

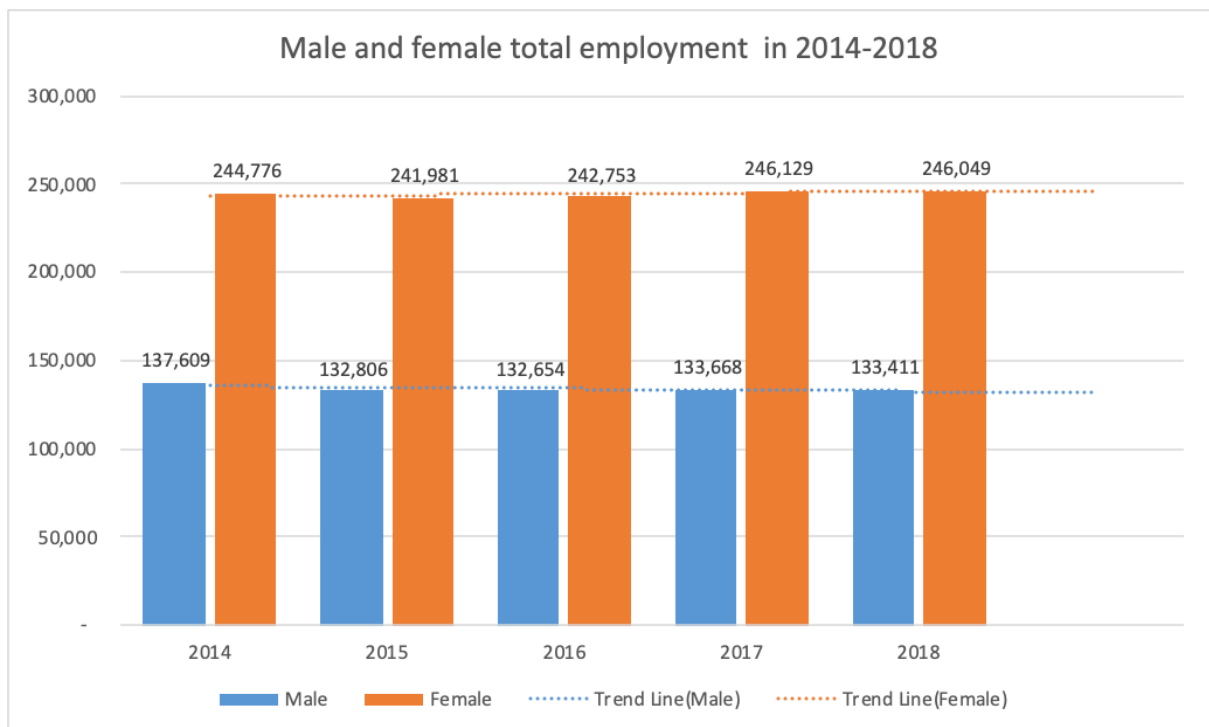
Data Analysis Case Study

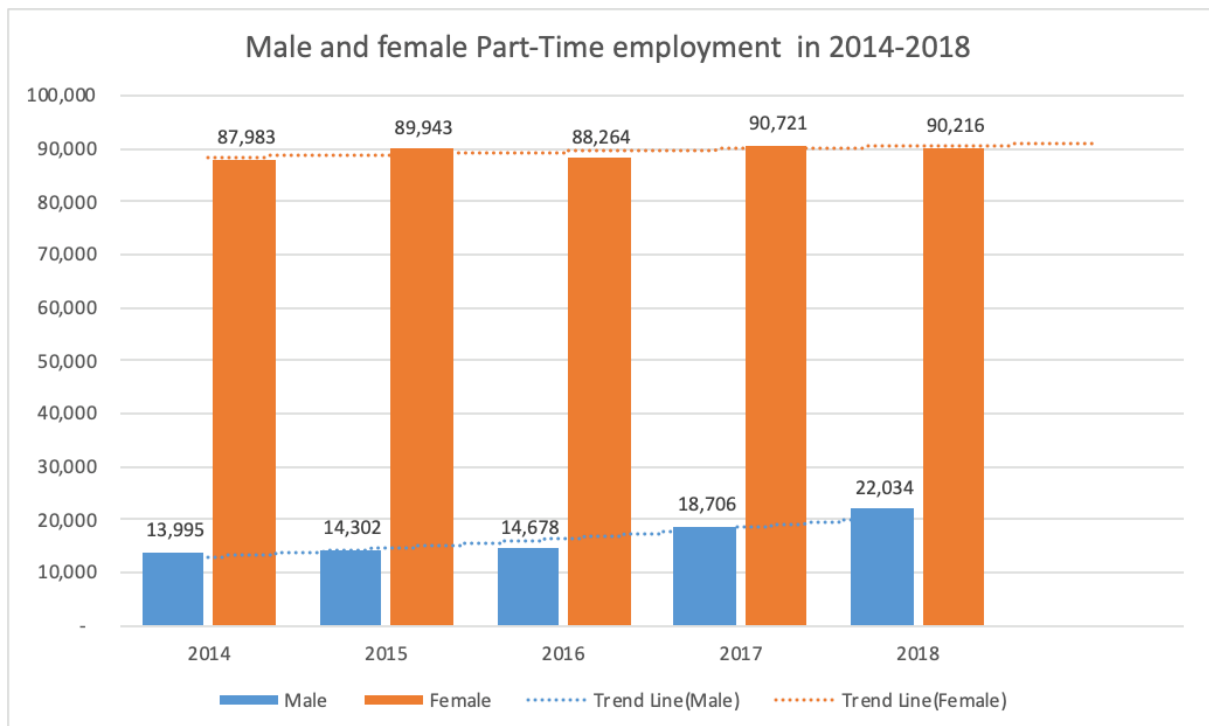
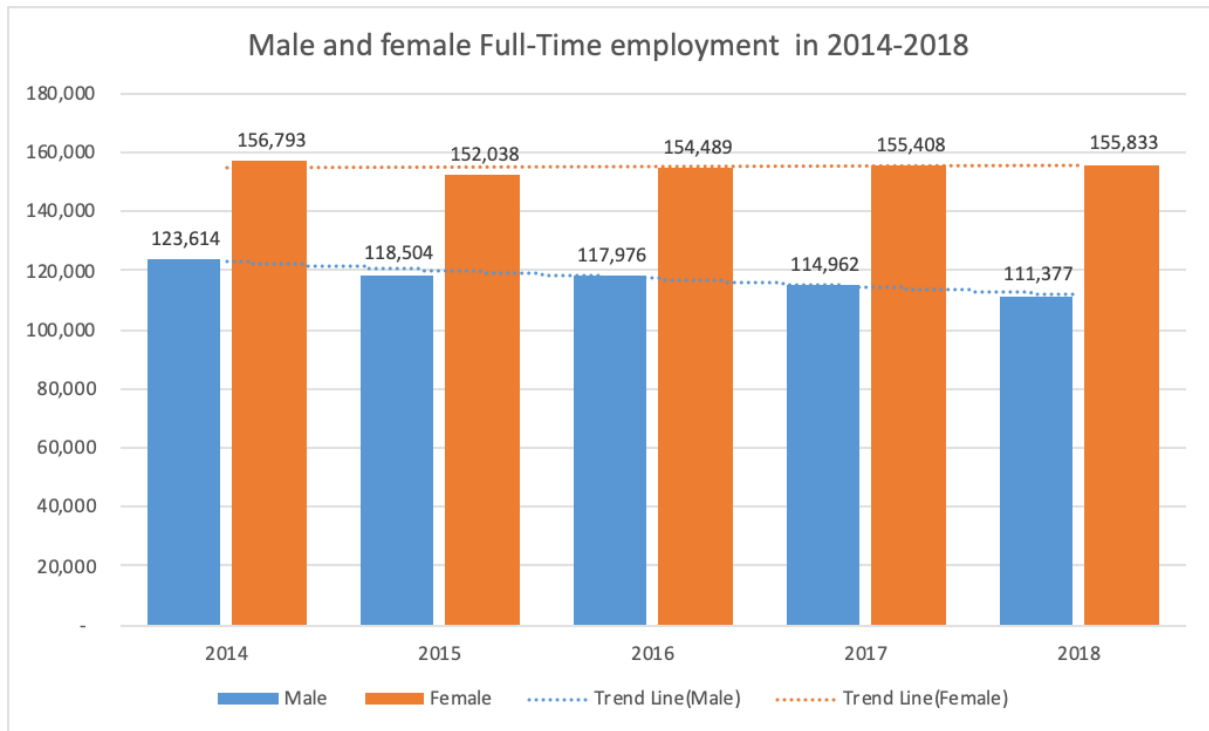
Part 1:

You have been asked to prepare analysis on part-time employees to brief your Director prior to a meeting they are attending with the Workforce Diversity Steering Committee to review whether part-time employment arrangements are increasing.

Please provide:

- Trends over time in male and female employment, including any notable changes





For sum of full-time and part-time, the male and female employment both have an overall smooth curve with only slight differences over time during 2014-2018. For full-time employment during 2014-2018, the male employment has a small decrease about 12,000, and female employment remain almost unchanged. For part-time, the male employment has a huge increase from 13,995 to 22,034, and female employment has rather smaller increase from 87,983 to 90,216.

- **The current representation of part time employees in the sector and in each Cluster**

We use IF function to compare part-time male and female employees and take the majority sexuality as the current representation in each Sector and each Cluster.

For example in Year 2018:

Section/Agency	Current Representation Sexuality
Education Agency 1	Female
Education Agency 2	Male
Education Agency 3	Female
Education Agency 4	Female
Family & Community Services Agency 1	Female
Family & Community Services Agency 2	Female
Family & Community Services Agency 3	Female
Finance, Services & Innovation Agency 1	Female
Finance, Services & Innovation Agency 2	Female
Health Agency 1	Female
Health Agency 10	Female
Health Agency 11	Female
Health Agency 12	Female
Health Agency 13	Female
Health Agency 14	Female
Health Agency 15	Female
Health Agency 16	Female
Health Agency 17	Female
Health Agency 18	Female
Health Agency 19	Female
Health Agency 2	Female
Health Agency 20	Female
Health Agency 21	Female
Health Agency 22	Female
Health Agency 23	Female
Health Agency 24	Female

Health Agency 25	Female
Health Agency 26	Female
Health Agency 27	Female
Health Agency 28	Female
Health Agency 29	Female
Health Agency 3	Female
Health Agency 30	Female
Health Agency 31	Female
Health Agency 32	Female
Health Agency 33	Female
Health Agency 4	Male
Health Agency 5	Female
Health Agency 6	Female
Health Agency 7	Female
Health Agency 8	Female
Health Agency 9	Female
Industry Agency 1	Female
Industry Agency 2	Female
Industry Agency 3	Female
Industry Agency 4	Female
Industry Agency 5	Female
Industry Agency 6	Male
Industry Agency 7	Female
Industry Agency 8	Female
Justice Agency 1	Female
Justice Agency 10	Female
Justice Agency 11	Female
Justice Agency 12	Female

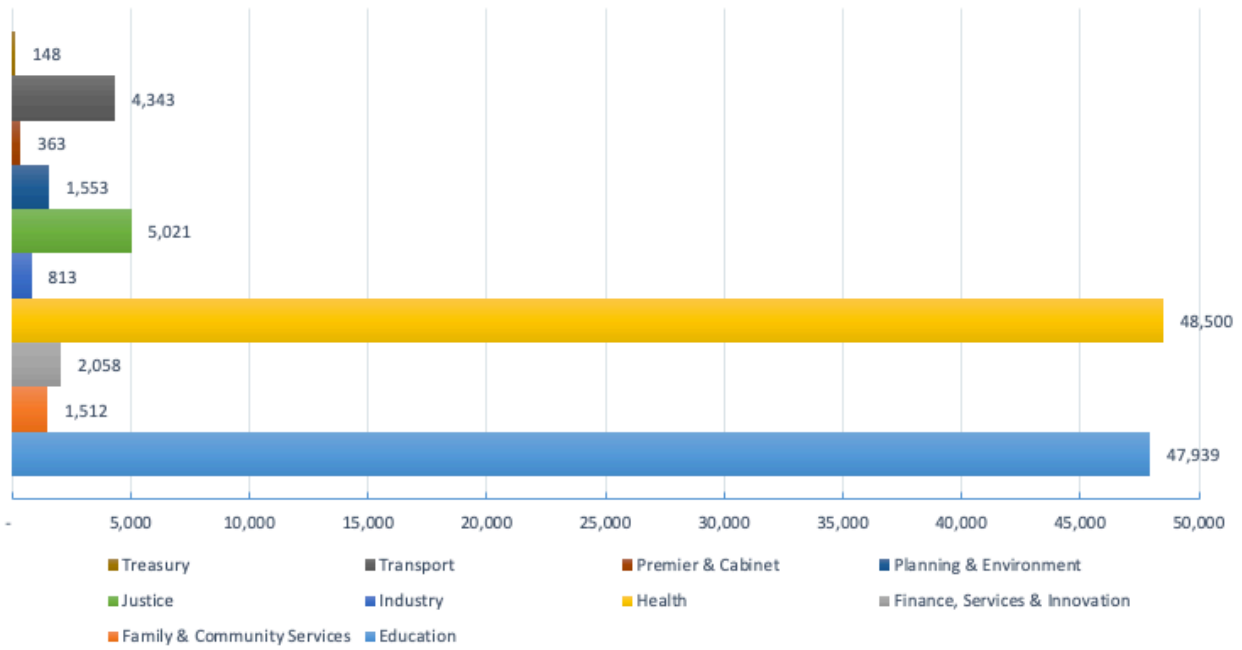
Justice Agency 13	Female
Justice Agency 14	Female
Justice Agency 2	Female
Justice Agency 3	Female
Justice Agency 4	Male
Justice Agency 5	Female
Justice Agency 6	Female
Justice Agency 7	Female
Justice Agency 8	Female
Justice Agency 9	Female
Planning & Environment Agency 1	Female
Planning & Environment Agency 2	Female
Planning & Environment Agency 3	Female
Planning & Environment Agency 4	Female
Planning & Environment Agency 5	Female
Planning & Environment Agency 6	Female
Planning & Environment Agency 7	Female
Planning & Environment Agency 8	Female
Premier & Cabinet Agency 1	Female
Premier & Cabinet Agency 10	Female
Premier & Cabinet Agency 11	Female
Premier & Cabinet Agency 2	Female
Premier & Cabinet Agency 3	Female
Premier & Cabinet Agency 4	Female
Premier & Cabinet Agency 5	Female
Premier & Cabinet Agency 6	Male
Premier & Cabinet Agency 7	Female
Premier & Cabinet Agency 8	Female

