

# SOURCE CONTROL AND MOBILE BUSINESSES: SURVEY OF MUNICIPAL PROGRAMS

Technical Memorandum

Prepared for: King County and Washington State  
Department of Ecology

Project No. 200212-A-02C • May 2022



e a r t h + w a t e r



# SOURCE CONTROL AND MOBILE BUSINESSES: SURVEY OF MUNICIPAL PROGRAMS

## Technical Memorandum

Prepared for: King County and Washington State  
Department of Ecology

Project No. 200212-A-02C • May 2022

Aspect Consulting, LLC

A handwritten signature in blue ink, appearing to read "James J. Packman".

**James J. Packman, PMP**  
Associate Hydrologist  
jpackman@aspectconsulting.com

V:\200212 KC Mobile Businesses SAM Study\Deliverables\Survey of Mobile Business Municipal Source Control\Memo\_Survey\_Source Control Mobile Business\_May2022.docx



# Contents

<b>Acronyms .....</b>	<b>iii</b>
<b>Executive Summary.....</b>	<b>ES-1</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 Mobile Business and Source Control SAM Study.....	1
1.2 Municipal Programs Survey .....	1
<b>2 Survey Development.....</b>	<b>3</b>
2.1 Background Documents Reviewed.....	3
2.2 Review and Distribution of Survey .....	3
<b>3 Survey Responses .....</b>	<b>4</b>
3.1 Respondents and Program Staffing (Questions 1-2).....	4
3.2 Mobile Business Definition and Business Types (Questions 3 and 5).....	5
3.3 Mobile Business Inventorying and Outreach (Questions 4 and 6).....	6
3.4 Mobile Business Waste Handling (Question 8).....	6
3.5 Staff Training and Program Coordination (Questions 7 and 9).....	7
<b>4 Discussion .....</b>	<b>8</b>
4.1 Findings that Help This Study .....	8
4.2 Findings for Permittees and Ecology .....	8
<b>5 Limitations .....</b>	<b>10</b>

**List of Tables**

---

1 Respondents to Survey .....4

**List of Figures**

---

1 Responses by Permittee Type  
2 Program Staffing  
3 Full Time Equivalent Staffing  
4 Mobile Business Definition  
5 Inventory Data Sources  
6 Mobile Business Types  
7 Outreach and Technical Assistance  
8 Staff Training Topics  
9 Barriers to Waste Handling  
10 Coordination with Other Programs

**List of Appendices**

---

A Survey Questions  
B Email Announcement for Survey Distribution

## Acronyms

APWA	American Public Works Association
Aspect	Aspect Consulting, LLC
BIG	Business Inspection Group
BMP	Best Management Practice
Ecology	Washington Department of Ecology
GIS	Geographic Information System
IDDE	Illicit Discharge Detection and Elimination
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PARIS	Ecology's Water Quality Permitting and Reporting Information System
SAM	Stormwater Action Monitoring
Source ID	Source Identification
Study	This SAM study
SWG	Stormwater Work Group
TAC	Technical Advisory Committee
WSC	Washington Stormwater Center

## Executive Summary

This memorandum summarizes the findings from a survey of municipal jurisdictions about stormwater source control. The findings support a Source ID Stormwater Action Monitoring (SAM) Study, which is focused on how municipal stormwater National Pollutant Discharge Elimination System (NPDES) permittees are implementing or plan to implement source control activities in relation to mobile businesses. As a subset of commercial enterprises, mobile businesses have unique challenges related to stormwater and pollution prevention since they are not at a fixed location and work at dispersed sites in multiple jurisdictions.

The survey goals were to:

- Build off recent related surveys from the Washington Stormwater Center
- Understand what data sources permittees use for site inventories and how they identify mobile businesses
- Identify ways that jurisdictions work together and also work separately on source control programs
- Gather information about barriers to proper waste handling by mobile businesses

In total, 65 survey responses were submitted by 6 Phase I permittees and 59 Phase II permittees. This represents 68 percent of permittees who have a source control program requirement (primary but not secondary permittees). The survey included nine questions, which ranged from program staffing to defining mobile businesses to coordination across programs and agencies (see Appendix A).

Survey outcomes were determined by assessing the frequency of the response options both tabularly and in bar graphs (see Figures section).

Many findings from the survey are helpful to this study. These include:

- Improvement to a working definition of mobile businesses and additions to the list of mobile business types of interest to source control
- Data sources used for site inventories (supports Task 3, Business Inventorying Process)
- Training topics that include mobile businesses (supports Task 5, Best Practices Guidance)
- Outreach and technical assistance topics for mobile businesses (supports Task 6, Pilot Study)
- Barriers to waste handling by mobile businesses (supports Task 5 and Task 6)

## ASPECT CONSULTING

- Elements of coordination with other programs and other jurisdictions for source control (supports Task 5 and Task 6)

In addition, some findings may be of immediate interest and help to some permittees and the Washington State Department of Ecology (Ecology). These include findings that illuminate the many ways permittees organize and run their source control programs and comply with permit requirements. Ecology may consider using these findings to inform the permit reissuance in 2024, the process for which has already begun. These include:

- Staffing levels for source control programs are mostly in the 0.1 to 2 full-time employee FTE range.
- Comments in the “Other” responses on some survey questions captured additional or new ideas about inventory data sources and staff training topics
- A wide range of outreach and technical assistance materials is used for mobile businesses with best management practices (BMPs), pollution prevention messaging, and waste management topping the list.
- Many permittees indicated “Unsure” about what topics will be covered in staff training
- Barriers to waste management for mobile businesses include many factors and can be location or activity-specific.
- Many, but not all, permittees use multiple collaboration approaches and share data and inspection effort

The findings from this survey shine a light on municipal source control program organization and implementation, including in regard to how mobile businesses are accounted for and included. These findings bring insight for the Study team on the other project tasks, especially developing a business inventorying process, preparing a best practices guidance document, and implementing the planned pilot study in King County.

# 1 Introduction

This technical memorandum provides a summary of a survey performed for a Stormwater Action Monitoring (SAM) study (Study). The Study is being implemented by King County and Aspect Consulting, LLC (Aspect). The SAM studies are administered by the Washington State Department of Ecology (Ecology) and support municipal permittees of the National Pollutant Discharge Elimination System (NPDES) in Washington State. Funding for the Study was provided by the permittees themselves via the SAM program.

## 1.1 Mobile Business and Source Control SAM Study

As part of the Source Identification (Source ID) group of studies, this Study is focused on how permittees are implementing or plan to implement stormwater source control activities in relation to mobile businesses. As a subset of commercial enterprises, mobile businesses have unique challenges related to stormwater and pollution prevention since they are not at a fixed location and work at dispersed sites in multiple jurisdictions.

