



# CAMEO Survey Results

## March 2023



### Background

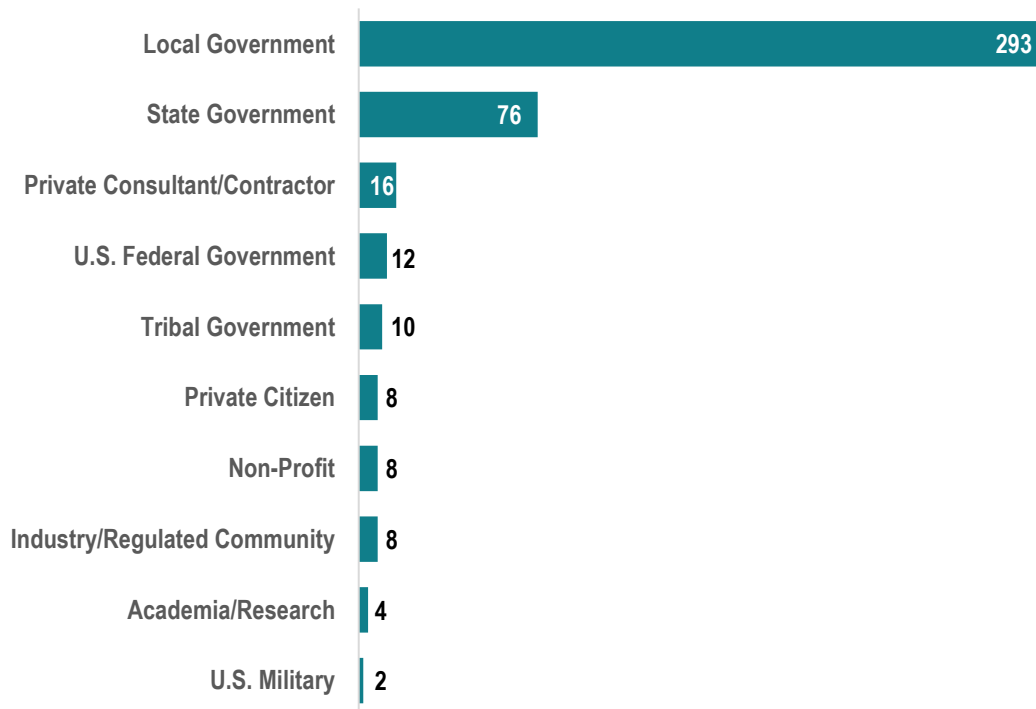
The National Association of SARA Title III Program Officials (NASTTPO) conducted a survey to understand the current use and relevance of the Computer-Aided Management of Emergency Operations (CAMEO) software suite. The survey results will be used to guide the future of the software suite and meet your training needs. The results are split into three categories: (1) Demographics of Survey Respondents, (2) CAMEO User Responses, and (3) Non-User Responses.

### Survey Responses

#### I. Demographics of Survey Respondents

1. Who respondents work for:

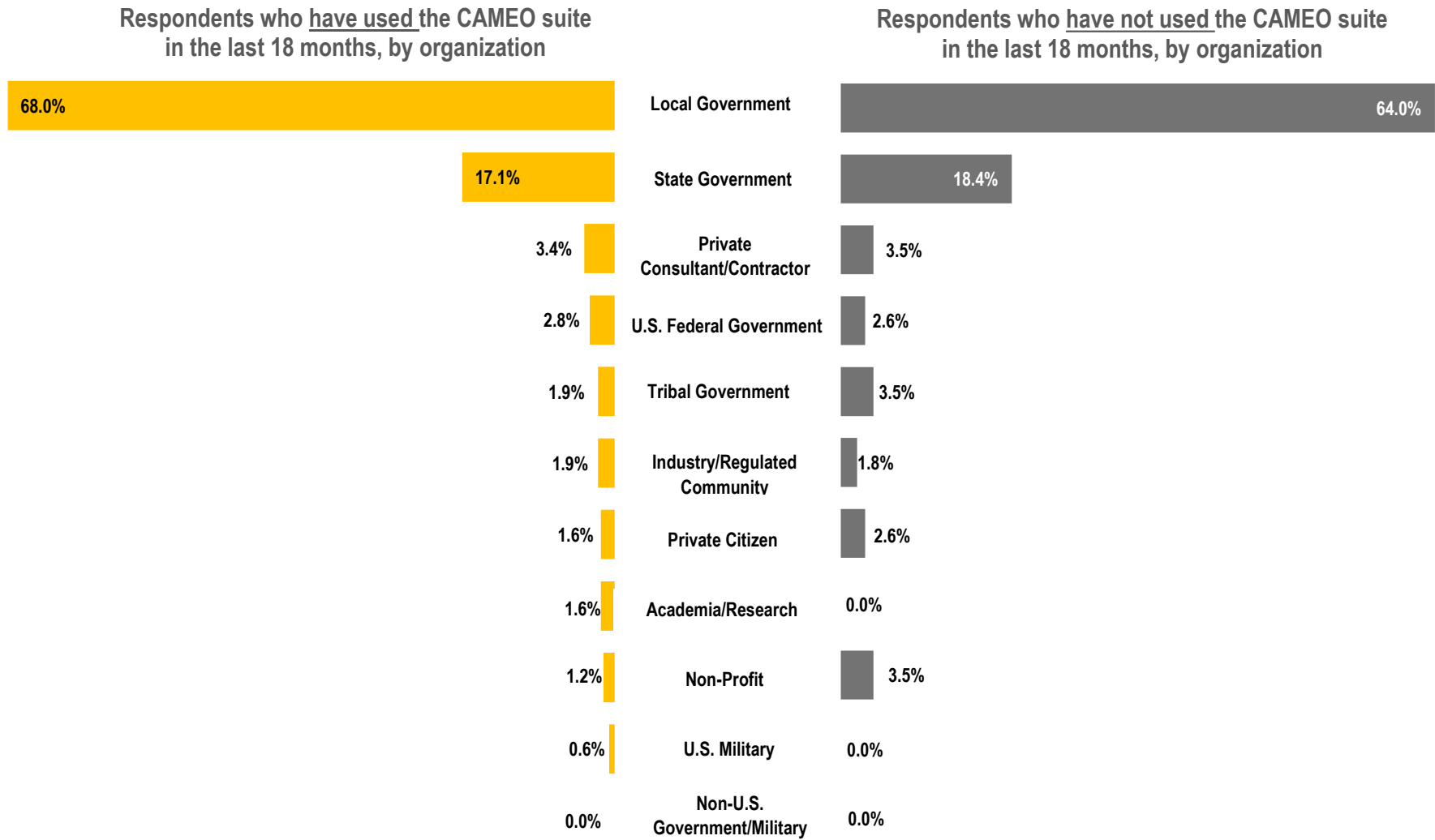
**Figure 1. CAMEO Suite Tool Users by Organization**



*Note: "Other" responses were put into the categories they most closely reflected.*

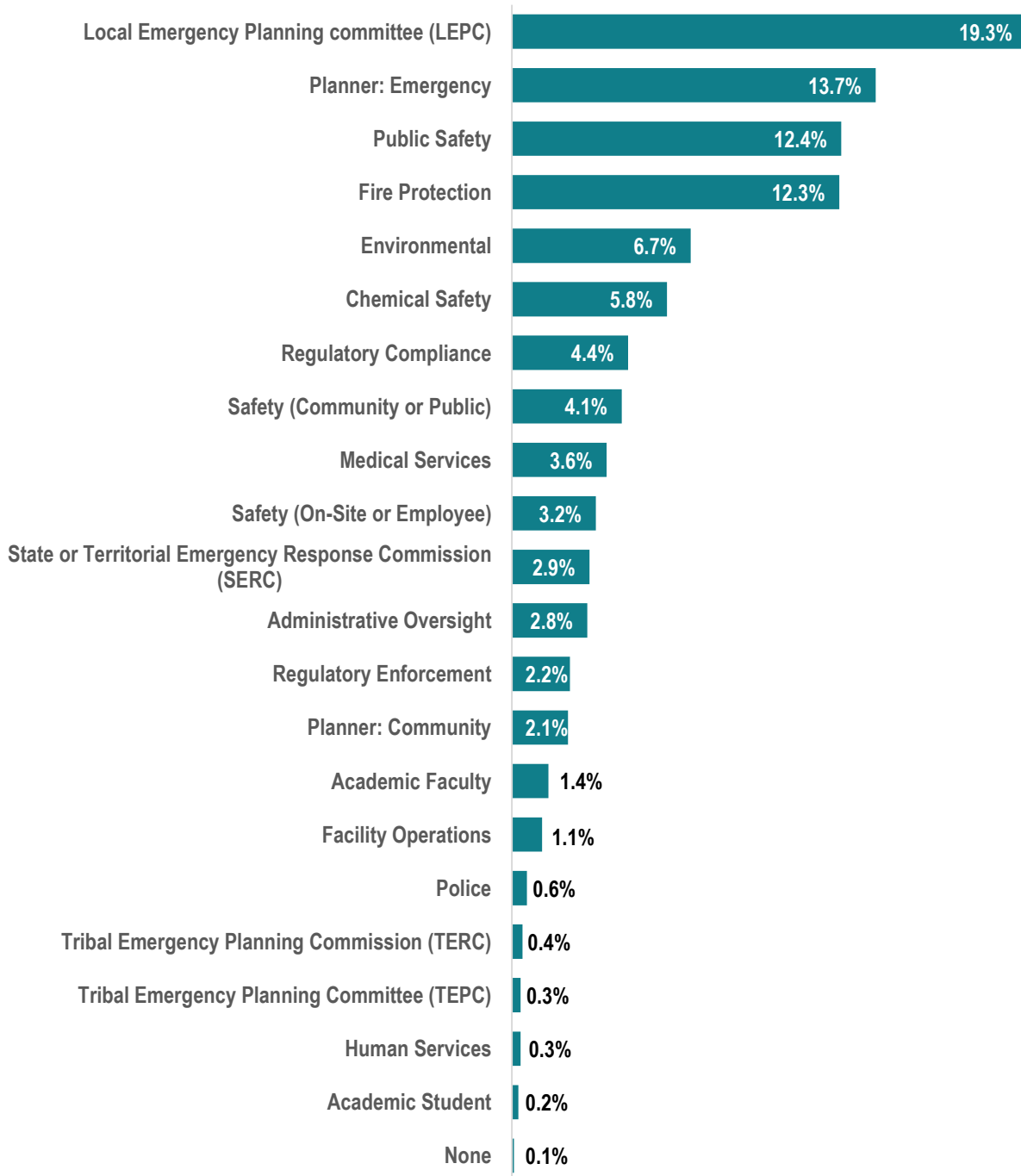
**Analysis.** 84% of respondents work in state and local government capacities.

Figure 1a. Comparison of respondents based on whether they used CAMEO suite in the last 18 months, by organization



2. Respondents' Relevant Roles:

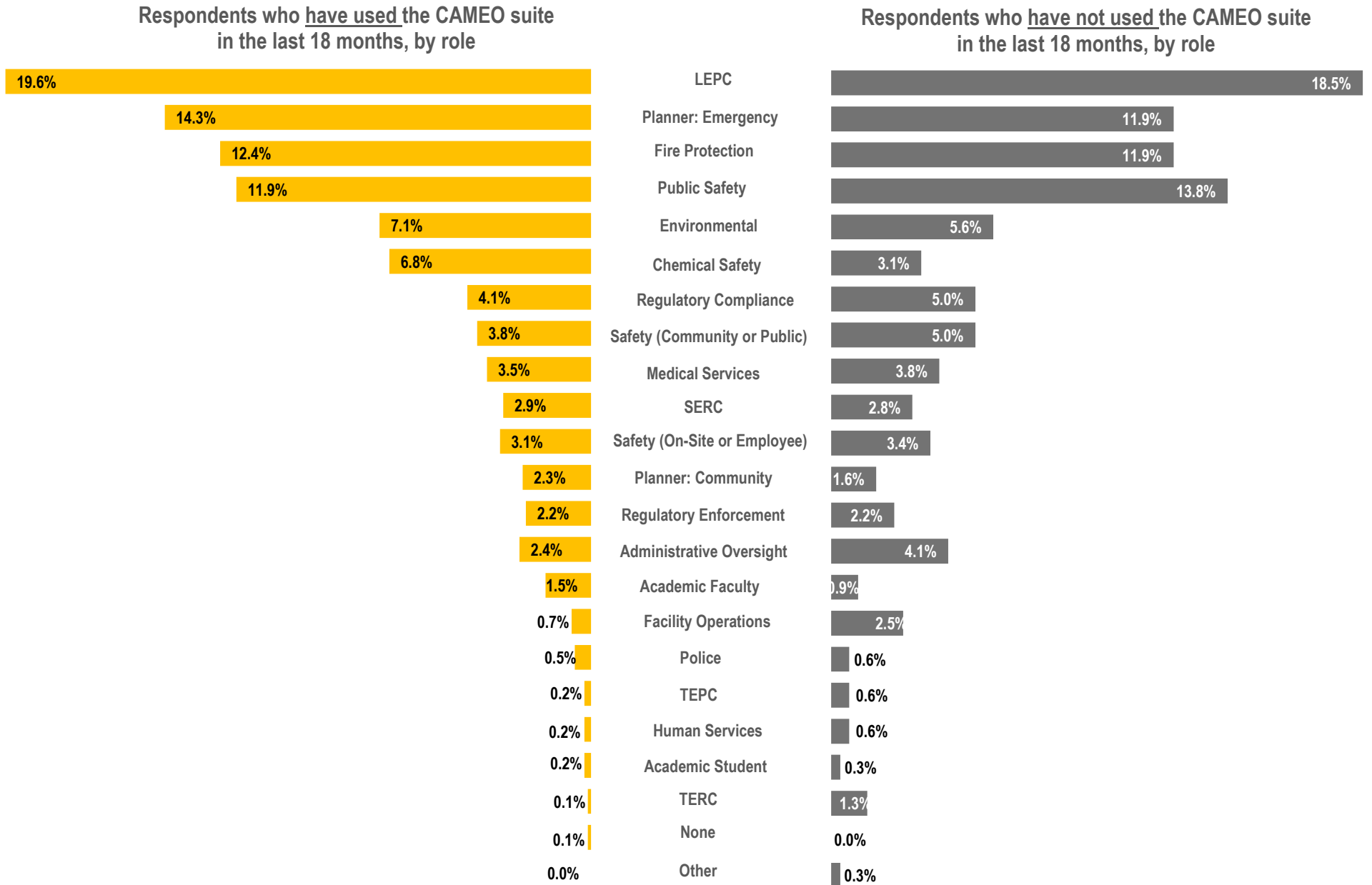
**Figure 2. The Majority of Respondents are Likely to Work Within these Relevant Roles**