Premier & Cabinet Agency 9	Female
Transport Agency 1	Female
Transport Agency 2	Female
Transport Agency 3	Female
Transport Agency 4	Male
Transport Agency 5	Male
Transport Agency 6	Male
Treasury Agency 1	Female
Treasury Agency 2	Female
Treasury Agency 3	Female

For example in Year 2018:

Cluster	Current Representation Sexuality	Count(Male+Female)
Education	Female	47,939
Family & Community Services	Female	1,512
Finance, Services & Innovation	Female	2,058
Health	Female	48500
Industry	Female	813
Justice	Female	5021
Planning & Environment	Female	1553
Premier & Cabinet	Female	363
Transport	Male	4343
Treasury	Female	148

Part-Time Job Employees in 2018

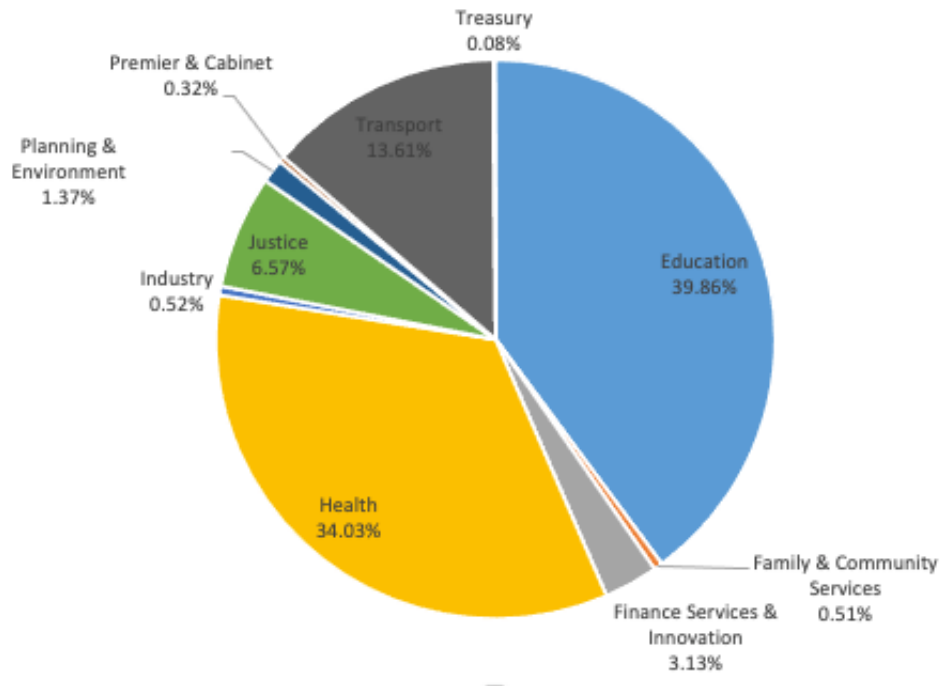


- The current representation of male and female part time employees as a proportion of the respective male and the female workforce in the sector and in each cluster

Male employees in 2018:

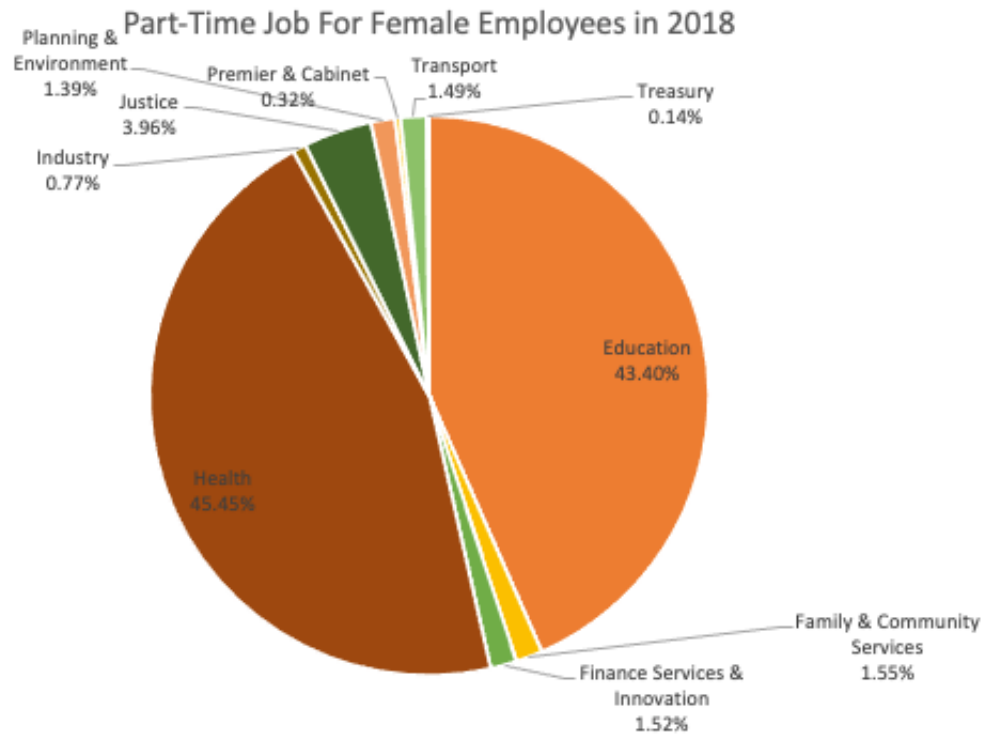
Cluster	Count
Education	8783
Family & Community Services	113
Finance Services & Innovation	690
Health	7498
Industry	114
Justice	1447
Planning & Environment	302
Premier & Cabinet	71
Transport	2998
Treasury	18