The overall Study goal is to provide insight and tools to help permittees identify, inspect, and coordinate in regard to mobile businesses and municipal source control activities. The Study also directly addresses two priority research topics (topics 17 and 23) identified by permittees and other stakeholders during the proposal and planning stages of the current round of SAM studies.<sup>1</sup>

## 1.2 Municipal Programs Survey

One task of the Study is for surveying municipal NPDES stormwater permittees about their source control programs. The survey included questions about the programs in general and several questions related to mobile businesses. The goals of the survey are to:

- Build off recent surveys related to municipal source control programs. These include: the survey in the Business Inspection Group (BIG) program report from January 2020, a survey from 2021 by from the Washington Stormwater Center (WSC) as part of their development of source control program guidance.
- Understand what data permittees use to create their site inventories and how/if they identify mobile businesses.
- Identify ways that jurisdictions work together and work separately on source control programs, including regarding mobile businesses.

---

<sup>1</sup> Priority topic 17. What additional regional or statewide regulatory systems or approaches would likely support local government oversight of mobile businesses that discharge waste to the MS4?

17.1. How can the business licensure process and requirements support proper waste handling?

17.2. What are barriers to proper handling of waste?

Priority topic 23. Evaluate the IDDE data reported by permittees and gather additional information needed to identify mobile and other multi-jurisdictional business' violations, to support coordinated and effective multi-jurisdiction enforcement.



## ASPECT CONSULTING

- Gather information from the municipal perspective about barriers to compliance and proper waste handling by mobile businesses.

Also, as part of scope development for this task, Ecology added a target response rate of “70-75% of the 95 Western Washington Permittees for this survey.” In addition, the scope noted that “Ecology may choose to invoke [permit section] S8.B.3, requiring Permittees to provide information as requested by this SAM project.” Since that time, however, Ecology decided not to take this option (personal communication, B. Lubliner, January 10, 2022). Thus, the survey was prepared and sent out as a “request to respond.”

## 2 Survey Development

The survey was developed by the Study team through a combination of background document review, draft questions iteration and refinement, and review by the Study's technical advisory committee (TAC). Once ready, the survey was distributed via several channels as described below using an email announcement (see Appendix B).

### 2.1 Background Documents Reviewed

---

Three recent surveys were reviewed when developing the survey questions for this Study. The surveys were chosen due to their topical relevance and in order to complement what they found. The surveys reviewed include:

- *Technical Memorandum: Summary of Supplemental Business Inspection Program Interviews, SAM study on Business Source Control and Inspection* (September 2021, Washington Stormwater Center and Herrera). [LINK](#)
- *Key Informant Interview Questions, SAM study on E&O Behavior Change* (October 2021, Washington State University) [LINK](#)
- *Survey on Behavior Change Campaigns in Stormwater Runoff Reduction and Water Quality Improvement, SAM study on E&O behavior change* (October 2021, Washington State University) [LINK](#)

### 2.2 Review and Distribution of Survey

---

Once the Study team had the draft survey questions ready, the TAC reviewed them and provided comments and feedback. The survey questions were then finalized and transferred to MS Forms, the online platform used to collect responses.

The email announcement for the survey went out starting on January 11, 2022. The announcement was sent out through several email lists and listservs that include all of the western Washington permittees as recipients. These included:

- Forwarded email by the Ecology regional permit managers throughout western Washington
- Announcement included in WSC Municipal Permittee Bulletin on two biweekly publication dates in January.
- SAM listserv
- Stormwater Work Group (SWG) listserv
- Ad-hoc permittee coordinator groups listserv and BIG group listserv
- Forwarded announcement by American Public Works Association (APWA) Stormwater Management Committee, Washington State Chapter

Responses were requested by January 31, which was extended 1 week to February 7.

### 3 Survey Responses

The survey responses are summarized in this section.

#### 3.1 Respondents and Program Staffing (Questions 1-2)

The first question of the survey asked responders to indicate what type of permittee they are—Phase I or Phase II—along with if they are a primary or secondary permittee. The survey did not, however, require permittees to indicate their names or jurisdictions, and all responses were anonymous. In total, 65 permittees responded to the survey, which is 68 percent of the 95 western Washington permittees. See Figure 1 for the distribution of respondents by permittee type, and Table 1 for a summary of the respondents by permittee type.

**Table 1. Respondents to Survey**

Permittee Type (& total number)	Respondents	Percentage by Type
Phase I (6)	5	83%
Phase I Secondary (9)	1	11%
Phase II (87)	56	64%
Phase II Secondary (28)	3	11%

**Notes:** The respondents included one eastern Washington Phase II permittee and one TAC member (non-permittee). Only permittee responses are included in the data analysis.

Most respondents represented primary permittees, but several secondary permittees completed the survey, too. Secondary permittees do not have the source control program requirement like primary permittees. They do, however, have effectively similar requirements for their own municipal facilities. For purposes of this Study, the data in the Figures 1 through 10 includes secondary permittee responses grouped with the primary permittees' responses.

The number of staff of municipal source control programs in the respondent's jurisdiction was asked about in Question 2, and the staffing full-time equivalents (FTEs) was asked about in Question 3. The responses received are shown on Figures 2 and 3, respectively.

While most respondents (27) indicated their current staffing levels, many (19) indicated their known planned staffing levels for the program, which is due to begin January 2023. These equated to almost all permittees (45) having 0.1 to 2 FTEs and just a handful with more (see Figure 3). Notably, four respondents indicated 0 FTEs, 2 respondents did not indicate a staffing level, and 11 did not indicate if their answer reflected current or planned staff.

## 3.2 Mobile Business Definition and Business Types (Questions 3 and 5)

---

Question 3 of the survey provided a working definition of “mobile business” in the context of source control and asked if respondents thought it was adequate. The definition provided was:

*Mobile businesses are defined by travel to customer sites to deliver or provide goods and services, including performing work at sites that often includes some outdoor activities, such as transfer, treatment, and/or discharge of material or waste; mobile businesses can include those with fixed workspaces, too.*

Most of the respondents (44) generally agreed this was an adequate working definition. Several indicated “no,” and a sizable number (15) were “Unsure.” See Figure 4 for the distribution of responses. Many provided comments and construction suggestions for how to improve the definition. Those comments and suggested revisions to the definition are summarized below.