*Note: Respondents were asked to select up to three choices (however, respondents were able to choose more than three choices). Values are expressed in percentage of total.*

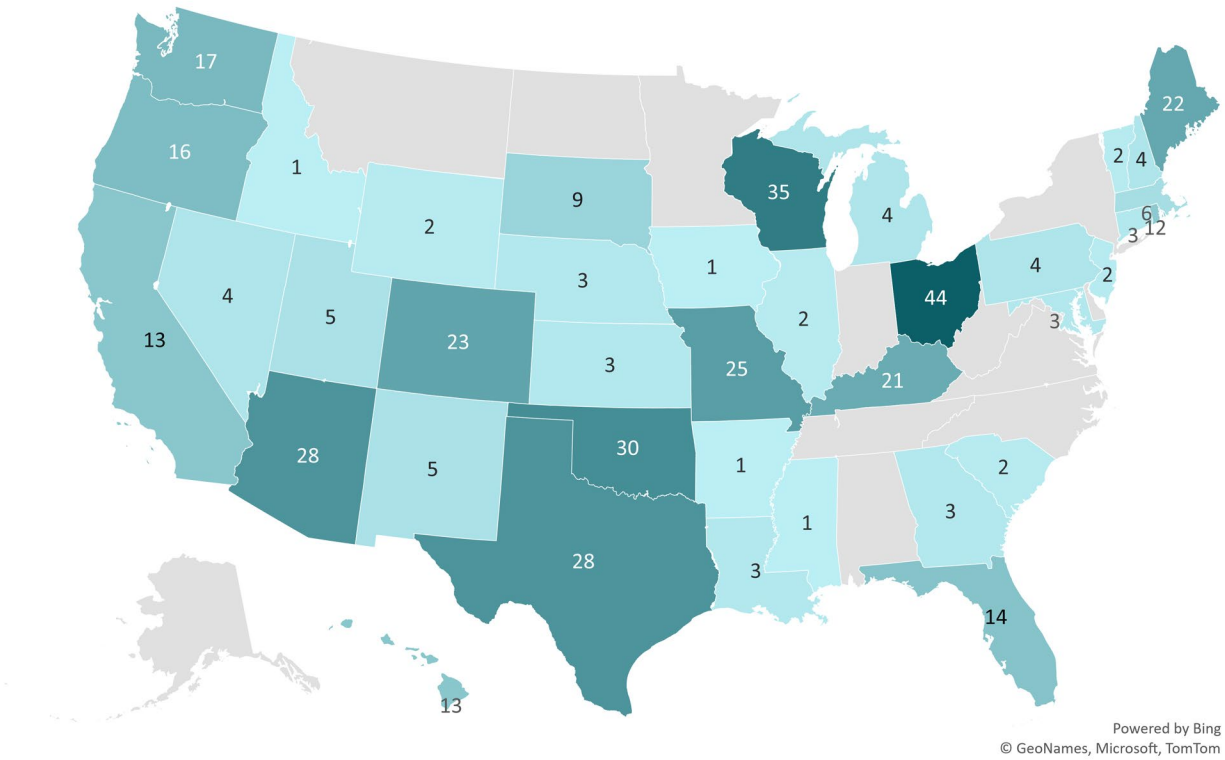
**Analysis.** The top five selections in absolute terms were Fire Protection, combination [Local Emergency Planning Committee (LEPC), Planner: Emergency], only Local Emergency Planning Committee (LEPC), combination [Local Emergency Planning Committee (LEPC), Planner: Emergency, Public Safety], and only Fire Protection, Public Safety.

Figure 2a. Comparison of respondents based on whether they used CAMEO suite in the last 18 months, by role



3. State, Territory, or Tribe of Respondent:

**Figure 3. Survey Respondents by State**

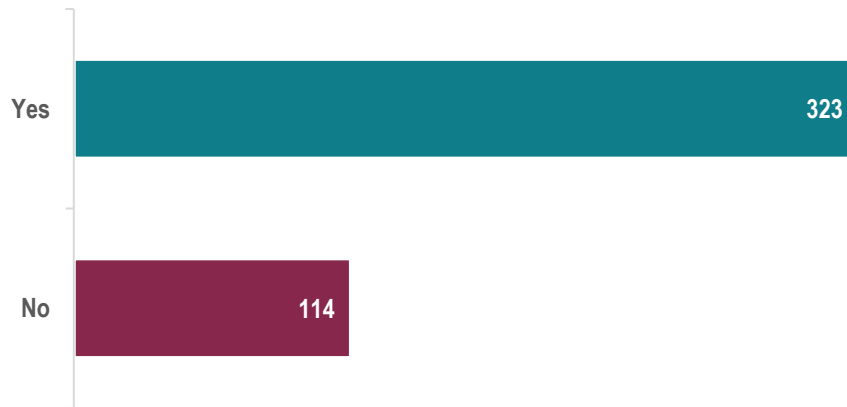


Powered by Bing  
© GeoNames, Microsoft, TomTom

*Note: The map does not include U.S. tribes and territories and other countries. Those values are Tribes (6), Guam (1), Mexico (2), and Canada (1).*

4. Did the respondent or their organization use the CAMEO suite in the past 18 months:

**Figure 4. Yes/No Responses to CAMEO Suite Usage in the Past 18 Months**

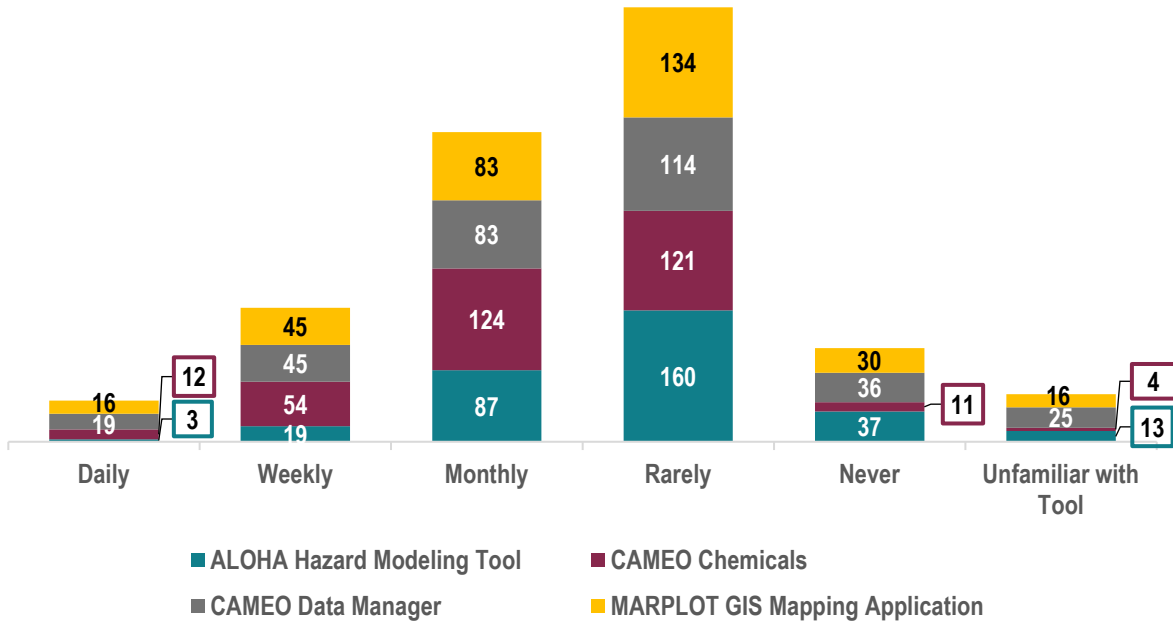


*Note: "Yes" responses led to questions 3.0 and "No" responses led to questions 4.0. Questions 2.2 and 2.3 breaks down Yes and No respondents into their identified organizations and roles.*

**Analysis.** "Yes" responses represented 73.9%, while "No" responses represented 26.1%. See more detailed breakout of the organization types and roles for each response above, under questions 2.2 and 2.3, respectively.

5. How often did respondent use the following CAMEO software suite programs?

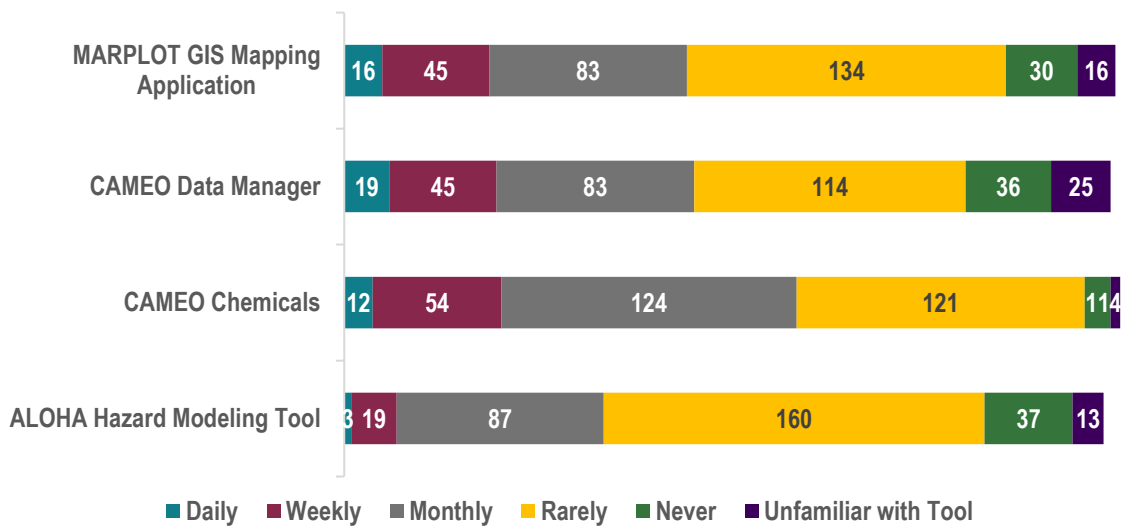
**Figure 5. CAMEO Software Suite Program by Frequency**