Part-Time Job For Male Employees in 2018



Female employees in 2018:

Cluster	Count
Education	39156
Family & Community Services	1399
Finance Services & Innovation	1368
Health	41002
Industry	699
Justice	3574
Planning & Environment	1251
Premier & Cabinet	292
Transport	1345
Treasury	130



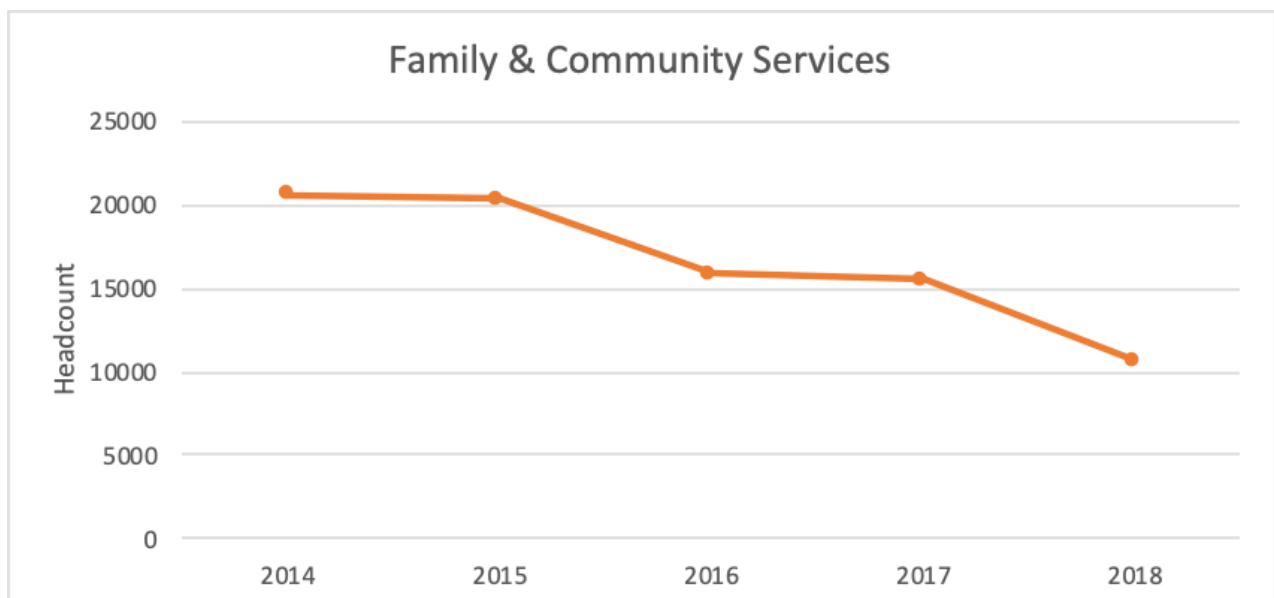
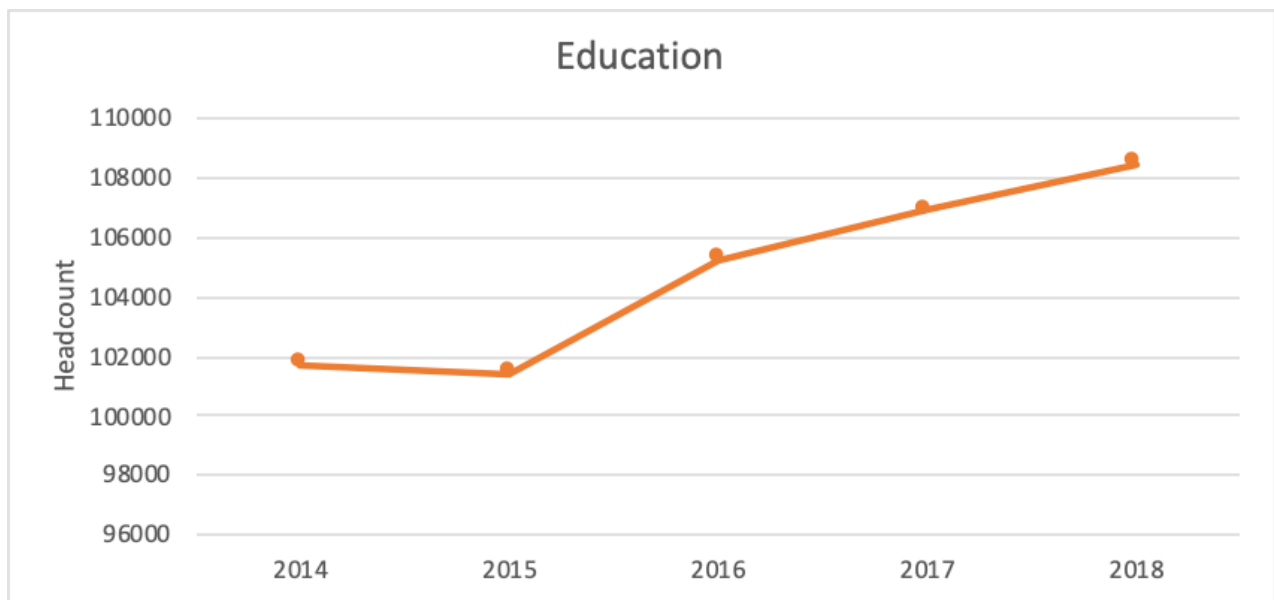
Gender	Part-Time Count (2018)	Percent(%)
Male	22034	19.629
Female	90216	80.371