- Include travel outside of jurisdiction
- Where the mobile businesses operate is important. Only include mobile businesses in source control inventory if they operate within one’s own jurisdiction.
- Delete these words: some, often, and can
- Include the definition of an illicit discharge for mobile businesses of interest to source control
- Broaden definition to be more general and divorced from stormwater; create separate definition for what types of mobile businesses are of interest for source control
- Keep wording simple so it’s clear who would be included (focus on waste materials)
- Give examples: outdoor washing, pressure washing, cleaning, maintenance, repair, pet grooming, food trucks, auto detailing, waste water generation
- Include operation in public spaces, too (e.g., food trucks)
- Not enough specificity for legal/tax purposes
- Too broad, don’t include:
  - Building/construction contractors since their work is permitted separately and has construction inspections
  - Package delivery

Question 5 of the survey asked about mobile business types that respondents include in their source control inventories. A list of 19 answer options was provided along with an “Other” option to enter comments. Figure 6 shows the distribution of responses among

the options suggested, each of which received from 12 to 31 votes. Several business types received a large number of responses, including *Auto Repair/Detail*, *Carpet Cleaners*, *Construction Contractors*, *Food Trucks*, *Landscapers*, *Painters*, and *Pressure Washing*. Responses are shown on Figure 6 in alphabetical order. No “Other” answers were provided; however, a moderate number of responses (25) indicated they were “Unsure” about what distinguishes a mobile business type.

### 3.3 Mobile Business Inventorying and Outreach (Questions 4 and 6)

---

Question 4 of the survey asked about what data sources are used to build source control inventories. A list of 11 answer options was provided along with an “Other” option to enter comments. The answer options included business licensing data along with mapping and land use data, windshield/screening surveys, and lists from other permit programs. Figure 5 shows the distribution of responses, each of which received 5 to 51 votes. Responses are shown on Figure 5 in order of frequency.

The data sources with the most responses were *Business License* data and *Spill/Complaints Hotline*, and the sources with the fewest responses were *GIS* and *Permit Education and Outreach List*. A high number of “Other” data sources were noted and included comments as summarized below:

- Fire Tier II sites
- Industrial waste sites, including those with pretreatment
- WA Dept of Health database
- WA Dept of Agriculture
- WA Dept of Revenue
- Ecology Water Quality Permitting and Reporting Information System (PARIS) database
- New construction permits

Question 6 of the survey asked about outreach and technical assistance information for mobile businesses and associated business sectors. A list of 13 answer options was provided along with an “Other” option to enter comments. Figure 7 shows the distribution of responses in order of frequency, each of which received from 13 to 42 votes. The most responses were for *Operational BMP Information* and the fewest were for *Voucher Programs*. A notable number (21) of responses indicated “Unsure,” and no “Other” answers were provided.

### 3.4 Mobile Business Waste Handling (Question 8)

---

Question 8 of the survey asked about permittee’s perceptions of waste handling issues by mobile businesses. A list of eight answer options was provided along with an “Other” option to enter comments. Figure 9 shows the distribution of responses in order of frequency, each of which received from 20 to 55 votes.

The most responses were for *Disposal* issues and the fewest were for *Labeling* of containers. Almost all respondents chose multiple answers, indicating the issue is multifold and depends on the type of waste and different issues considered for handling waste by mobile businesses. No “Other” answers were provided.

### 3.5 Staff Training and Program Coordination (Questions 7 and 9)

---

Question 7 of the survey asked about what elements permittees include (or will include) in staff training regarding source control and mobile businesses. A list of nine answer options was provided along with an “Other” option to enter comments. Figure 8 shows the distribution of responses in order of frequency, each of which received from 17 to 31 votes. The most responses were for *BMPs for Materials and Wastes* and *Pollution Generating Activities*, and the fewest were for *Inspection Methods* and *Multicultural Audiences*. Many “Other” answers were provided (22) and included comments as summarized below:

- How to deal with interpersonal conflict
- How to report emergencies
- Plain language messaging in English and other languages
- No staff training planned

Question 9 of the survey asked about how permittees coordinate or share information with other programs related to source control. A list of example program that could overlap with a source control program was provided,<sup>2</sup> and a list of 10 answer options was available along with an “Other” option to enter comments. Figure 10 shows the distribution of responses, each of which received from 4 to 39 votes. Responses are shown on Figure 10 grouped by like responses (i.e. groupings of data management, enforcement information, and inspections) and roughly in order of frequency.

Among the data management responses, more jurisdictions manage data separately than together, share data than not, and sometimes count inspections for multiple programs rather than counted strictly separately. A moderate amount of responses (15) indicated they were “Unsure” about coordination topics. No “Other” answers were provided.

---

<sup>2</sup> Illicit discharge detection and elimination (IDDE) program; FOG (fats, oils, and grease) program; Private facility or private BMP inspections; Spill response among multiple departments or agencies; Intra-jurisdictional Outreach and Education program; Public health inspections; Water quality permit inspections by state or federal agencies; Industrial wastewater inspections; Ecology’s Pollution Prevention Assistance (PPA) program

## 4 Discussion

The outcomes from this survey shine a light on municipal source control programs, including how mobile businesses are accounted for and included. The insights gained benefit the Study team for the remaining project tasks as explained below. In addition, Ecology and permittees may benefit from the survey outcomes about how permittees implement their programs and meet permit requirements for their source control programs.

### 4.1 Findings that Help This Study

---

These findings give the Study team information and insight on the remaining tasks, which include:

- Task 3: Developing a business inventory process
- Task 5: Preparing a best practices guidance document
- Task 6: Pilot study in King County

Highlights from the findings that will help the Study include:

- Suggestions for improvement to the definition of mobile businesses, especially to distinguish businesses that don't have significant pollution generating potential.
- Additional examples of what types of mobile businesses are of interest for municipal source control work.
- Data sources that permittees use to develop their source control site inventories, including the breadth and multiple sources noted by many permittees. This finding will be especially helpful for Task 3 and the development of the business inventory process.
- Types of outreach and technical assistance information used by permittees for mobile businesses. This will especially help Task 6 with the development of outreach materials for mobile businesses.
- Topics covered in municipal staff training for source control with high number of responses for each answer option.
- Permittee perceptions of barriers to waste handling by mobile businesses, especially the emphasis on proper waste disposal but also other steps in the waste management process from storage to labeling to using alternative products. This will especially help with Task 5 for identifying best practices to address the waste handling issues for mobile businesses.
- The range of approaches by permittees for coordination with other programs and other jurisdictions for source control work. While most respondents indicated that data, inspections, and follow-up are shared among programs, many respondents indicated their source control work is managed separately from other programs.