*Note: This graph combines each of the four programs.*

**Analysis.** Most CAMEO Software Suite Program users use the tools monthly to rarely in the last 18 months.

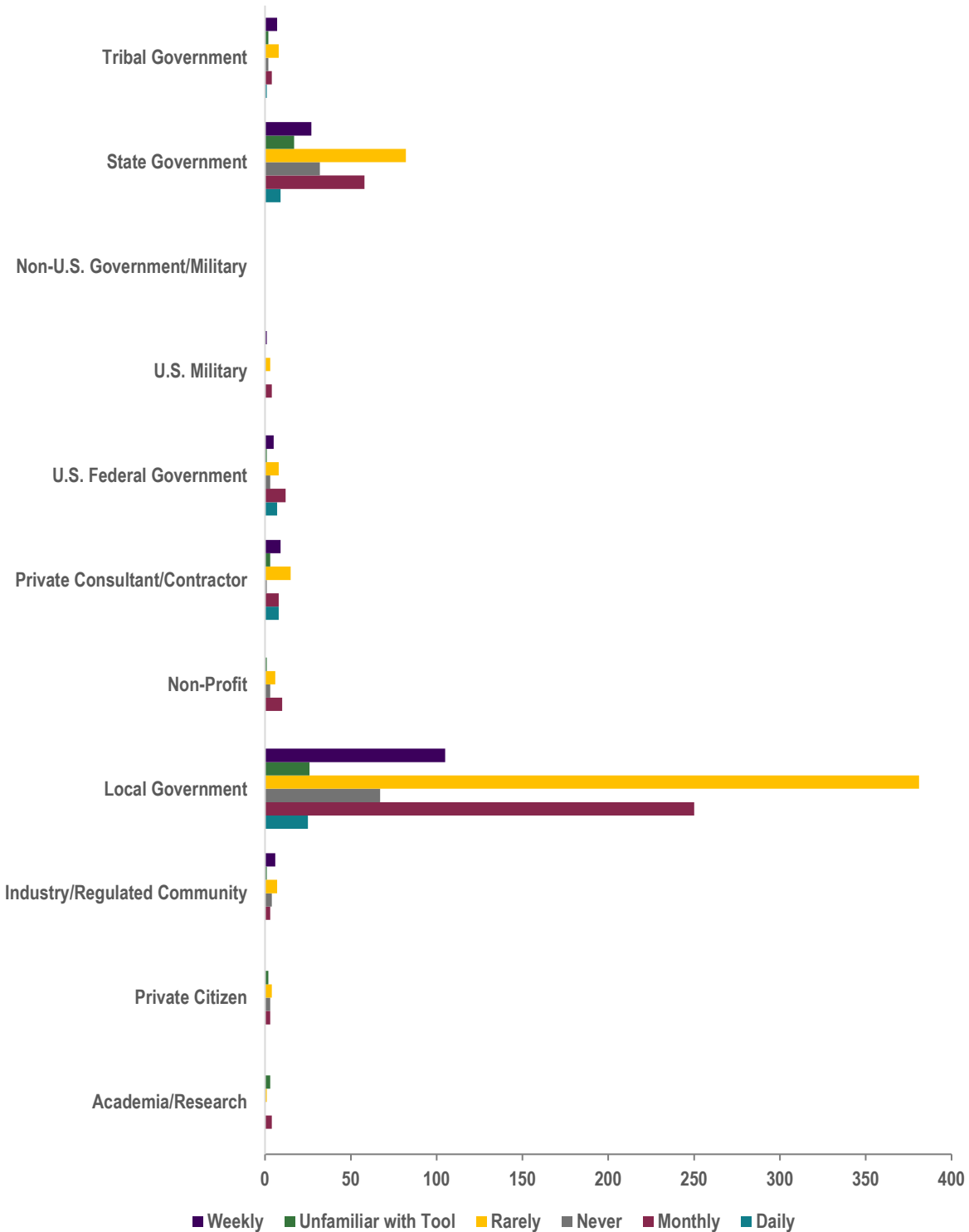
**Figure 5a. CAMEO Software Suite Program by Tool**



*Note: This graph combines frequency of use.*

**Analysis.** Users evenly use the four programs roughly the same amount of time.

**Figure 5b. Frequency of Use of CAMEO Suite Programs by Organization**

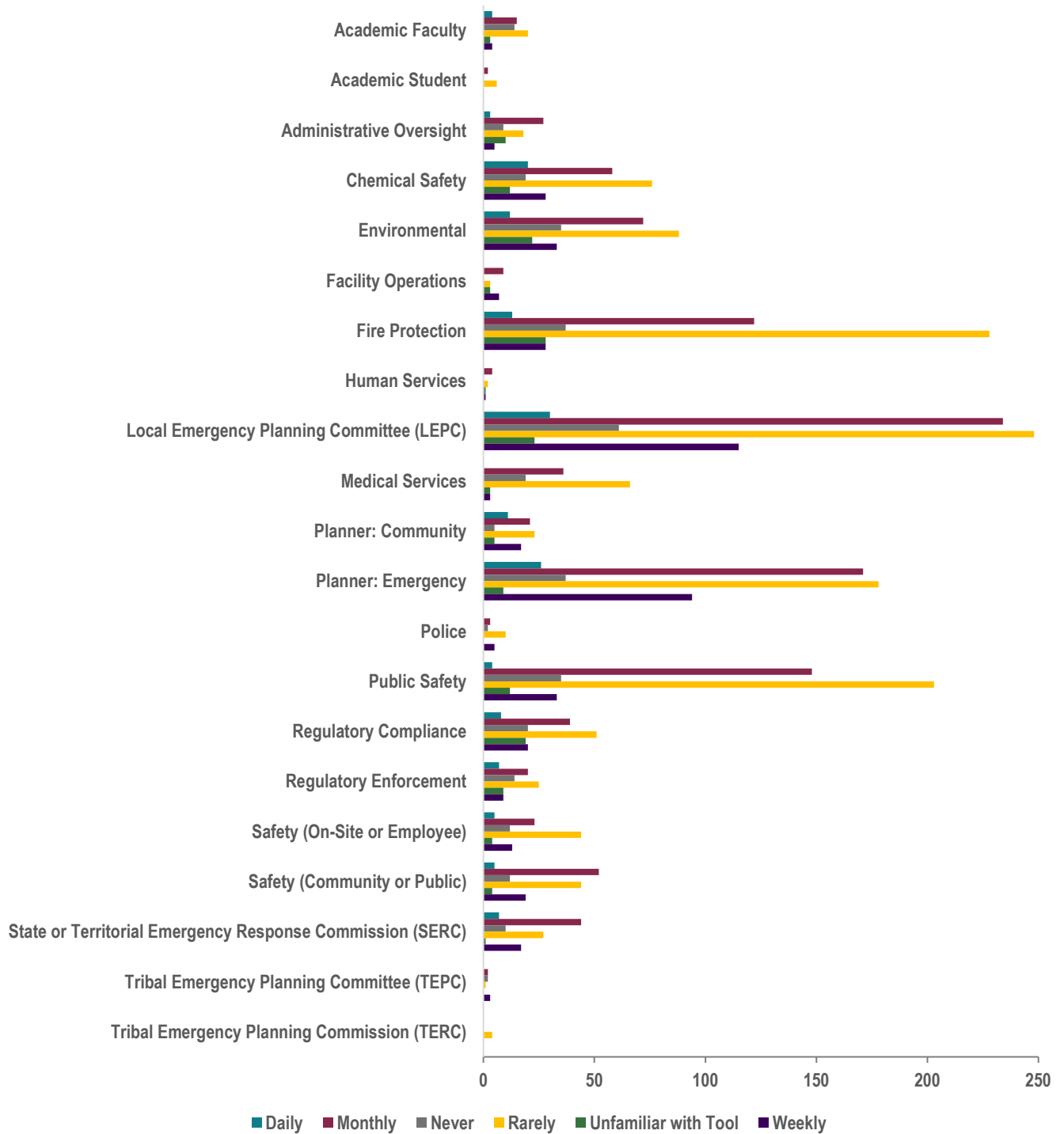


*Note: Note: This graph displays total values for all the four CAMEO Suite programs. Organizations are sorted alphabetically. This does not include the Other category.*

**Analysis.** This graph highlights how frequent organizations use the CAMEO Suite programs. In absolute terms, state and local government use the CAMEO Suite programs the most frequently compared to other groups.



**Figure 5c. Frequency of Use of CAMEO Suite Programs by Roles**



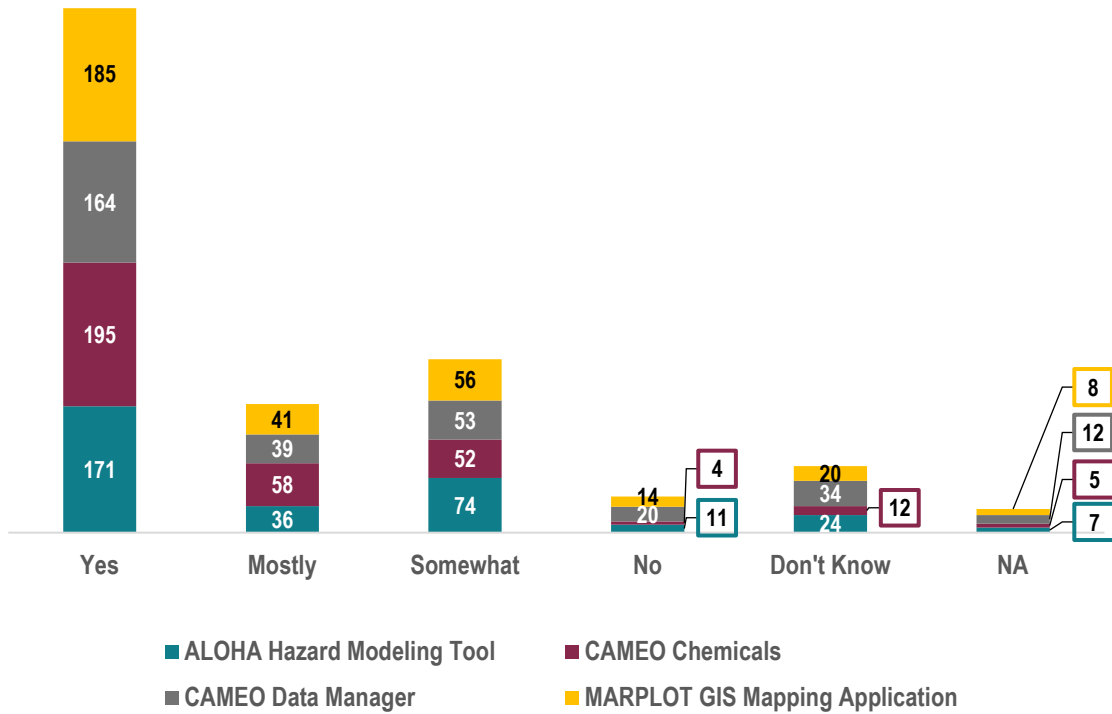
*Note: This graph displays total values for all the four CAMEO Suite programs. Roles are sorted alphabetically.*

**Analysis.** This graph highlights which roles are more frequently using the CAMEO Suite programs. In absolute terms respondents who are in the Local Emergency Planning Committee (LEPC), Planner: Emergency, and Chemical Safety roles are use CAMEO Suite programs daily more than other roles.

## II. CAMEO User Responses

6. Preparedness activities require many tools. Are the following CAMEO software suite programs beneficial for your preparedness activities for their specific tasks?

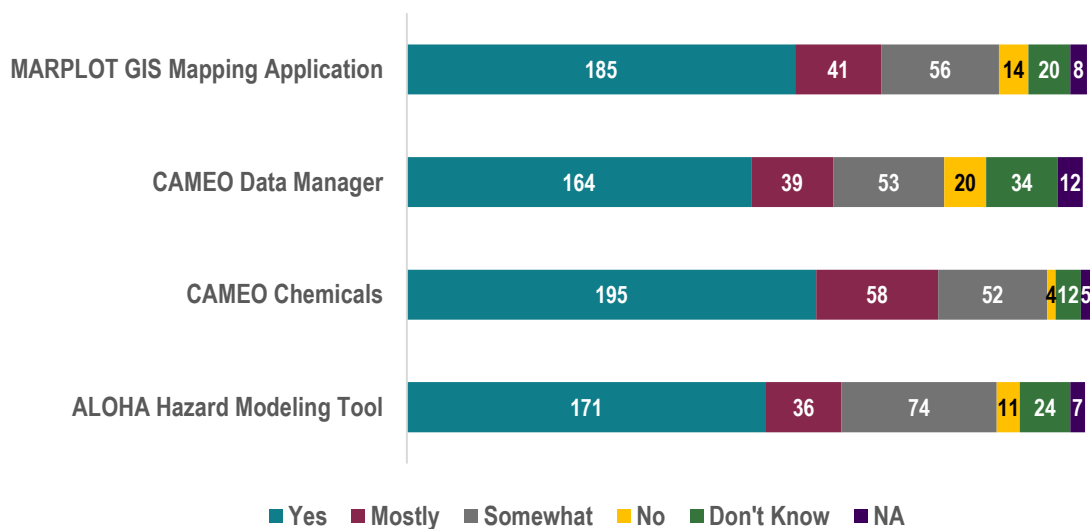
**Figure 6. Preparedness by Level of Benefit**



Note: Graph displays the four programs combined.

