Unknown disability	2468	13.2%		2,314	13.0%		- 0.2	-6.2%
Full Time	16081	85.7%	85.7%	15,065	84.3%	84.3%	- 1.4	-6.3%
Part Time	2679	14.3%	14.3%	2,798	15.7%	15.7%	1.4	4.4%
Under 40	6973	37.2%	37.2%	6,347	35.5%	35.5%	- 1.6	-9.0%
40 and over	11787	62.8%	62.8%	11,516	64.5%	64.5%	1.6	-2.3%

C.2   Staff by Executive Agency and sex

	2009/10				2010/11			
	Male	Female	Female as % of Total	Total staff	Male	Female	Female as % of Total	Total staff
DfT(C)	1,311	743	**36.2%**	2,054	1,188	671	**36.1%**	1,859
DSA	1,822	790	**30.2%**	2,612	1,766	767	**30.3%**	2,533
DVLA	2,329	3,967	**63.0%**	6,296	2,318	3,860	**62.5%**	6,178
GCDA	249	25	**9.1%**	274	211	24	**10.2%**	235
HA	2,606	1,111	**29.9%**	3,717	2,520	1,013	**28.7%**	3,533
MCA	819	377	**31.5%**	1,196	766	340	**30.7%**	1,106
VCA	106	41	**27.9%**	147	107	41	**27.7%**	148
VOSA	1,764	700	**28.4%**	2,464	1,649	622	**27.4%**	2,271
DfT(whole)	**11,006**	**7,754**	**41.3%**	**18,760**	**10,525**	**7,338**	**41.1%**	**17,863**