### 4.2 Findings for Permittees and Ecology

---

Additionally, some findings from this survey may be helpful immediately to municipal permittees and to Ecology. These include findings that illuminate how

permittees organize and run their source control programs. Ecology may consider using these findings to inform the municipal stormwater permit reissuance in 2024, the process for which has already begun. These findings include:

- Staffing levels are mostly in the 0.1 to 2 FTE range for permittees' source control programs.
- Additional data sources were mentioned that some permittees use for developing source control site inventories, including industrial waste sites and sites from state Department of Health and state Department of Transportation.
- Data sources that relatively few permittees use include GIS data and permit education and outreach lists.
- Emphasis with outreach and technical assistance materials on BMPs, pollution prevention messaging, and waste management.
- The high number of permittees who indicated they don't (yet) know what topics will be covered in staff training. This represented the most number of responses for the training survey question.
- Permittee perceptions of waste management barriers for mobile businesses includes many factors and had the second-most number of responses, indicating multiple possible barriers.
- Insight on how permittees are currently working together for their source control programs. While permittees work together to varying degrees, many use multiple collaboration approaches and share data, inspection effort, and enforcement information.



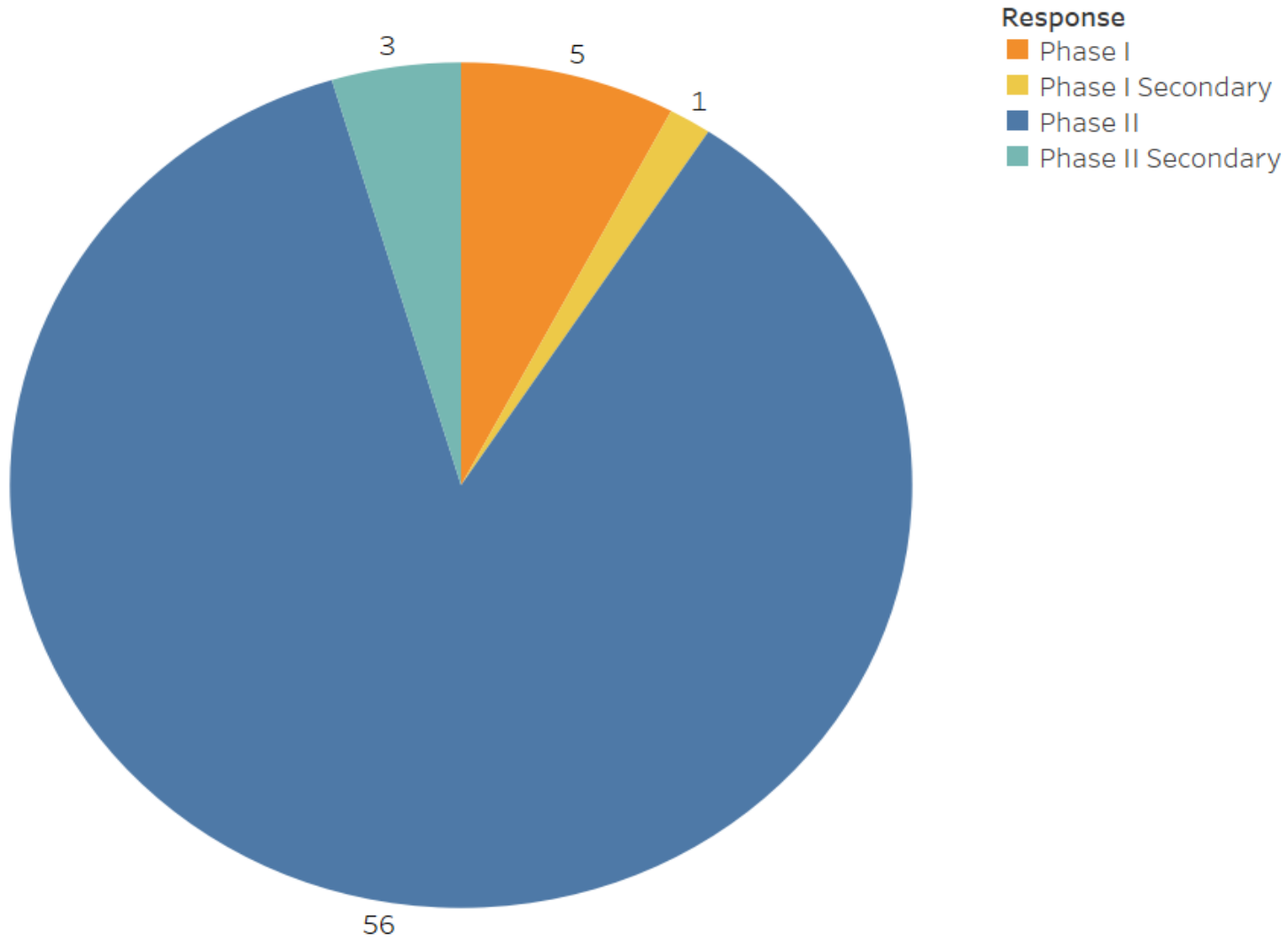
## 5 Limitations

Work for this project was performed for the King County and the Department of Ecology (Clients), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Clients apply only to the services described in the Agreement(s) with the Clients. Any use or reuse by any party other than the Clients is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