**Analysis.** CAMEO programs are overwhelmingly beneficial in preparedness.

**Figure 6a. Preparedness by Tool**

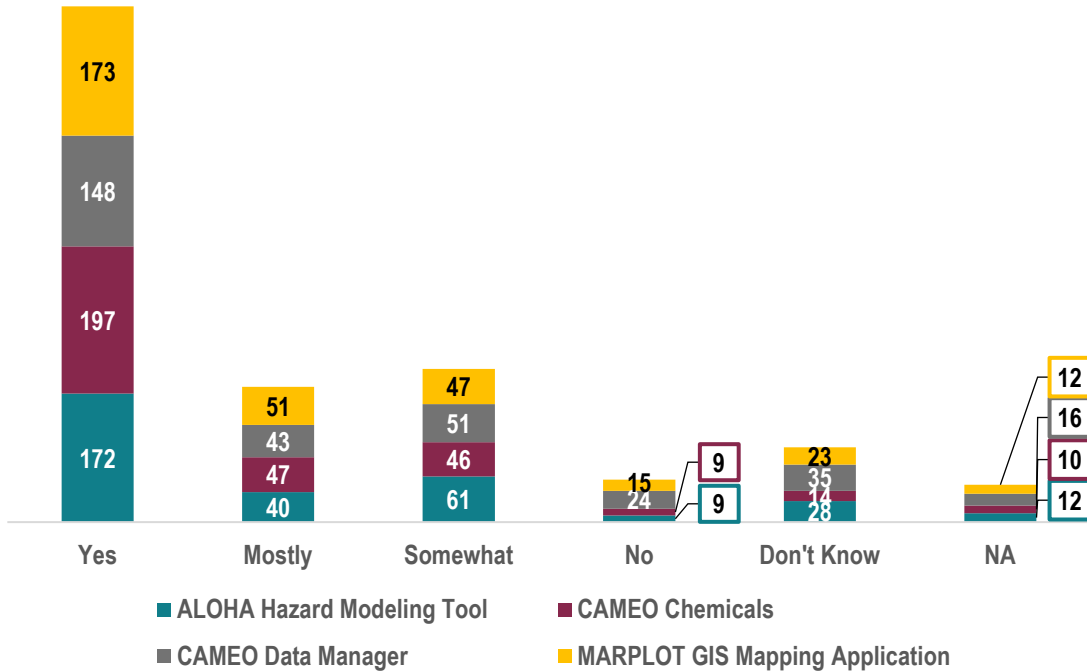


Note: This graph displays the level of benefit for preparedness by tool.

**Analysis.** For each tool, many of the respondents find CAMEO Suite programs beneficial.

7. Are the following CAMEO software suite programs beneficial for response activities for their specific tasks?

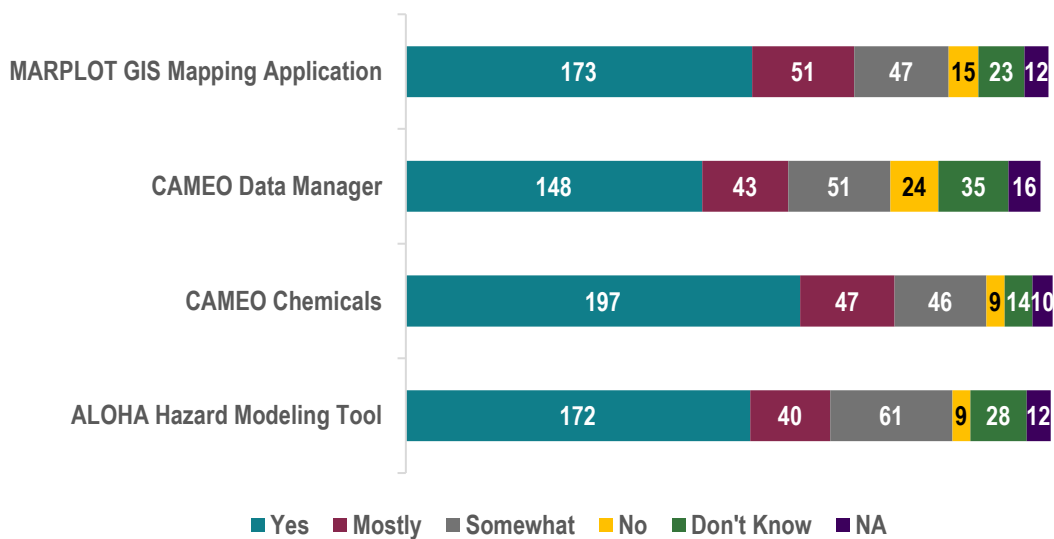
**Figure 7. Response by Level of Benefit**



Note: The graphic displays the four programs combined.

**Analysis.** CAMEO programs are overwhelmingly beneficial in response.

**Figure 7a. Response by Tool**

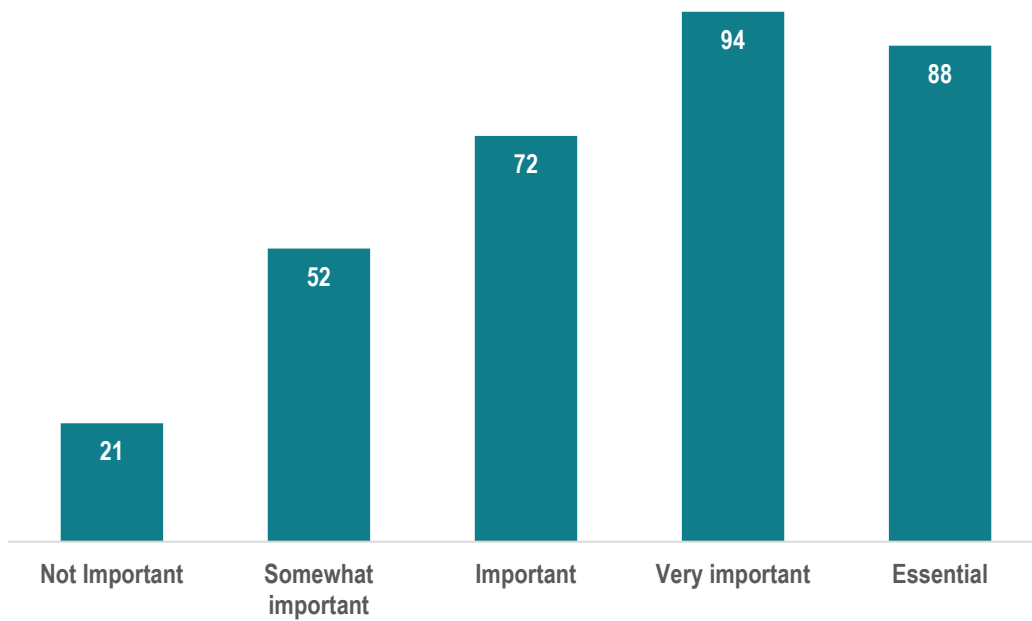


Note: This graph displays the level of benefit for response by tool.

**Analysis.** For each tool, many of the respondents find CAMEO Suite programs beneficial.

8. How important is ability to work without an internet connection?

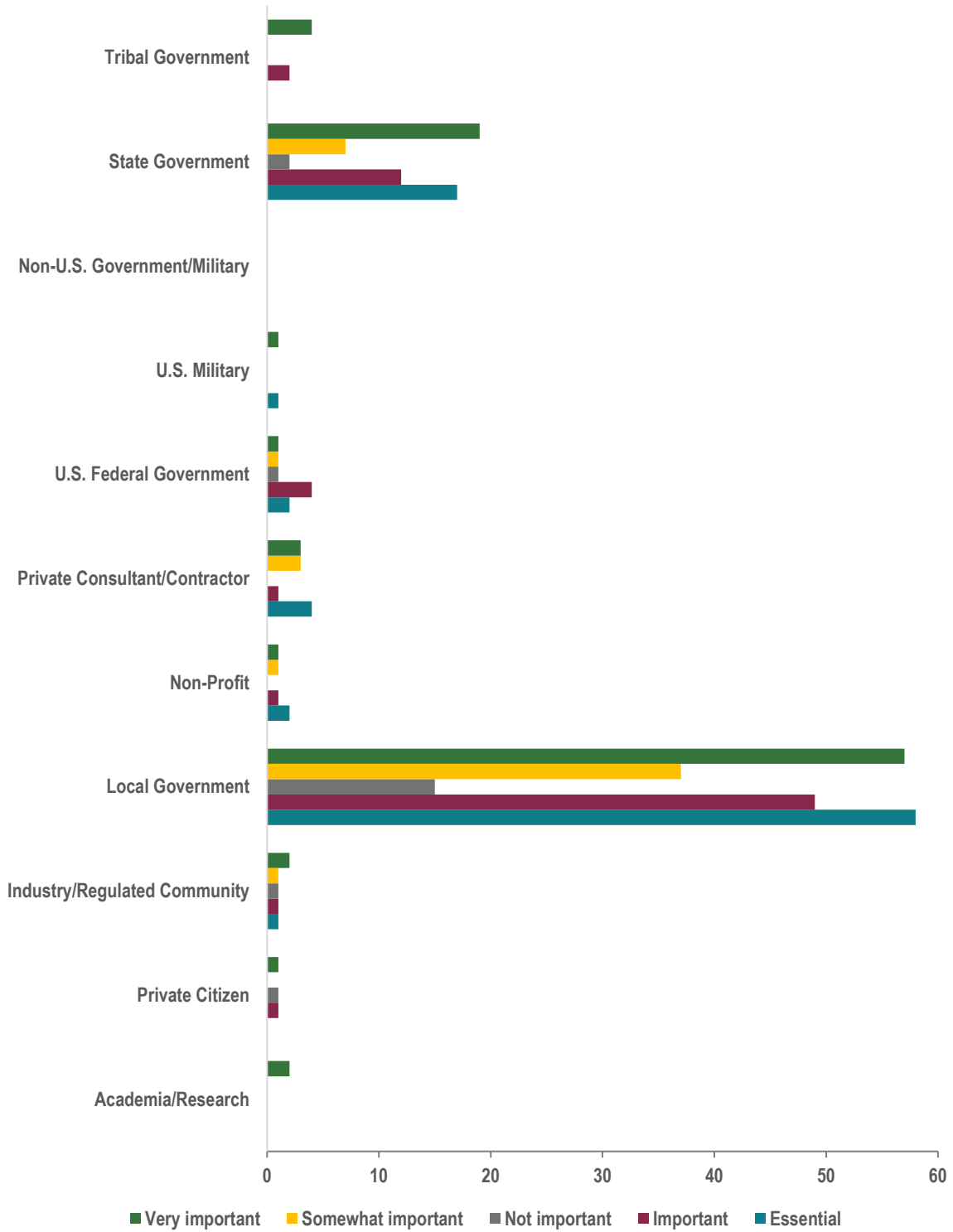
**Figure 8. Importance of Offline Functionality**



*Note: The graph display response totals.*

**Analysis.** Offline accessibility is overwhelmingly important to essential.

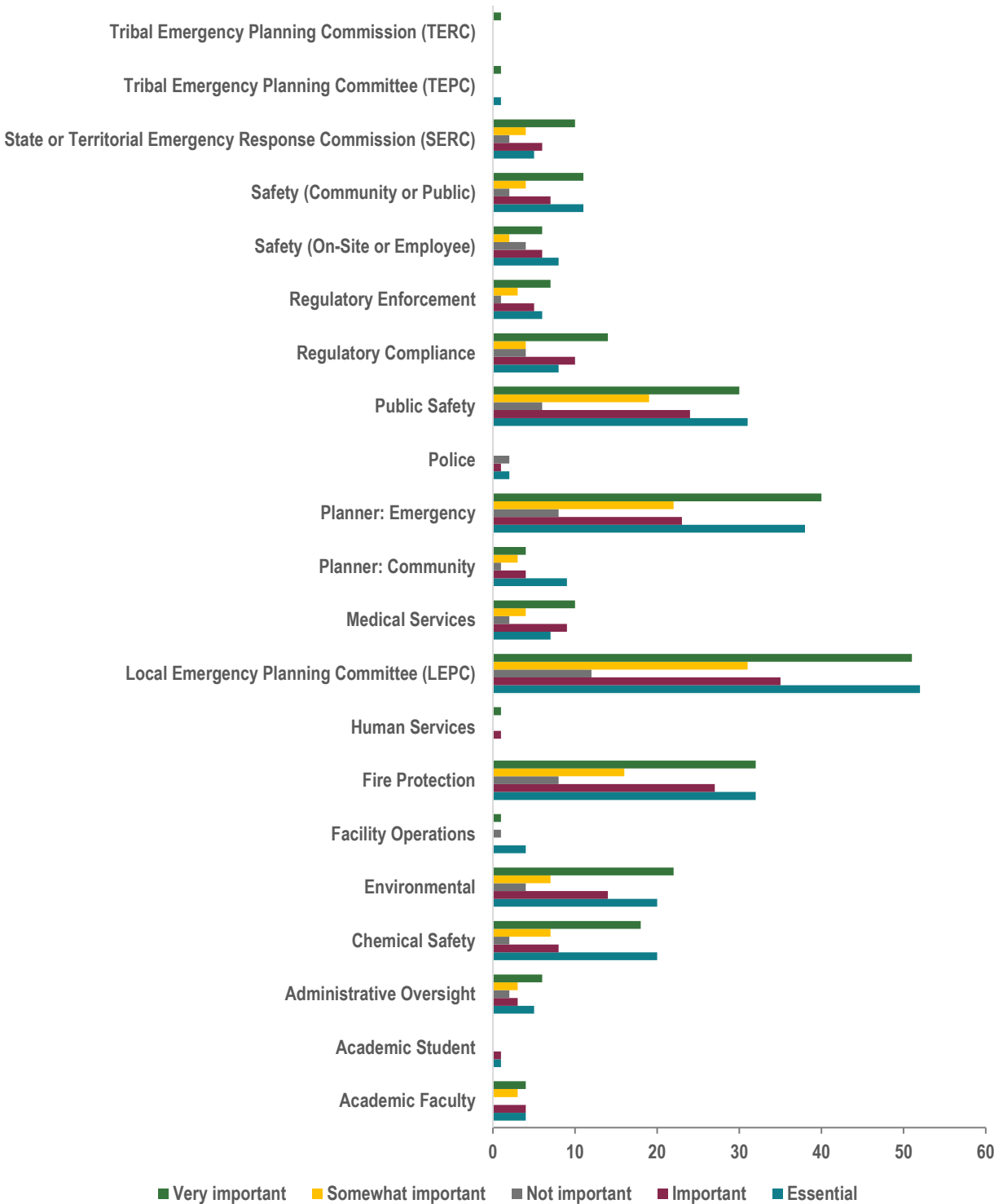
**Figure 8a. Importance of Functionality by Organization**