- **Change in these two above statistics over the last 4 years**

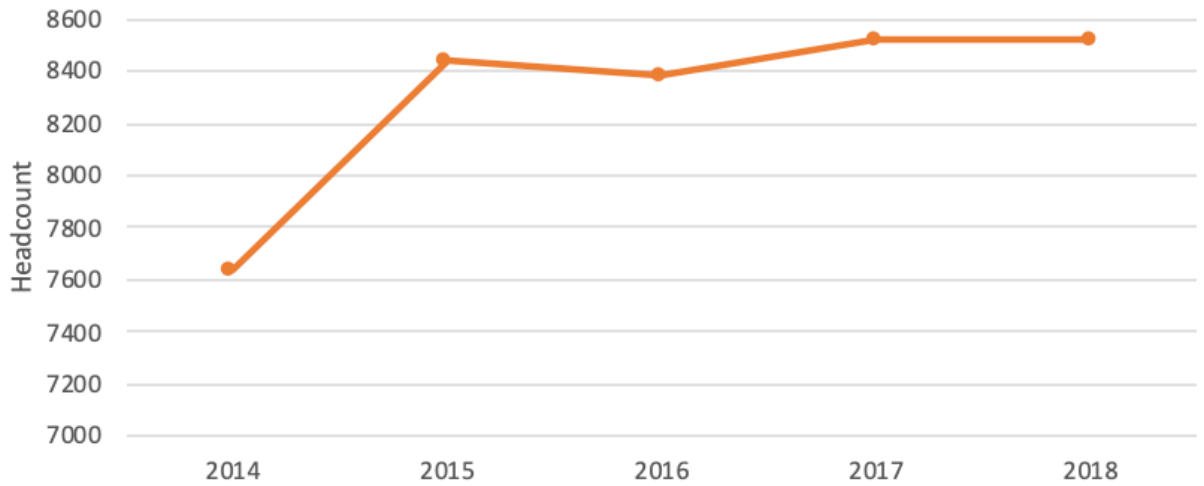
Cluster	Year	Headcount
Education	2014	101731
Education	2015	101430
Education	2016	105238
Education	2017	106928
Education	2018	108454
Family & Community Services	2014	20656
Family & Community Services	2015	20351
Family & Community Services	2016	15885
Family & Community Services	2017	15514
Family & Community Services	2018	10676
Finance Services & Innovation	2014	7638

Finance Services & Innovation	2015	8436
Finance Services & Innovation	2016	8383
Finance Services & Innovation	2017	8518
Finance Services & Innovation	2018	8518
Health	2014	135970
Health	2015	138087
Health	2016	139982
Health	2017	141911
Health	2018	146312
Industry	2014	28239
Industry	2015	17134
Industry	2016	16565
Industry	2017	16194
Industry	2018	12202
Justice	2014	44602
Justice	2015	45473
Justice	2016	45631
Justice	2017	46001
Justice	2018	47498
Planning & Environment	2014	9772
Planning & Environment	2015	9662
Planning & Environment	2016	9841
Planning & Environment	2017	10636
Planning & Environment	2018	10947
Premier & Cabinet	2014	2063
Premier & Cabinet	2015	2084
Premier & Cabinet	2016	2410
Premier & Cabinet	2017	2588

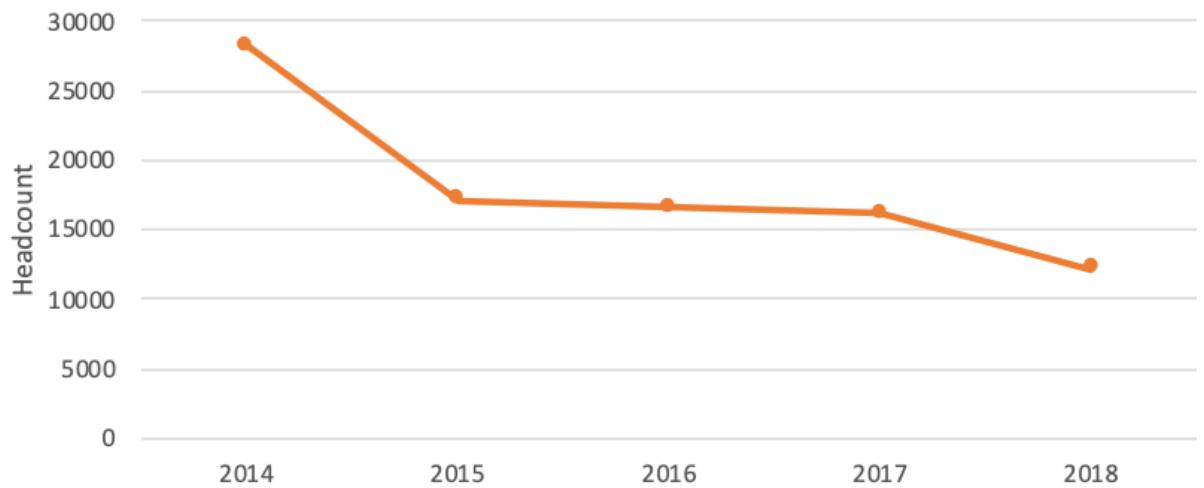
Premier & Cabinet	2018	2810
Transport	2014	29759
Transport	2015	30104
Transport	2016	29555
Transport	2017	30129
Transport	2018	30524
Treasury	2014	1955
Treasury	2015	2026
Treasury	2016	1917
Treasury	2017	1378
Treasury	2018	1519