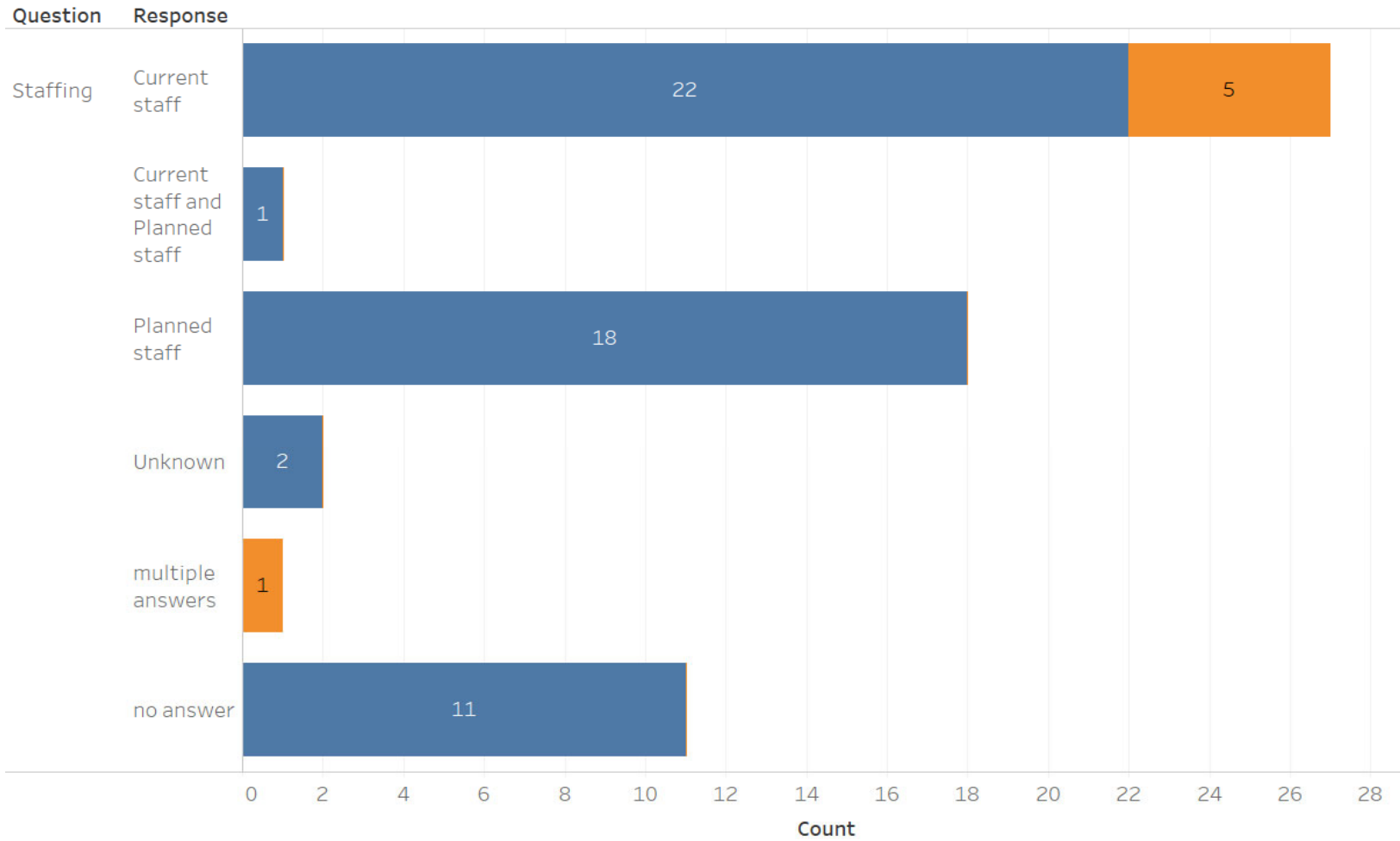
# FIGURES

# 1\_Permittee Type



**Figure 1**  
**Responses by Permittee Type**

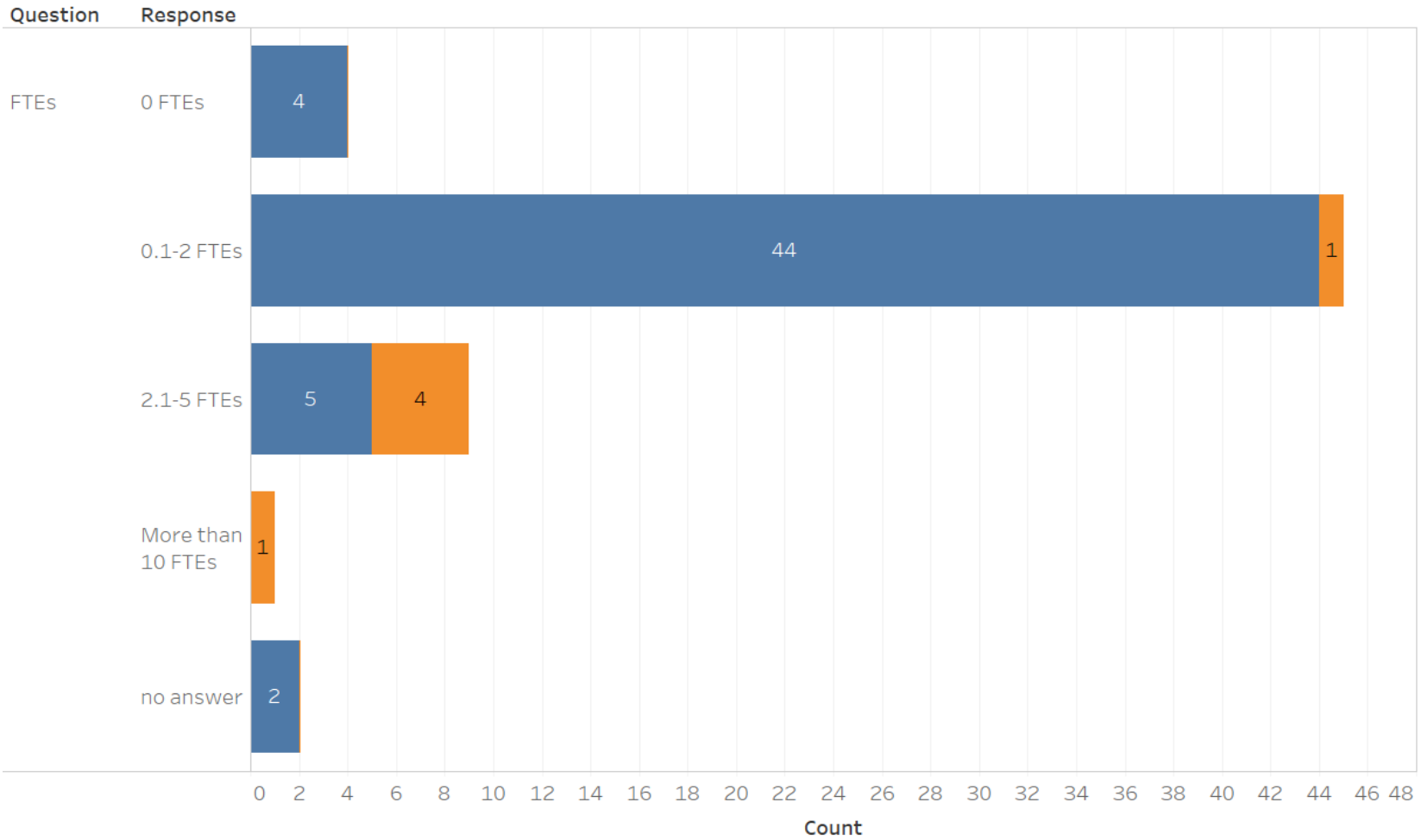
## 2\_Staffing



### Permittee Type

- Phase I
- Phase II