*Note: The graph displays values in total values.*

**Analysis.** State and local governments noted the value of offline functionality.

**Figure 8b. Importance of Functionality by Role**

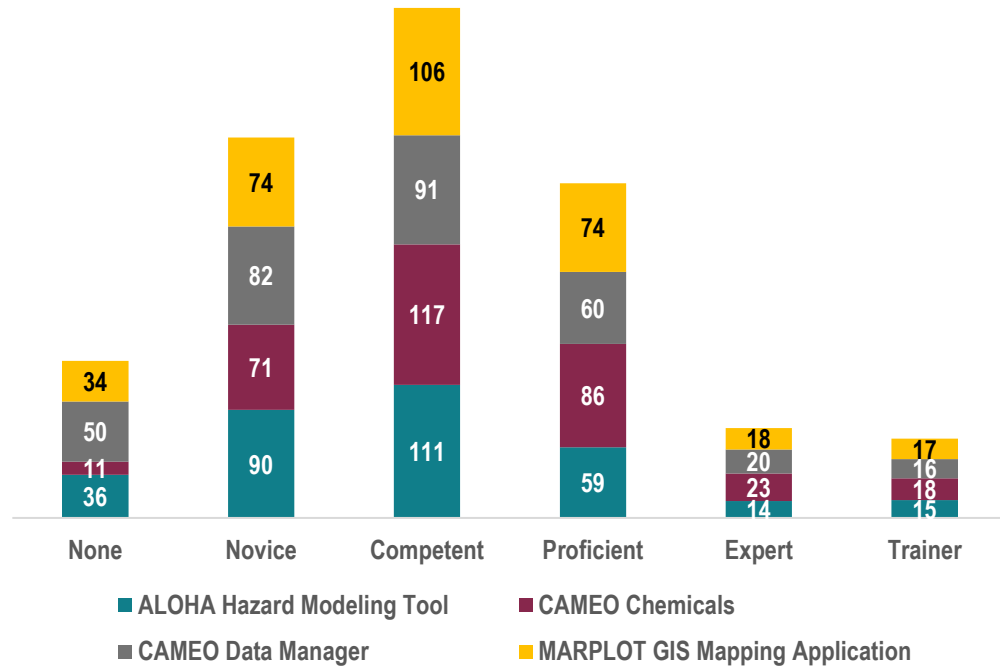


*Note: The graph displays values in total values.*

**Analysis.** LEPC, Emergency: Planner, Fire Protection, and Public Safety roles have the highest percent of the total for the “Essential” response.

9. What is the respondent's level of expertise in the following CAMEO software suite products?

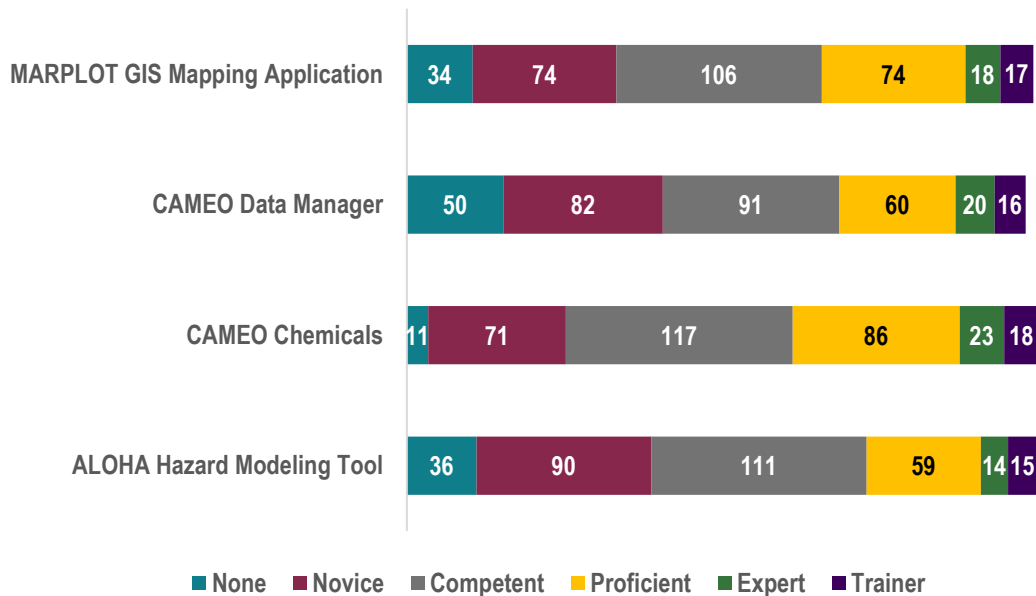
**Figure 9. Level of Expertise by Competency**



*Note: The graph displays the four programs combined.*

**Analysis.** A plurality of respondents is competent using the CAMEO programs.

**Figure 9a. Level of Expertise by Tool**

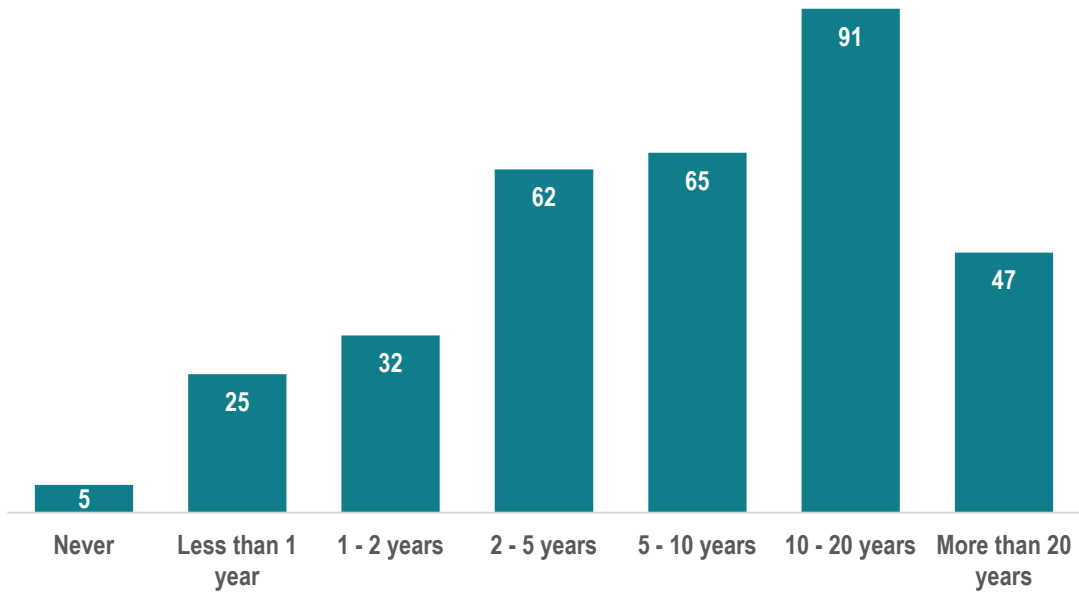


*Note: This graph displays the level of expertise by tool.*

**Analysis.** The level of expertise is relatively even by tool.

10. How many years has the respondent been working with the CAMEO Suite?

**Figure 10. Years of Experience of CAMEO Suite**



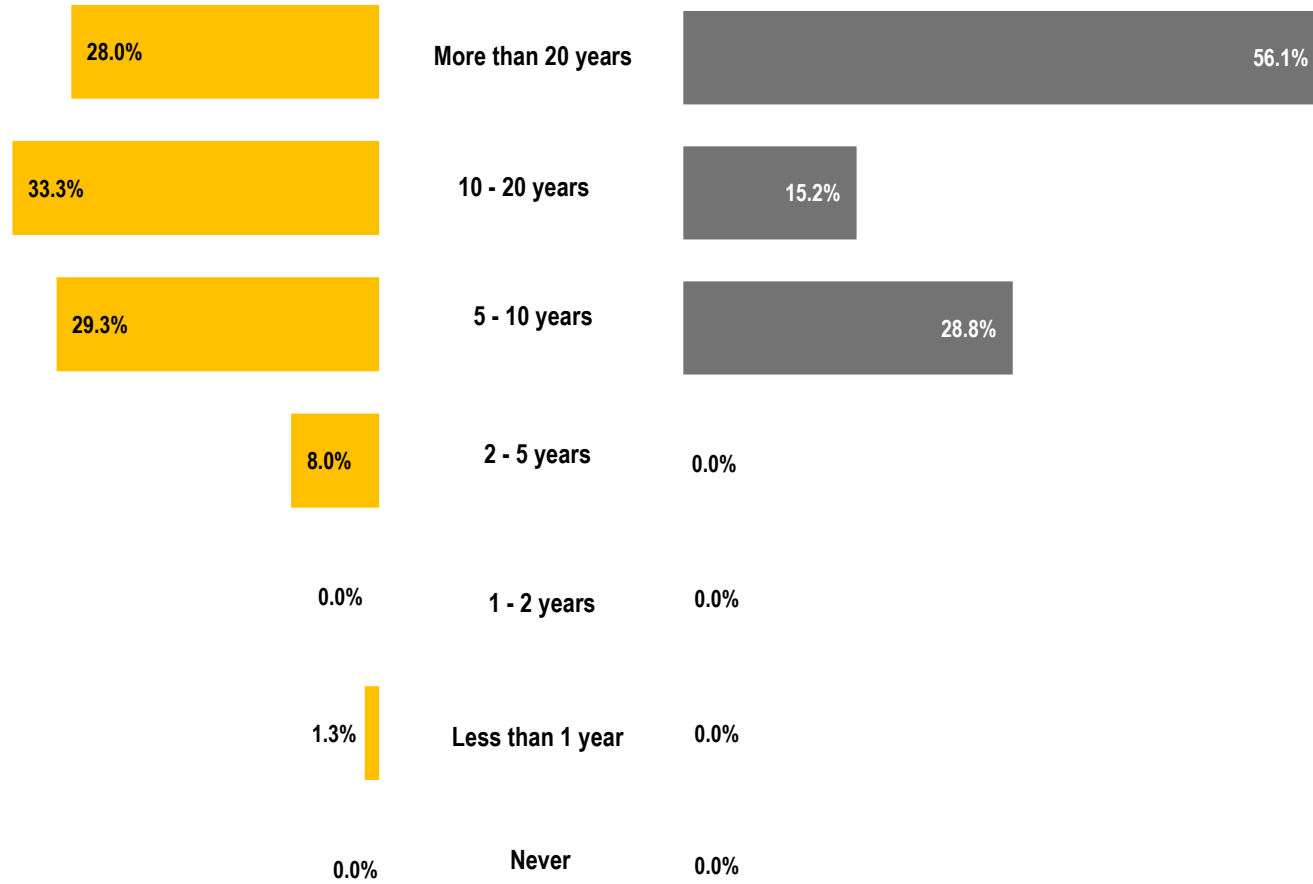
**Analysis.** The majority of respondents have over 5 years of experience.