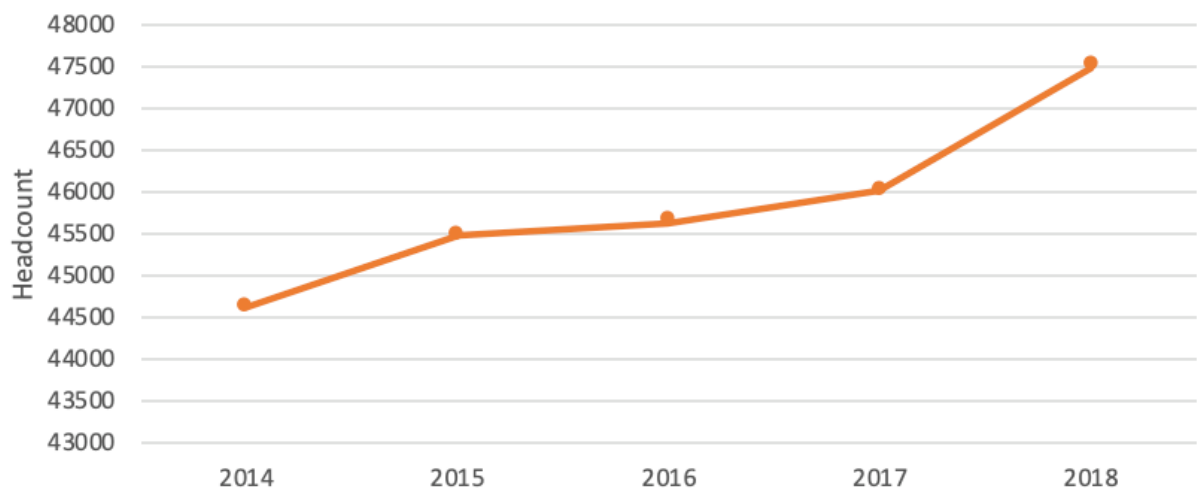
Finance Services & Innovation



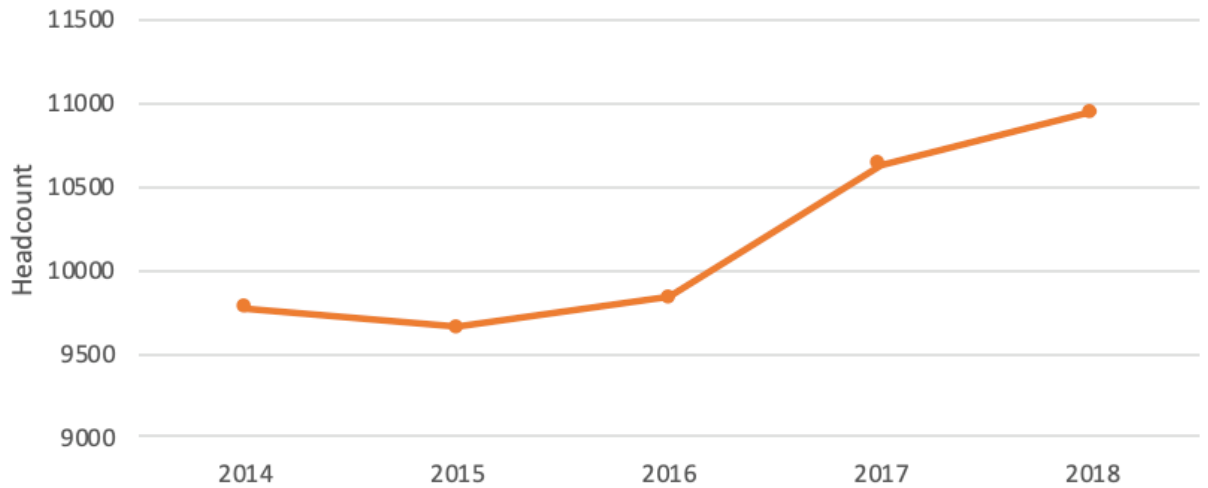
Industry



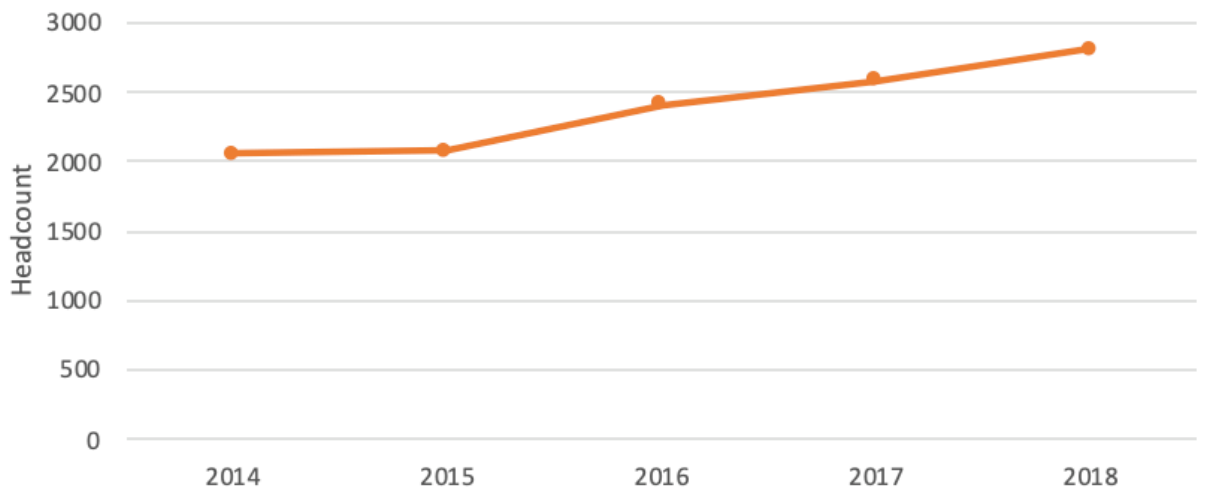
Justice



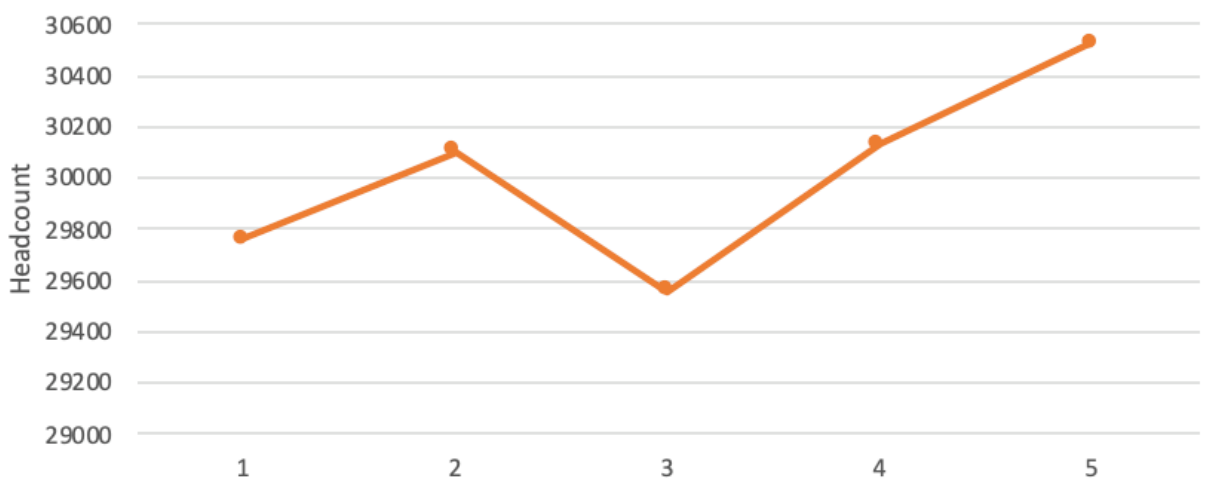
Planning & Environment

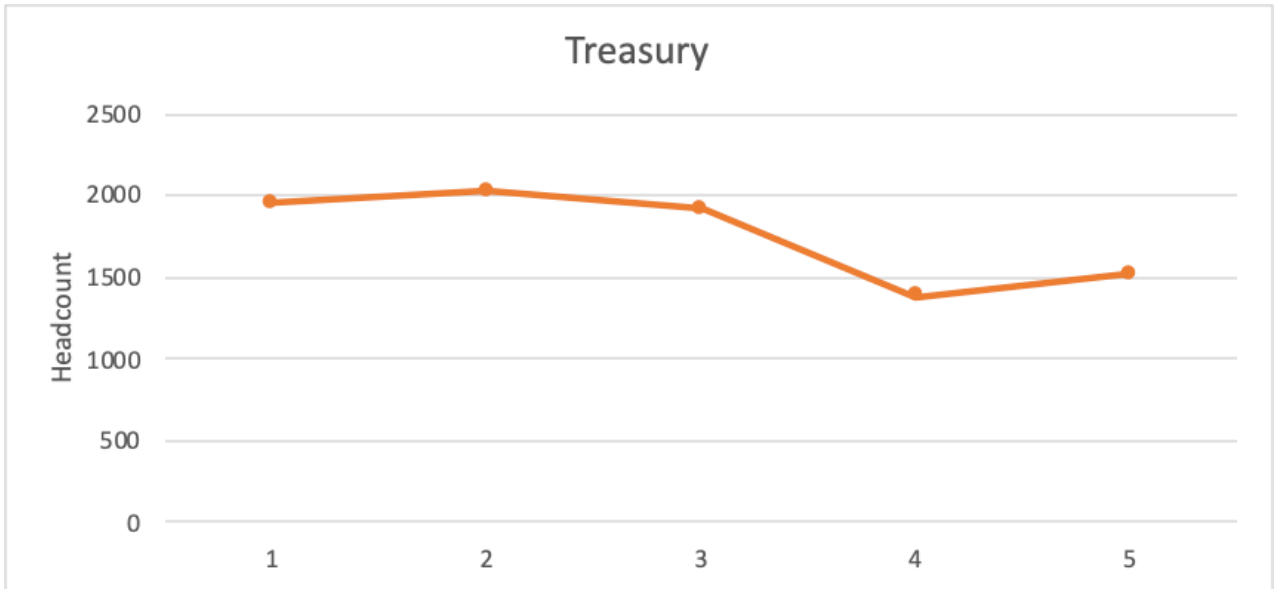


Premier & Cabinet

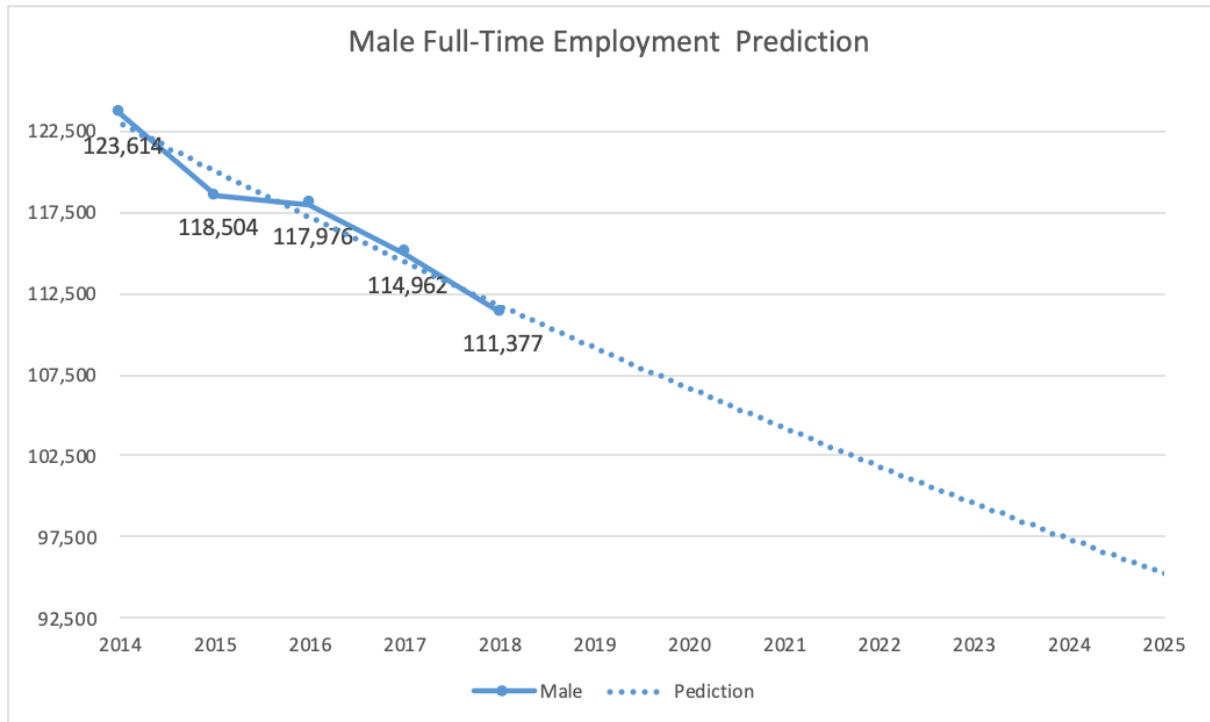