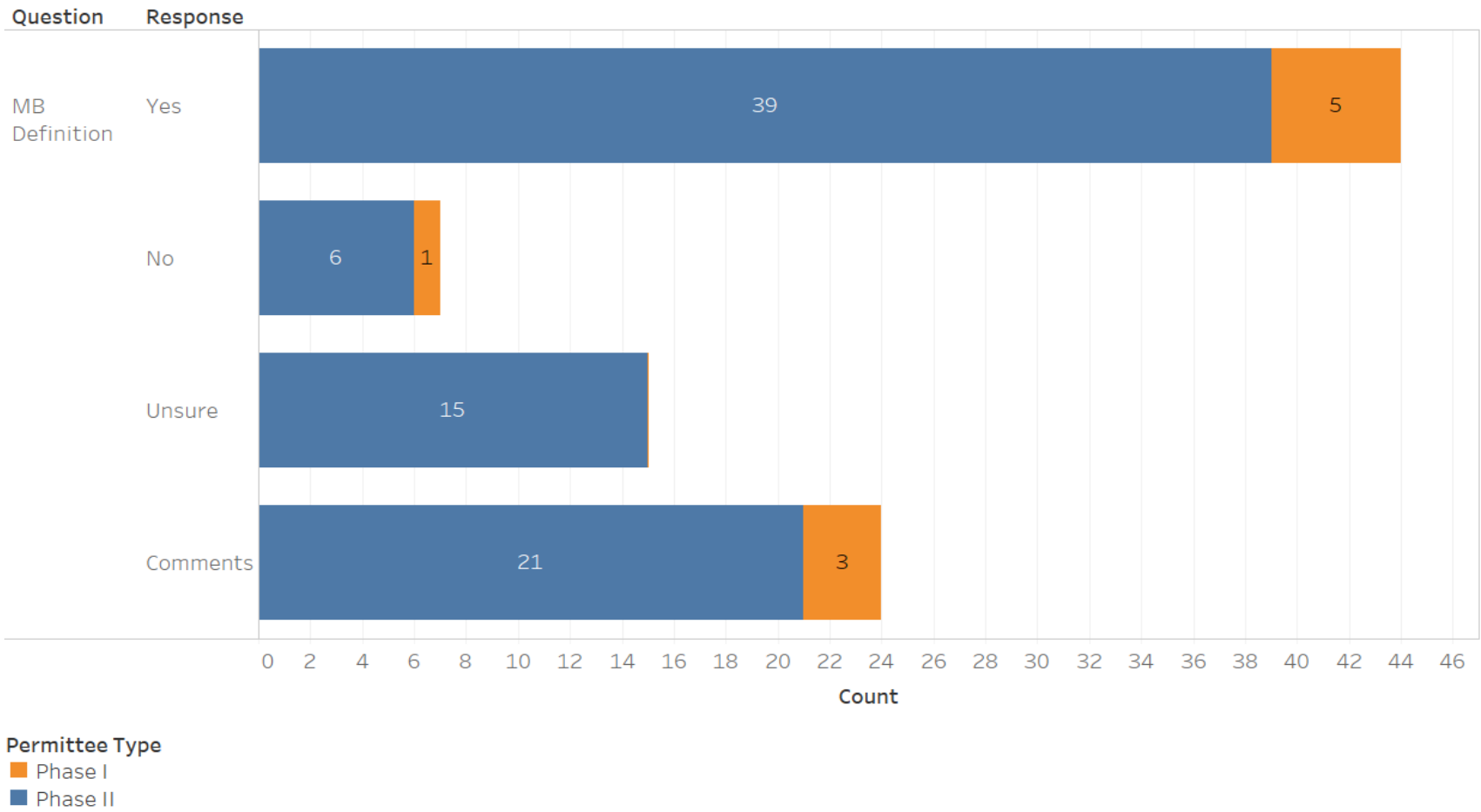
2\_FTEs



Permittee Type  
Phase I  
Phase II

**Figure 3**  
**Full-time Equivalent Staffing**  
Survey of Source Control and Mobile Businesses  
Project No. 200212-A-02C  
Mobile Business SAM Study