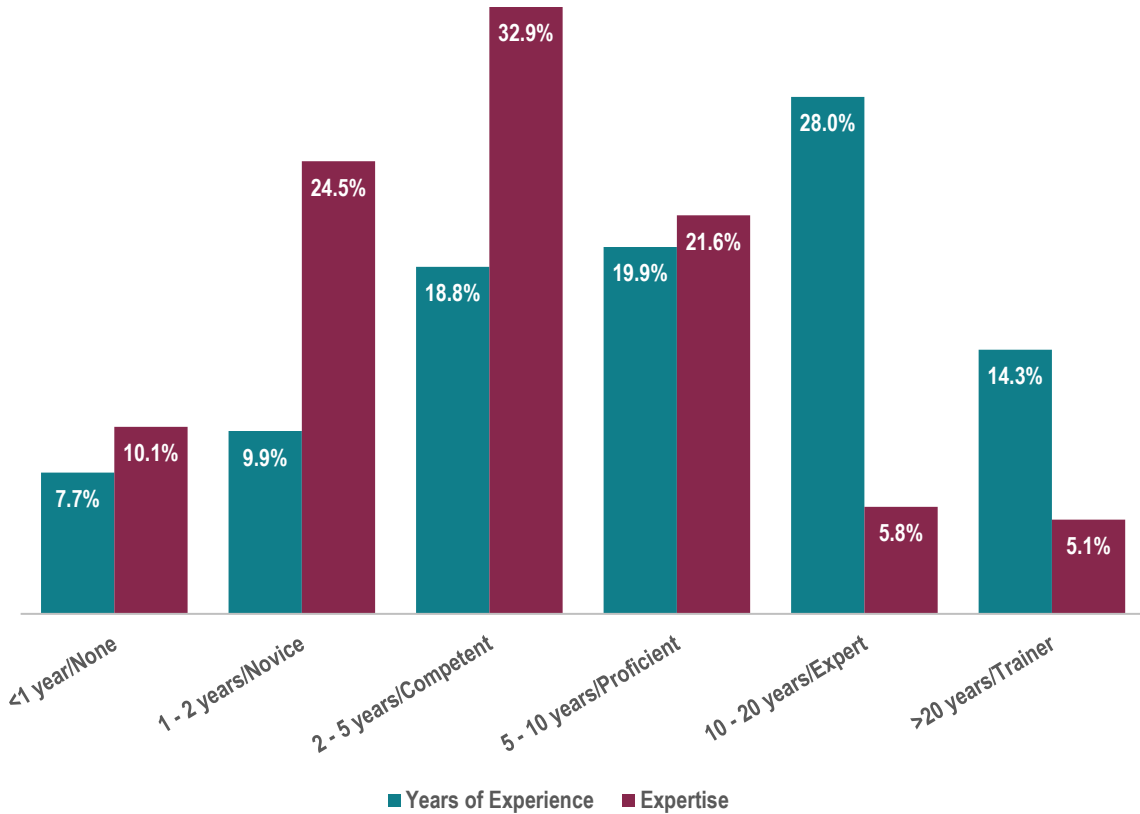
Figure 10a. The majority of respondents that noted their expertise level as “Expert” or “Trainer” have more than 10 years of experience

Years of experience reported by those with "Expert" level of expertise

Years of experience reported by those with "Trainer" level of expertise



**Figure 10b. Years of Experience and Level of Expertise**

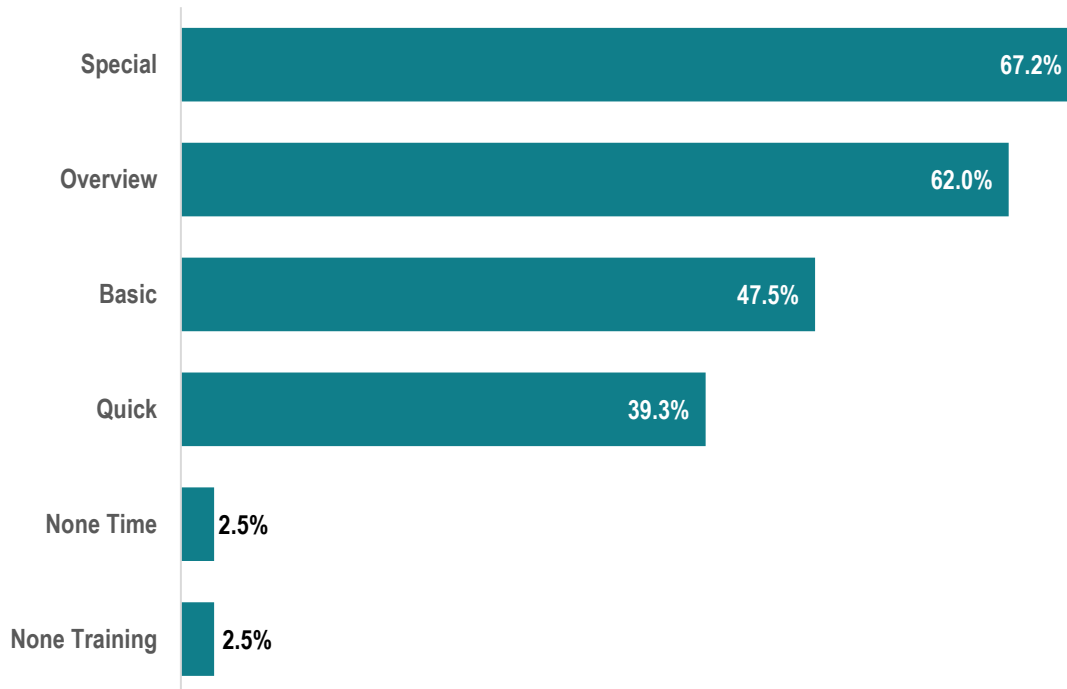


*Note: This scatter chart overlays years of experience data and level of experience data by percent of total. This makes the assumption that "Less than 1 year" equates to "None" level of experience, "1-2 years" equates to "Novice", "2-5 years" equates to "Competent", "5-10 years" equates to "Proficient", "10-20 years" equates to "Expert", and "More than 20 years" equates to "Trainer".*

**Analysis.** While this is not an apples-to-apples comparison, this graph can help infer whether reported years of experience correlates to reported level of experience, by percent of total. For example, 18.8% of question 3.8 respondents answered "2-5 years," while approximately 32.9% of question 3.7 respondents answered "Competent".

11. What levels of training are the respondents interested in attending in the future? (Select many)

**Figure 11. Levels of Training that Respondents Are Most Interested In**

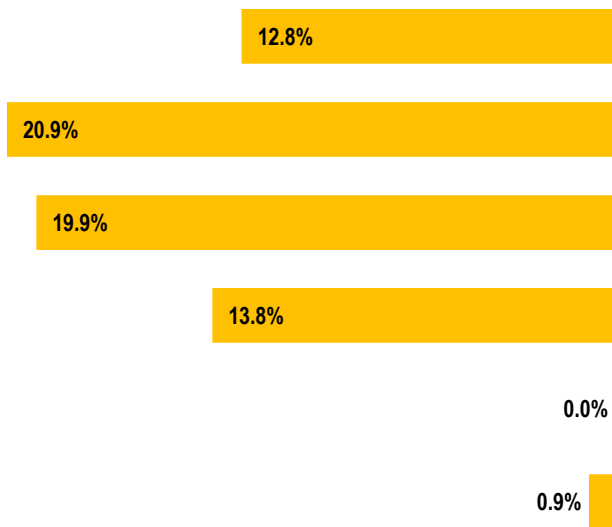


*Note: Values are displayed as abbreviations of the following: Quick Start Guides (e.g., 2-hour overviews), Basic (e.g., 3 days for the four core CAMEO suite programs), Overview/Refresher (e.g., < 1 day review of basics), Specialty (e.g., Adv. Hazmat Technician, Adv. ALOHA, Facility Hazard Analysis, Tier II Report Creation or Mgmt), None, I don't need any more training., None, I don't have time for formal training.*

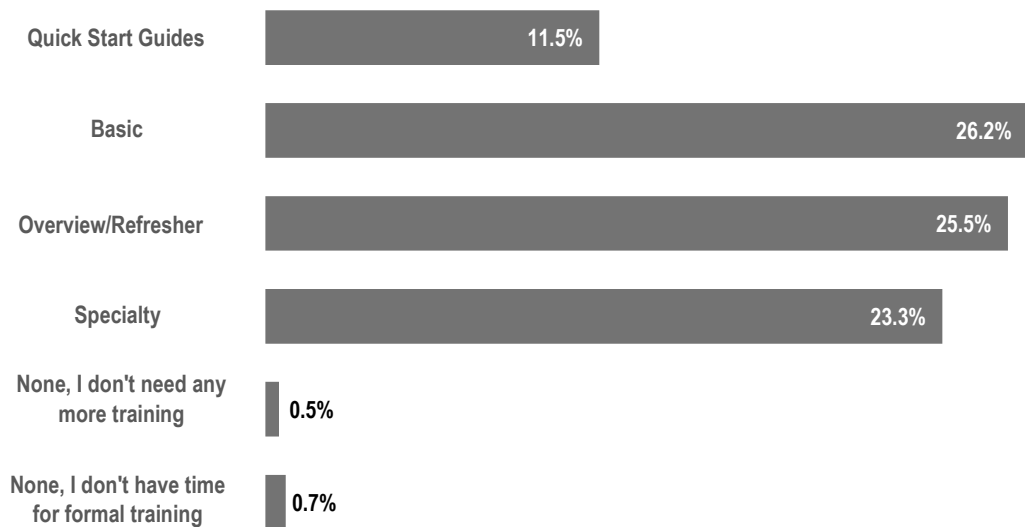
**Analysis.** In absolute terms, the section of all trainings (Special, Overview, Basic, and Quick) was selected 61 times (18.7% of total). The selections of only Specialty were selected 51 times (15.6% of total) and of both Overview and Specialty were selected 51 times (15.6% of total). Together that represents 50% of all responses.

Figure 11b. Comparison of levels of training that respondents were most interested in by level of experience

Levels of training those with "Novice" level of experience most interested in

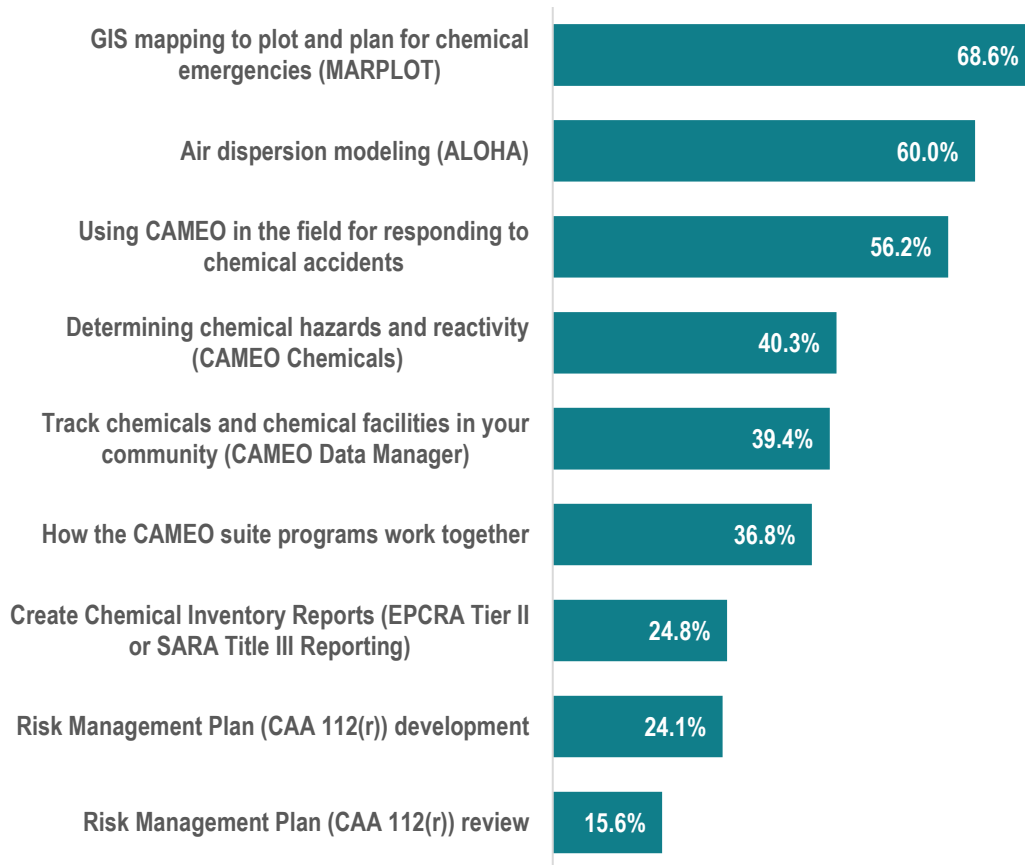


Levels of training those with "Competent" level of experience most interested in



12. What are the most important topics that you'd like to be trained on? (Select up to 3)

**Figure 12. Topics Most Interested in by Respondents**

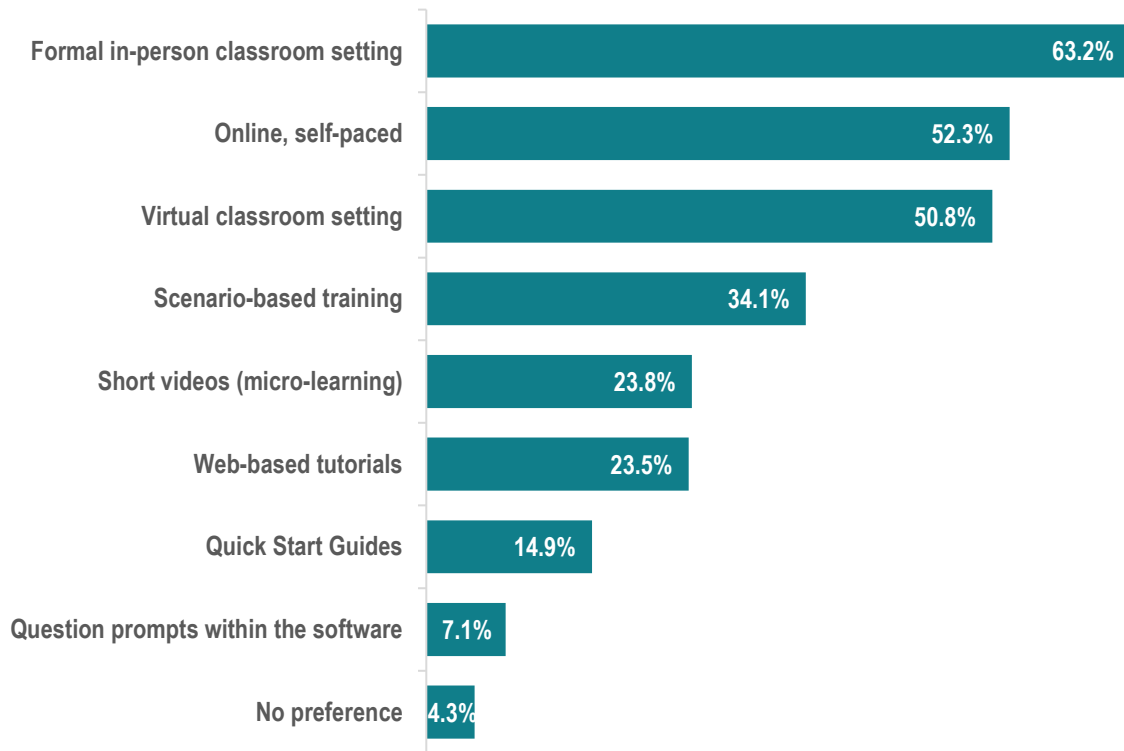


*Note: This graph reflects the percentage of total. Respondents were given the option to select up to three selections.*

**Analysis.** The highest selection was the combination of ALOHA, MARPLOT, and using CAMEO in the field at 21 responses. This was nearly double the responses of the next highest selection. This is also reflected above in percentages of total responses.

