



Data Analysis for Individual Reports

Introduction

Data analysis for the reports can be done using the responses tab with Google Forms. Data analysis primarily consists of average responses. From here you can scroll down through a summary of responses, see individual questions, total responses and see each individual response from the survey.

Questions **Responses** 4

4 responses + ⋮

Accepting responses

Summary Question Individual

If you have read this information above and agree to participate in this climate survey please click 'agree' below, if not please click 'disagree' and you will exit the survey.

4 responses

Response	Percentage
Agree	100%
Disagree	0%

● Agree
● Disagree

Background Information

What is your designation at your current fire department?

4 responses

Designation	Percentage
Career Full-Time	50%
Volunteer	50%

● Career Full-Time
● Career Part-Time
● Volunteer
● Career Full-Time

From here you can utilize the attached report as an example to fill in with your own responses. This example report was created initially for those using the Qualtrics software by exporting that data into excel to create the graphs and tables. As Google Forms already does this for you, you only need to adjust the analysis based on the responses and you can utilize the graphs already created through the initial survey.

Analyzing Response Meaning

Most of the data collected can easily be interpreted by an average response to the questions. We intentionally made this survey both easy to take and interpret so that department leadership can better understand what their members want within their department and what their experiences have been. The below categories should better enable you to understand the data that has been collected. Following the descriptions of the breakdown will be a codebook with all the questions and the categories they fall under for analysis.

Demographics

Within this category you are hopefully collecting statistical data and providing a breakdown of the firefighters and employees who responded to the survey based on employment status (career full-time or volunteer), rank, gender, and ethnicity.

Diversity in the Department

The survey included three questions to help get a baseline understanding of individual perceptions of the importance of diversity in the department. These questions were included early in the survey in order to better understand individual perceptions of the importance of diversity within the organization before asking about their perceptions of the actual culture within the department.

This category is divided into three areas; individual perception of diversity in the department, willingness to invest in creating a diverse team, and what underrepresented groups would be beneficial to have as members within the department. From these three categories you can obtain a better understanding of where your department membership is when it comes to being and creating an inclusive team.

If you are trending towards members not responding in a more positive way towards your efforts to create more inclusive teams, more internal training may be needed to help them understand the need and drive to change the department. Additionally, from these questions you can see where your members feel the need for a change to include more underrepresented groups with a specific focus, like including more LGBTQ+ individuals or those who speak more languages.

Overall Department Climate towards Other Groups

The preceding section of the report examined how individual firefighters view the importance of diversity in the fire service and the department. This section measures the perception of respondents regarding the climate and culture within the department toward others, as well as individual experiences within the department with regards to inclusiveness, discrimination, bullying, and hazing. This category is then split into five different areas to gain more understanding of an individual respondents' views of the department itself.

By looking at the questions within these separate categories, you can hopefully get a sense of how your department members view leadership's response and support towards underrepresented groups within the department, if there is bullying or discrimination going on that has remained unreported, as well as how the individual respondent has been treated while a member of your department.

As you see the responses within each question, take the time to see which questions reflect a positive or negative scale. While most questions that are on a Likert Scale with a '1' equaling a 'strongly disagree' response and a '7' equaling a 'strongly agree' response, the statements themselves can be more positive or negative based depending on the section. If you are seeing that most members are leaning towards a more negative way on efforts you have tried to recently implement, you can then take action to find out why and try new strategies or trainings to help bolster your efforts.

Overall Department Culture

While the last section reflected more on inclusivity and diversity, the following section focuses on other aspects of the department's climate like leadership, trust, fairness, and influence. These questions are designed to see what your department members think about how you run the department and how much ability they have to change their department. These questions hopefully can give you insight into how your company officers are doing leading their firefighters, and how those same company officers are feeling about how you are leading them. Having a clear understanding of what the perceptions of the department are from everyone can help you change or know that what you are doing is working and is valued.

Team Culture

This category is showing you how the respondents measure the team's cohesiveness. These questions are aimed to see how well your department works together to execute the mission of your fire department. The focus of these questions is around trust among the department members, how members handle conflict when it occurs, and how everyone perceive how they are included within the department and their team/shift. Seeing that your department members feel a part of a team and are integrated within your department well can have an effect even outside the walls of your fire house. Your community can see this type of cohesiveness on a fire ground when they are responding to a call, or even when they are all together outside of the firehouse.

Commitment to the Department

The last category is an important one to all fire service leaders. The department's overall culture may impact the firefighters' willingness to stay at the department. Given the importance of retention to continuity, budgets, safety, etc..., the survey measured commitment to the department in two ways; an overall commitment to the department and an individual's intent to leave the department.

After reviewing all other questions, it can be inferred that if a person feels excluded, not valued and has no trust in their leadership they will intent to leave a department. It should be important for you to look at all the responses of each individual that stated they have the intent to leave the department so as to gain a better understanding of that individual's intent to leave and see if there is anything you can do within the department to keep them, or keep others from having the same plan.