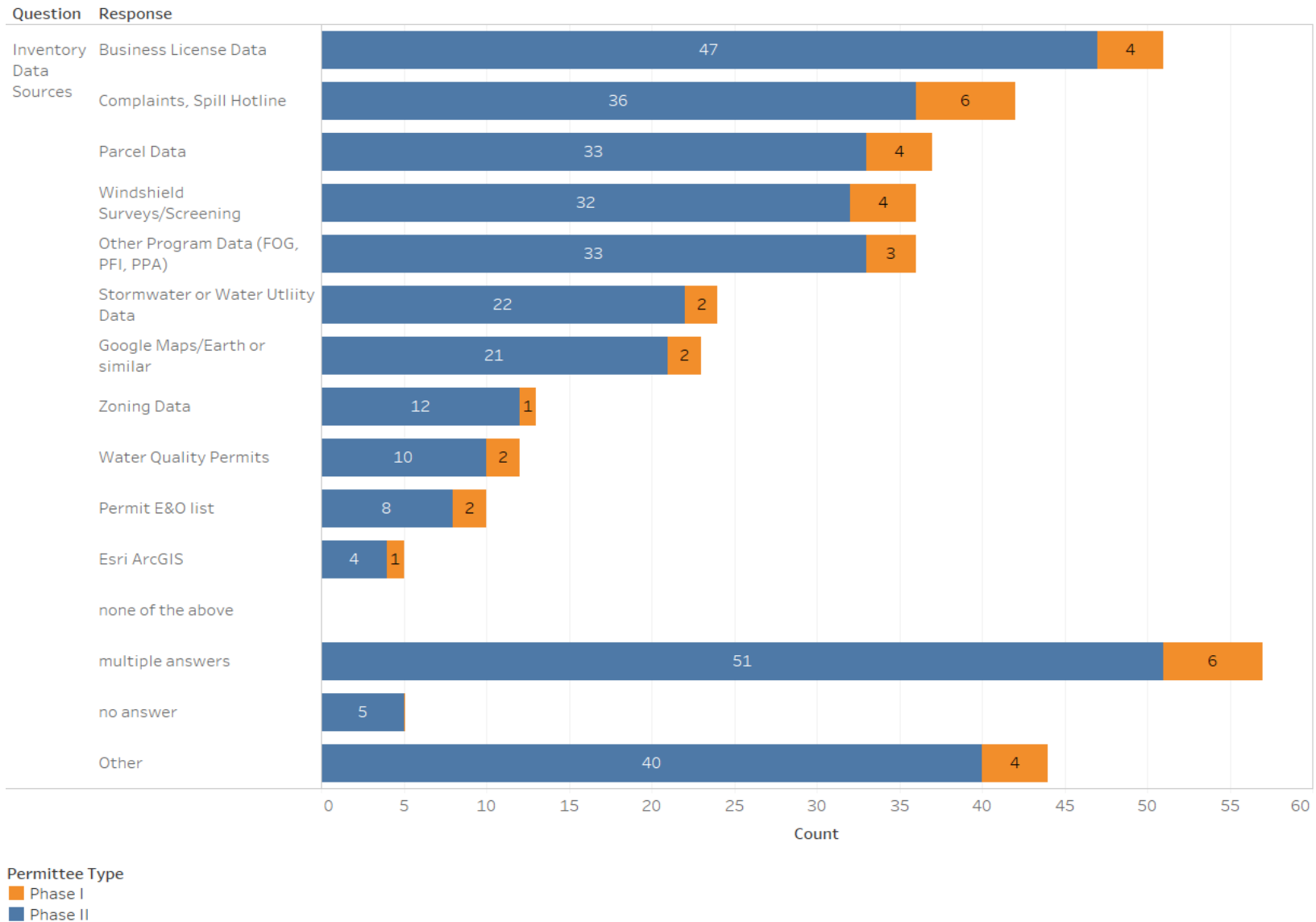
### 3\_MB Definition



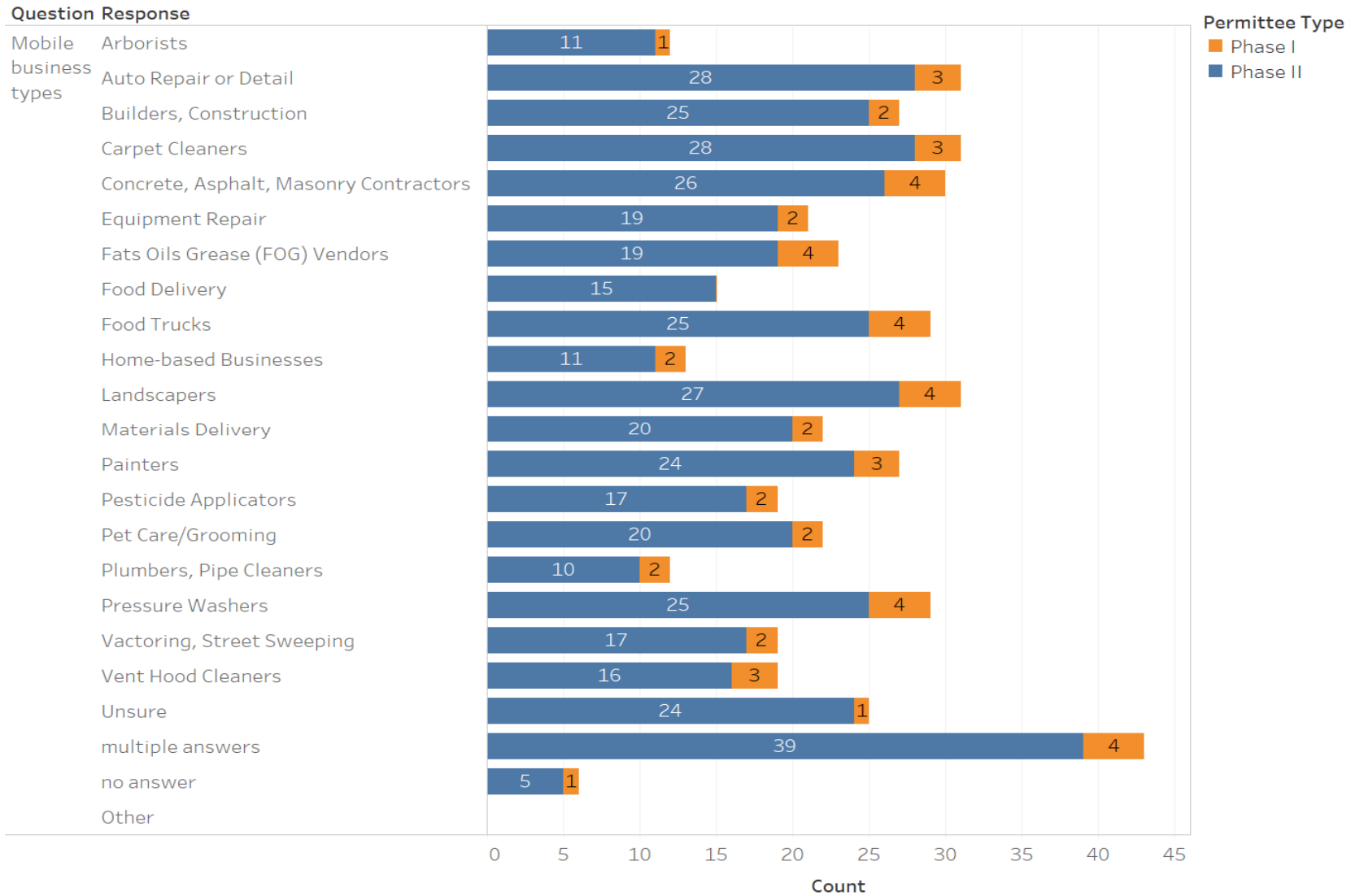
**Figure 4**

**Mobile Business Definition**

## 4\_Inventory Data Sources



## 5\_Mobile Business Types



**Figure 6**

### Mobile Business Types

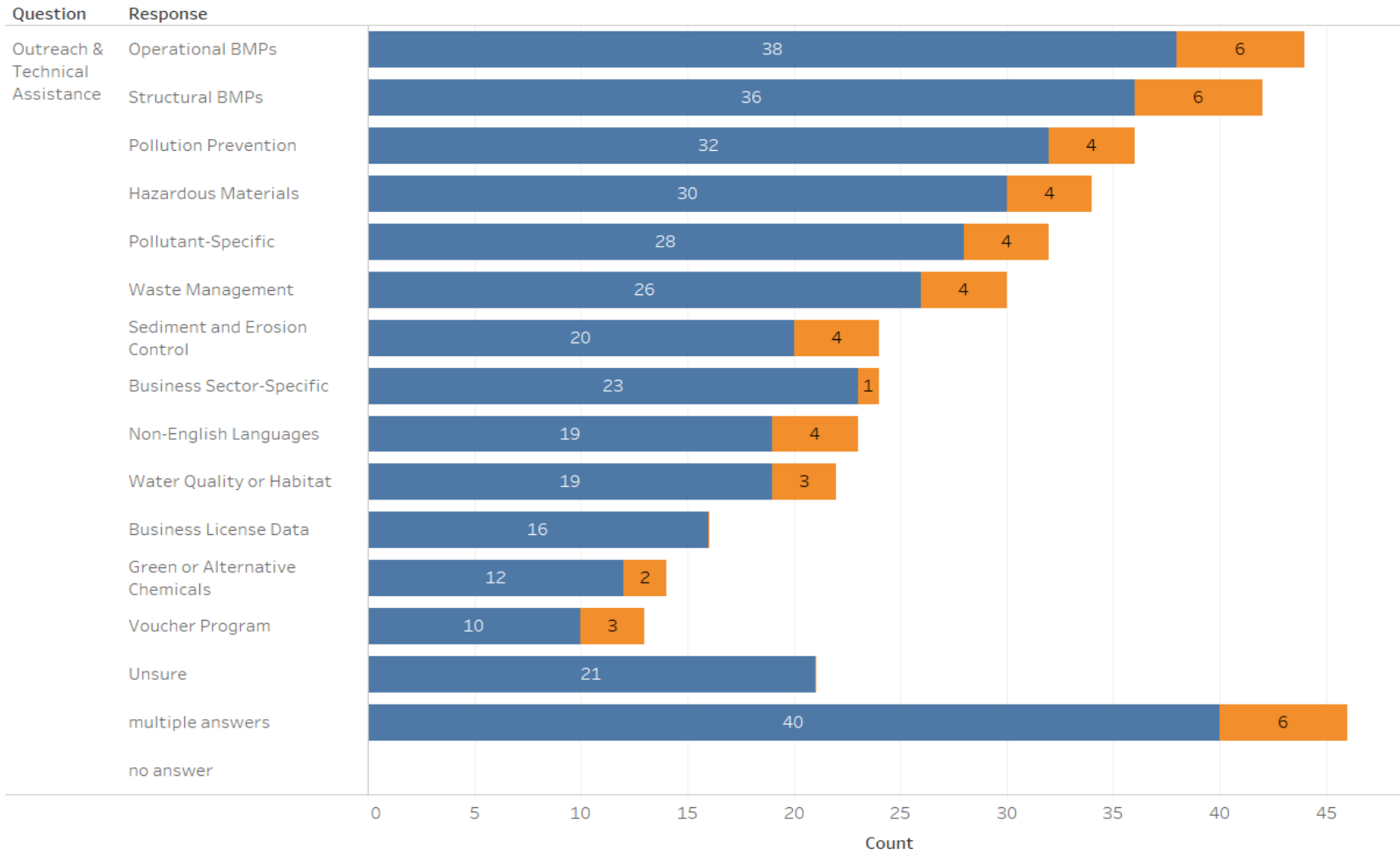