13. What training delivery style would you prefer? (Select up to 3)

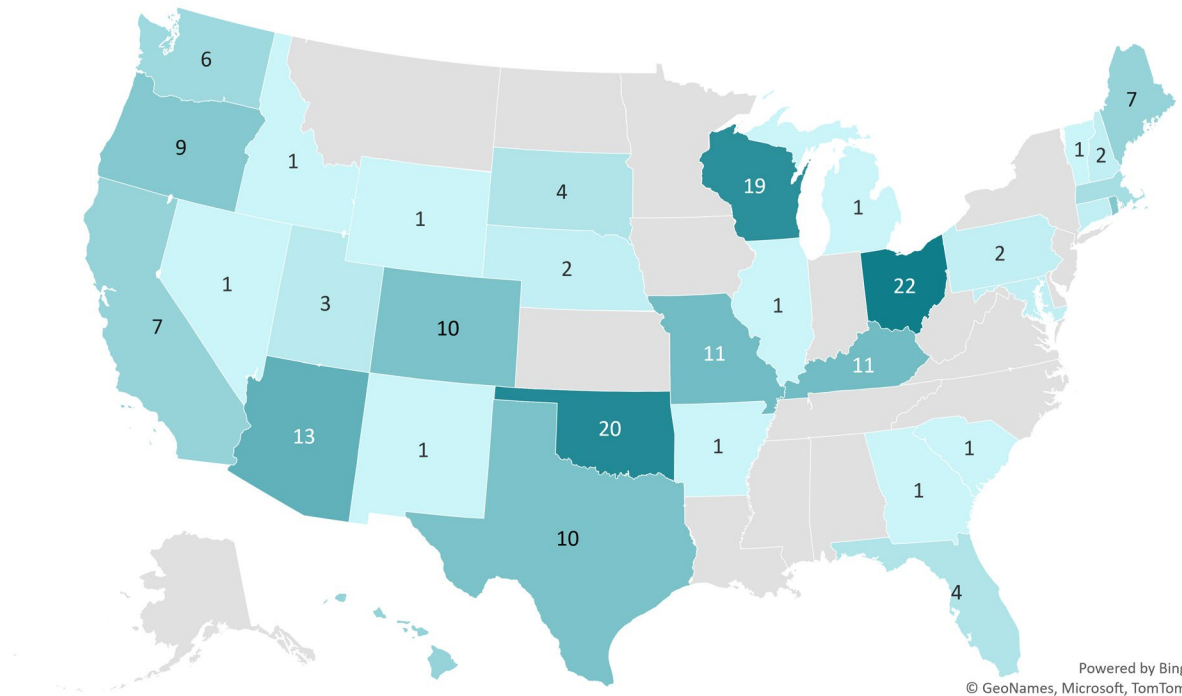
**Figure 23. Training Delivery Styles Most Interested in by Respondents**



*Note: This graph reflects the percentage of total. Respondents were given the option to select up to three selections.*

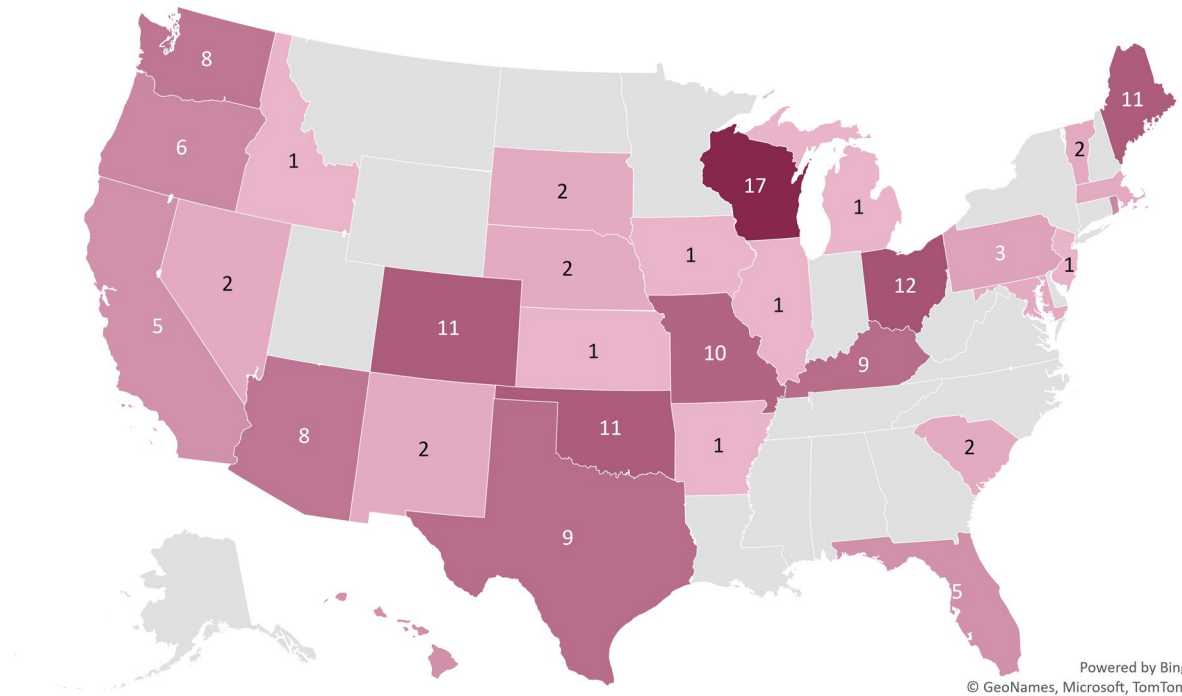
**Analysis.** Top four highest selections included only formal in-person classroom setting (35 of 323 responses), combination of formal in-person classroom, virtual classroom, and online (27 of 323 responses), combination of formal in-person classroom and virtual classroom (18 of 323 responses), and combination of formal in-person classroom, virtual classroom, and scenario-based training (16 of 323 responses). These top four selections account for 29.7% of the total.

**Figure 13a. Map of top response to training delivery style preferred by respondents, “Formal in-person classroom setting”**



*Note: The map does not include U.S. tribes and territories and other countries. Those values are Tribes (4), Guam (1), and one response “State” (1).*

**Figure 13b. Map of top response to training delivery style preferred by respondents, “Online, self-paced”**

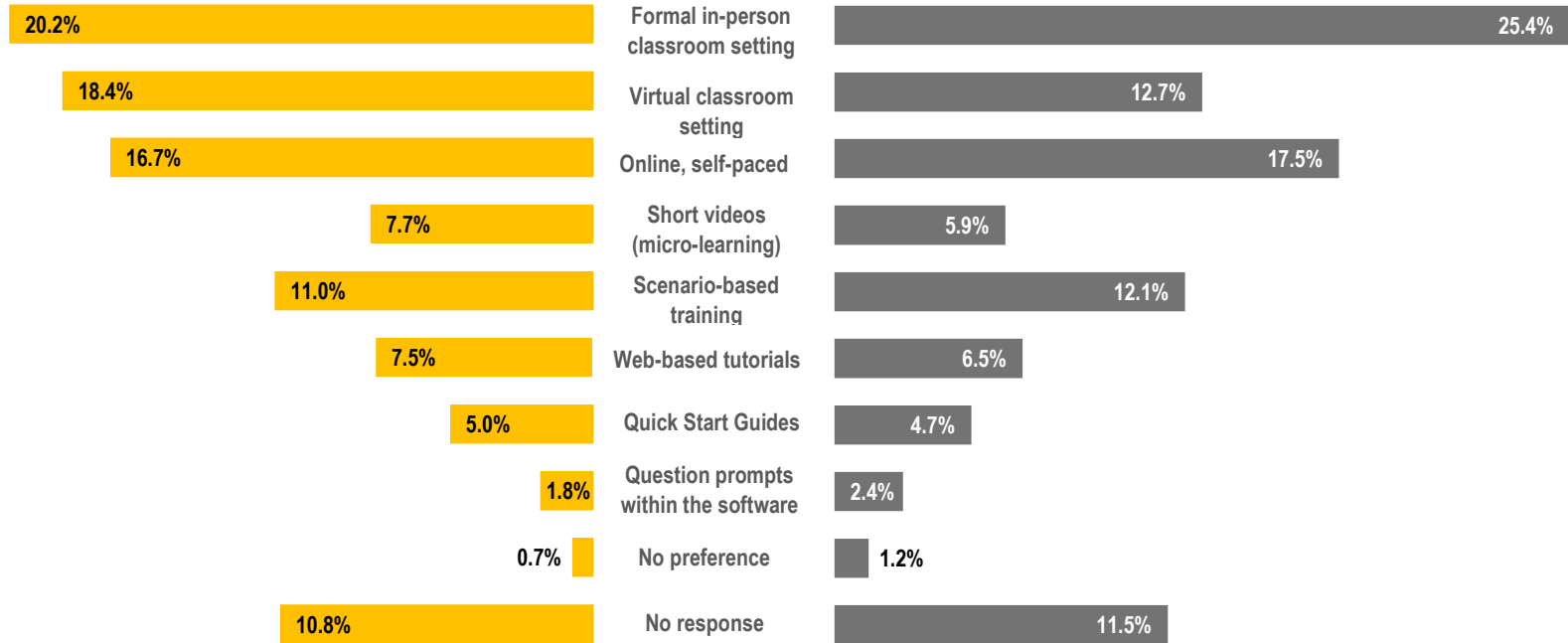


*Note: The map does not include U.S. tribes and territories and other countries. Those values are Tribes (1), Guam (1), one response “State” (1), one response “All” (1), and one non-location based response (1).*

Figure 13c. Comparison of training delivery style preferred by those in LEPC and Fire Protection roles

Training delivery style preferred by those in LEPC roles

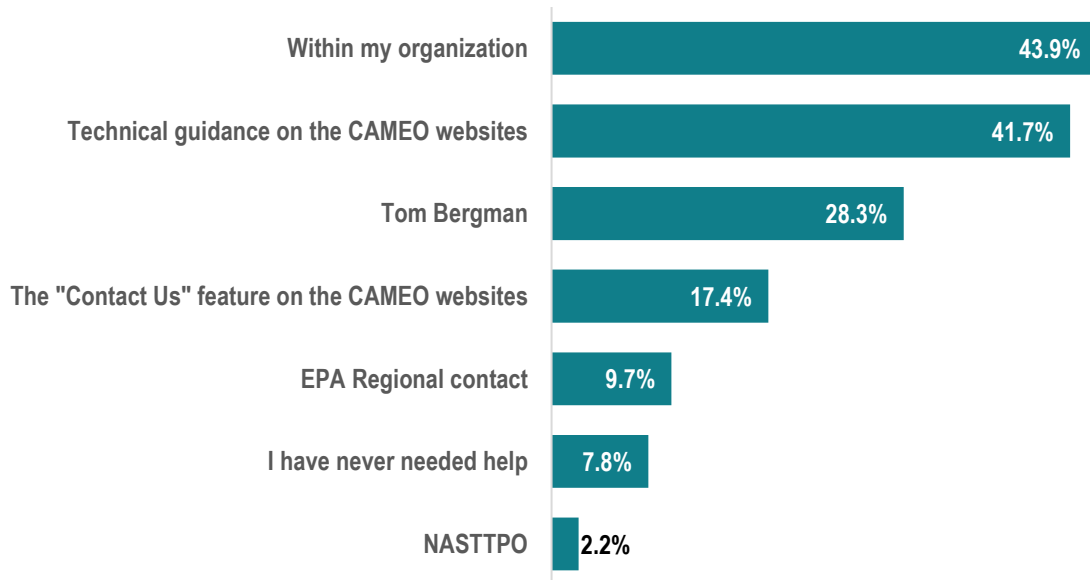
Training delivery style preferred by those in Fire Protection roles





14. Where does the respondent go for technical support? (Select all that apply)

**Figure 14. Technical Support Most Sought Out by Respondents**

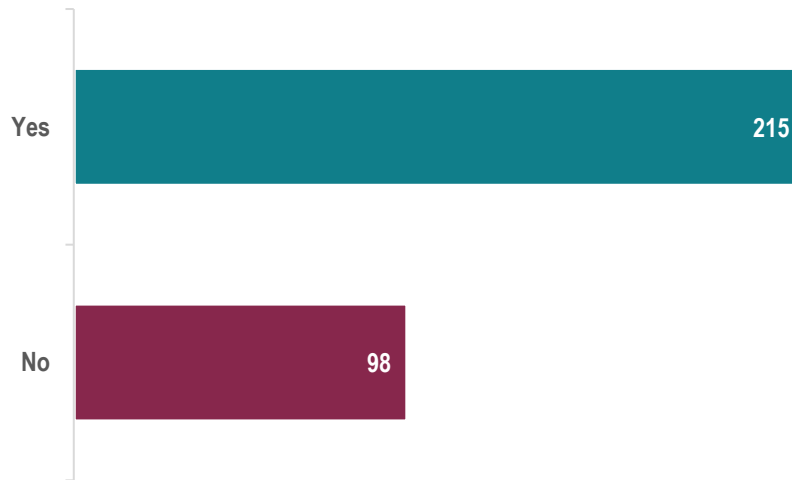


*Note: This graph reflects the percentage of total. Respondents were given the option to select all selections that applied.*

**Analysis.** The top five highest selections were only Within my organization (64 of 321 responses), only Technical guidance (44 of 321 responses), both Within my organization and Technical guidance (24 of 321 responses), only Tom Bergman (23 of 321 responses), and only I have never needed help (19 of 321 responses). These top five selections account for 54.2% of the total.