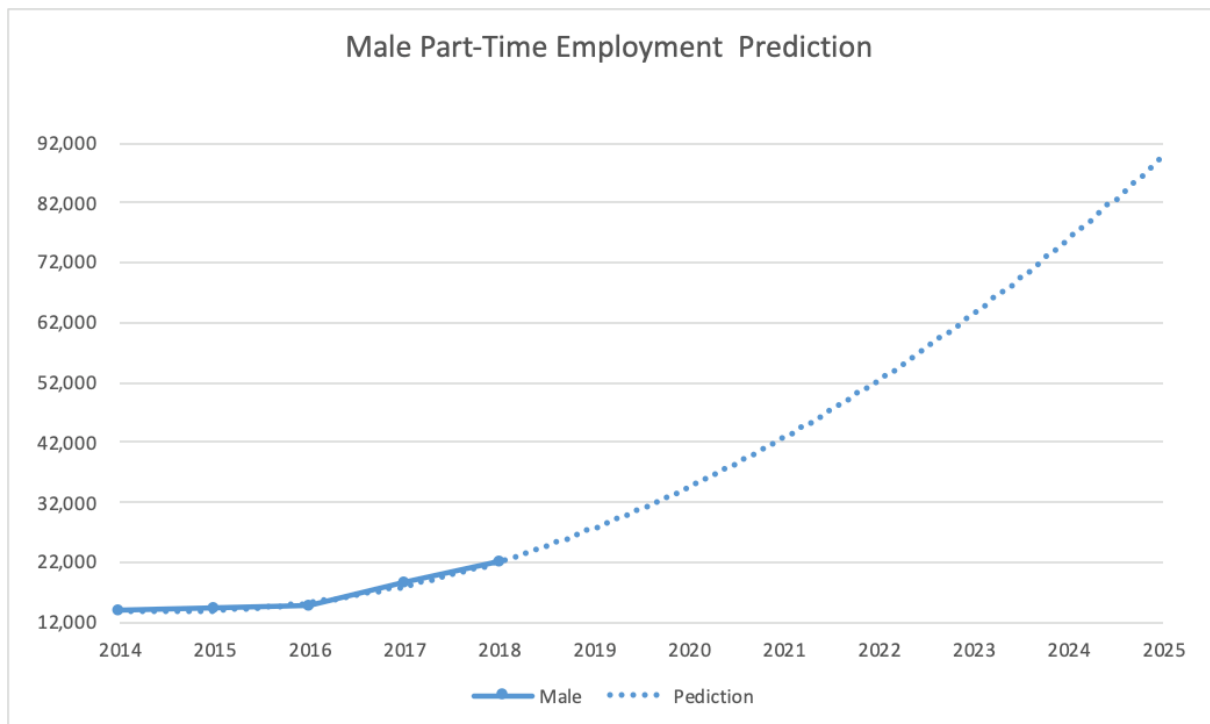
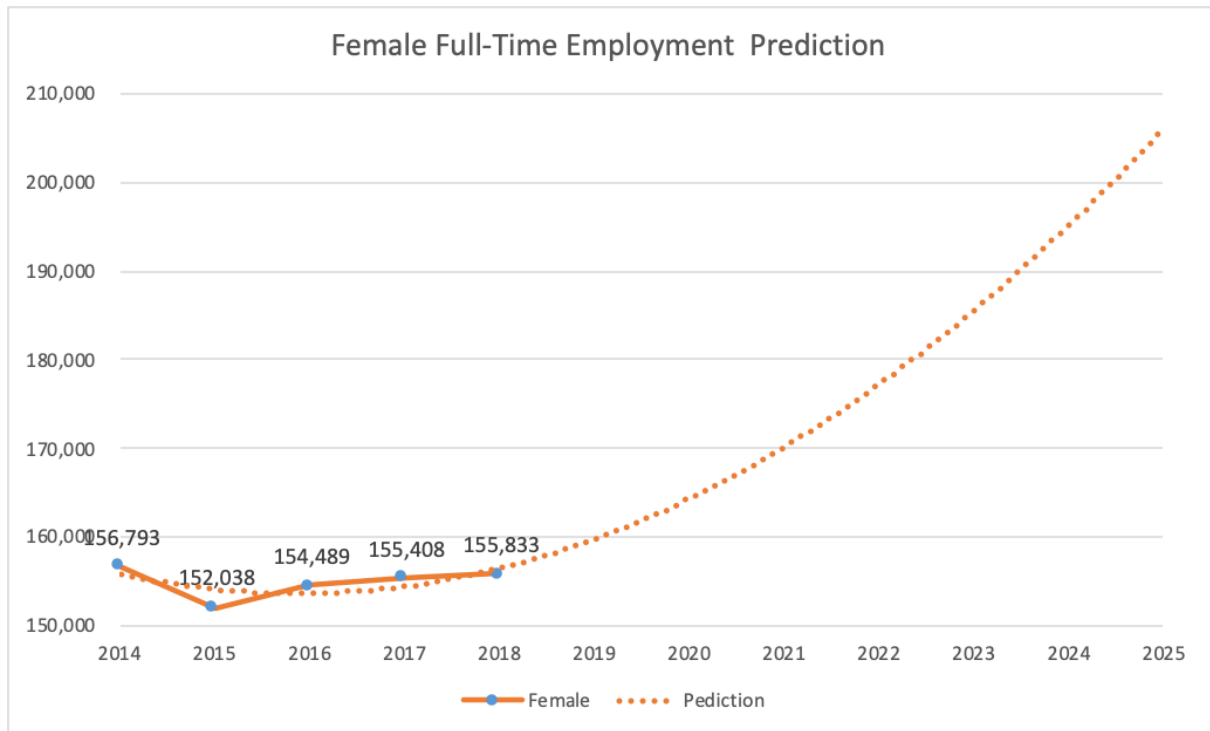
Transport

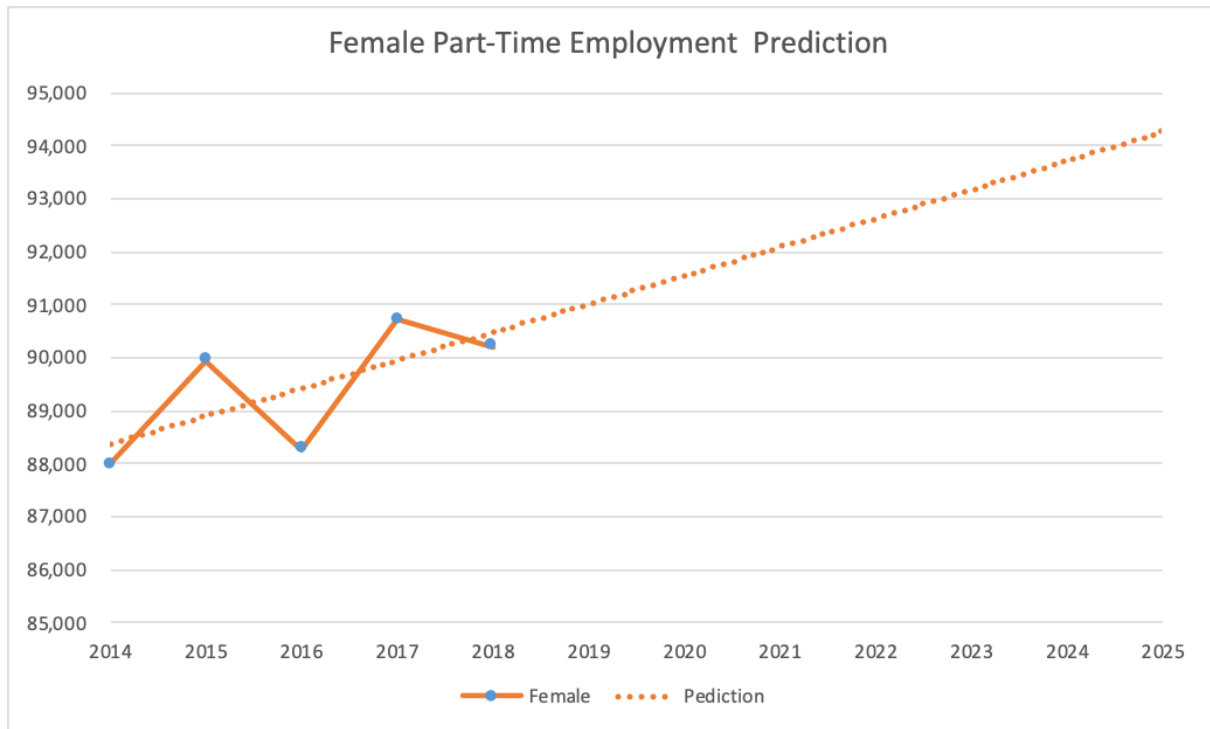




- Projection of what the representation will be by 2025 if the current trends continue







Part 2:

Please prepare a discussion paper (maximum 4 A4 pages of content or 6 presentation slides) of your analysis that would be suitable for a Director to use as a discussion aid in a meeting with senior executives. You must include tables or charts that illustrate your findings.

"This work has the potential to influence the direction of a sector wide target, so it needs to be of the highest quality ..."

We recommend you spend around 1 hour and 30 minutes on this task.