Codebook

The following list is the codebook that corresponds to each question within the survey. From here you can see what questions are under which report heading or subsection to better formulate your results. To see each question and variable associated outlined individually, please see the [Climate Survey Questions](#).

Report Heading or Subheading	Survey Question Number	Variable Name	Analysis Used
<i>Demographics</i> -Employment Status -Current Rank -Gender -Ethnicity	Q2 Q3 Q35 Q36 & Q37	career rank gender hispanic ethnicity	Number of responses to each response category. i.e. rank 1=career full-time 2=career part-time 3=volunteer
<i>Individual Perception that Diversity is Important to the Department</i>	Q14	diverseteam	Number of responses to each category (1-5)
<i>Investment in Diversity</i>	Q11	invest	Number of responses to each category (yes or no)
<i>Group Representation in the Department</i> - Women -White -Black or African-American -American Indian or ... -Asian -Native Hawaiian or... -LGBTQ+ -Older Adults -Younger Adults -Additional Languages	Q15	represent_1 represent_2 represent_3 represent_4 represent_5 represent_6 represent_7 represent_8 represent_9 represent_10	Average or mean response to each "group" In the report analysis, also count the number of languages requests as additions to the department, which is the represent_10 column
<i>Overall Climate in the Department toward Other Groups</i>	Q17	climate_1 climate_2 climate_3 climate_4	Average responses to each variable (group)
<i>Support for Diversity among the Leadership, Supervisors, Department, and Firefighters</i>	Q18	orgsupport_1 orgsupport_2 orgsupport_3 orgsupport_4 orgsupport_5	Average or mean responses for each statement.

		orgsupport_6 orgsupport_7 orgsupport_12 orgsupport_13 orgsupport_8 orgsupport_9 orgsupport_10 orgsupport_11	**Pay attention to the order of the variables for this question. orgsupport_12 and orgsupport_13 are out of order so that the Table flows better.
<i>Inclusiveness in the Department</i>	Q19	inclusive_1 inclusive_2 inclusive_3 inclusive_4 inclusive_5 inclusive_6 inclusive_7 inclusive_8 inclusive_9	Average or mean responses to each statement (variable).
<i>Discrimination, Bullying, and Hazing</i>	Q20	bullying_1 bullying_2 bullying_3 bullying_4 bullying_5 bullying_6 bullying_7 bullying_8 bullying_9 bullying_10	Average or mean responses to each statement (variable). bullying_10 is not included in the Table, but discussed separately in the discussion.
<i>Discrimination on the Basis of Ethnicity, Sex, Orientation, Beliefs, and Other Factors</i>	Q21	discriminate_1 discriminate_2 discriminate_3 discriminate_4 discriminate_5 discriminate_6 discriminate_7 discriminate_8 discriminate_9 discriminate_10 discriminate_11 discriminate_12 discriminate_13	Each variable has four response categories, and the table includes the count for each category (never, 1-2 times, 3-4 times, 5 or more times) “report” is an open-ended variable, and respondents answers are summarized in the discussion part of this section of the Report.
	Q22	report	

<i>Impact of Department on Individual Beliefs</i>	Q16	experience_1 experience_2 experience_3	Average or mean responses to each statement (variable).
<i>Perceptions About and Trust in Leadership</i>	Q25	leadership_1 leadership_2 leadership_3 leadership_4 leadership_5 leadership_6 leadership_7 leadership_8 leadership_9	Average or Mean Responses to each statement (variable)
<i>Individual Influence in Department Affairs</i>	Q23	decisions_1 decisions_2 decisions_3 decisions_4	Average or mean responses to each question (variable).
<i>Fairness in the Department</i>	Q24	fairness_1 fairness_2 fairness_3 fairness_4 fairness_5 fairness_6 fairness_7 fairness_8	Average or mean responses to each statement (variable).
<i>Team Culture</i>	Q26	team1 team2 team3	Average or mean response to each question (variable).
<i>Trust Among Team Members</i>	Q27	teamwork_1 teamwork_2 teamwork_3 teamwork_4 teamwork_5 teamwork_6 teamwork_7	Average or mean responses to each question (variable). Variables 1,2, & 6 have negative wording, so that lower average responses are actually a positive indicator.
<i>Conflict Within the Team</i>	Q28	conflict_1 conflict_2 conflict_3 conflict_4	Average or mean responses to each question (variable).

		conflict_5 conflict_6	
<i>Team Inclusiveness</i>	Q29	ostracism_1 ostracism_2 ostracism_3 ostracism_4 ostracism_5 ostracism_6 ostracism_7 ostracism_8 ostracism_9 ostracism_10	Average or mean responses to each statement (variable). All statements in this section are negative, which means that lower response means are a positive indicator.
<i>Overall Commitment to the Department</i>	Q8	commit_1 commit_2 commit_3 commit_4 commit_5 commit_6 commit_7 commit_8	Average or mean responses to each statement (variable). *variables 4, 5, 6, & 8 are negatively worded, so that lower response means are a positive indicator.
<i>Intention to Leave</i>	Q9 Q10	intent_1 intent_2 intent_3	Average or mean responses to each statement or question (variable).