15. Do the respondents have adequate CAMEO technical support?

**Figure 15. Responses Indicating Adequate Technical Support**



*Note: The graph displays yes and no responses.*

**Analysis.** than two thirds of respondents feel as though they have adequate CAMEO technical support. This could be teased out further if we want to filter the data through the “no” responses.

16. Which of the following improvements should the CAMEO team consider if resources allow? (Select up to 3)

**Figure 36. The CAMEO Team Should Consider the Following Improvements Suggested by the Respondents**



*Note: This graph displays a percentage of the total respondents. Respondents could select up to three selections.*

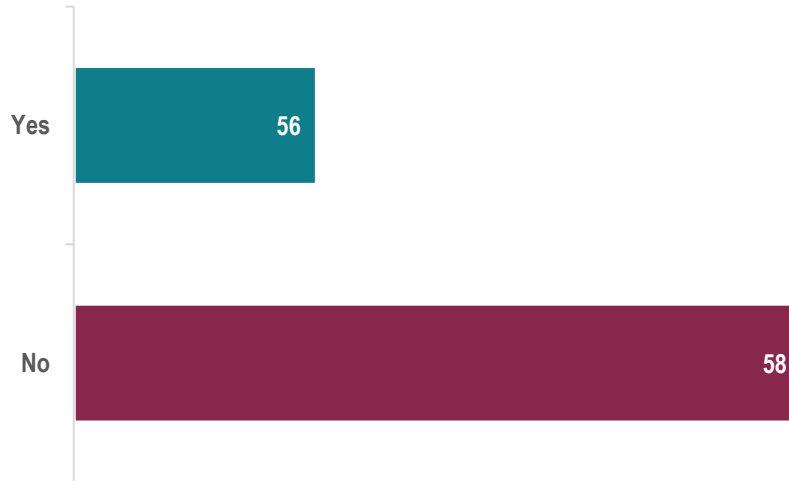
**Analysis.** The most selected response was the combination of Free Online Training, Free Online Exercises, and Training integrated into the software (34 of 322 responses). Free Online Training and Free Online Exercises choices were selected in each of the top four responses.

IF no to “2.10 In the past 18 months, have you or your organization used the CAMEO suite in any capacity?”

### III. Non-User Responses

17. Has the respondent ever tried to use CAMEO?

**Figure 47. Responses to Ever Using CAMEO**



*Note: This graph displays yes and no responses.*

**Analysis.** This is the first question asked if the respondent answered “No” to question 2.10 asking if you or your organization used the CAMEO suite in the past 18 months.

18. Why is the respondent not using CAMEO? (Select all that apply)

**Figure 58. The Majority of Respondents Suggested the Following Reasons to Not Use CAMEO**

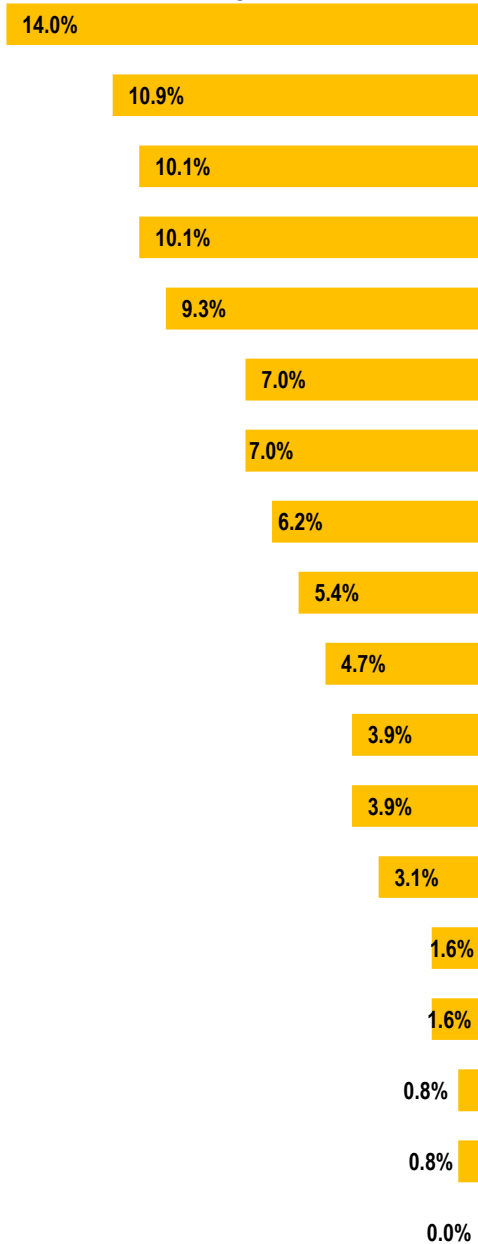
*(Values are expressed in percentage of total; n=108)*



*Note: Values displayed are those >15%. The rest of the values are less than 7% and include Need web-based/online collaborative tools; It is difficult to download due to organization IT security procedures; Need tablet/cellphone tools; It is not useful for my planning and preparedness needs; It is often out of date; There is a lack of technical support available; It is difficult to collaborate and share information with partner agencies; Doesn't allow for direct submission of Tier II reports; and Doesn't allow enough chemical facility data management.*

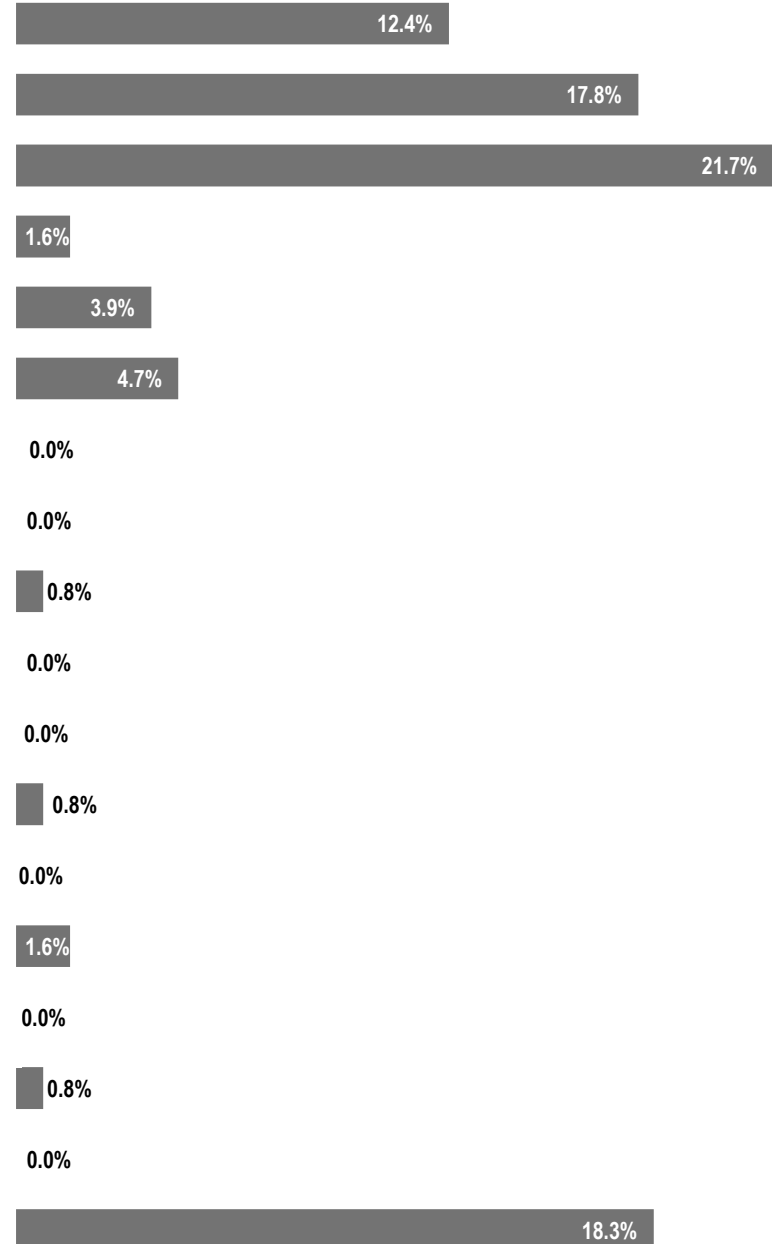
Figure 18a. Comparison of reasons why respondents have not used CAMEO in the past

Why not using CAMEO, for respondents that have used it in the past



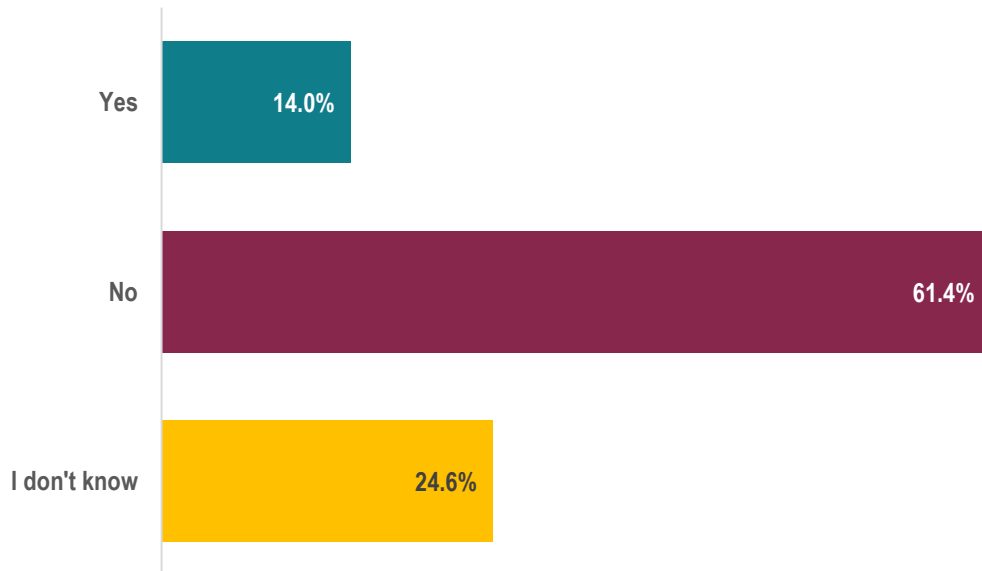
Other  
 Haven't been trained to use it  
 I don't know enough about it  
 It is difficult to use  
 There is a lack of training materials available  
 My organization uses other software  
 It is difficult to collaborate and share information within my organization  
 It is difficult to download due to organization IT security procedures  
 Need web-based/online collaborative tools  
 It is not useful for my planning and preparedness needs  
 Need tablet/cellphone tools  
 No response  
 It is often out of date  
 There is a lack of technical support available  
 It is difficult to collaborate and share information with partner agencies  
 Doesn't allow for direct submission of Tier II reports  
 Doesn't allow enough chemical facility data management  
 Never heard of it before

Why not using CAMEO, for respondents that have not used it in the past



19. Has the respondent or their organization used another disaster modeling software for chemical preparedness and response, in the past 18 months?

**Figure 19. Majority of respondents have not used another software for chemical preparedness and response**



**Analysis.** Among the respondents (114), 24.6% responded “I don’t know”, 61.4% responded “No”, and 14.0% responded “Yes”.

20. Other disaster modeling software used by respondents for chemical preparedness and response, include the following 12 programs:

Software that uses CAMEO to some extent (6)

- CERES
- E-Plan
- NWS, Hysplit
- PEAC
- RMP Comp
- WISER \*Note this software is now retired.

Software with no CAMEO affiliation (6)

- ESRI
- HAZ MAT 2020, BUXS
- Hyper-Reach, FlowMSP
- Plume Modeling
- Rhodium Incident Response
- RSEI Model