Survey of Source Control and Mobile Businesses

Project No. 200212-A-02C

Mobile Business SAM Study



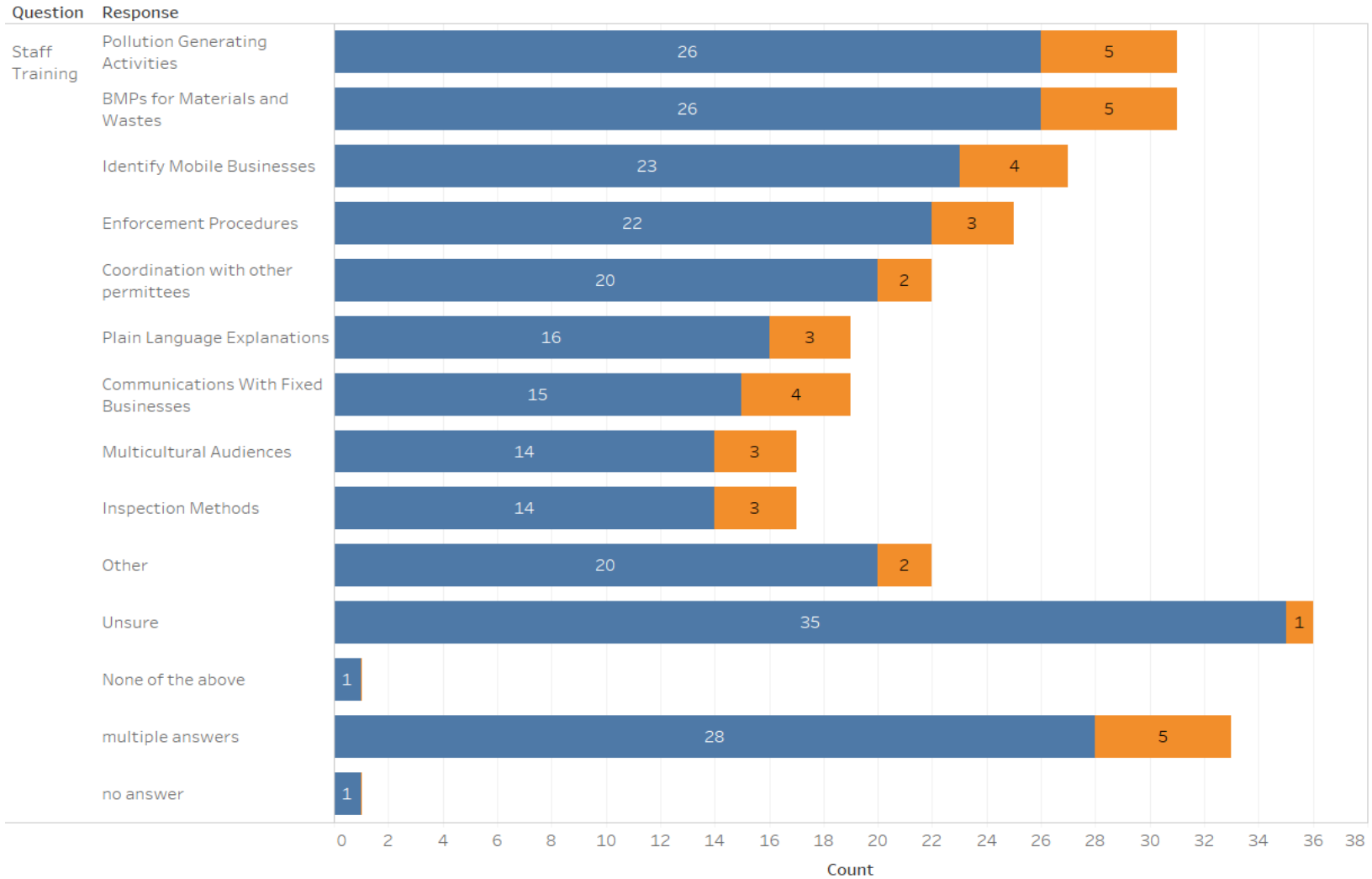
## 6\_Outreach and Technical Assistance



Permittee Type  
■ Phase I  
■ Phase II

**Figure 7**  
**Outreach and Tech. Assistance**

## 7\_Staff Training



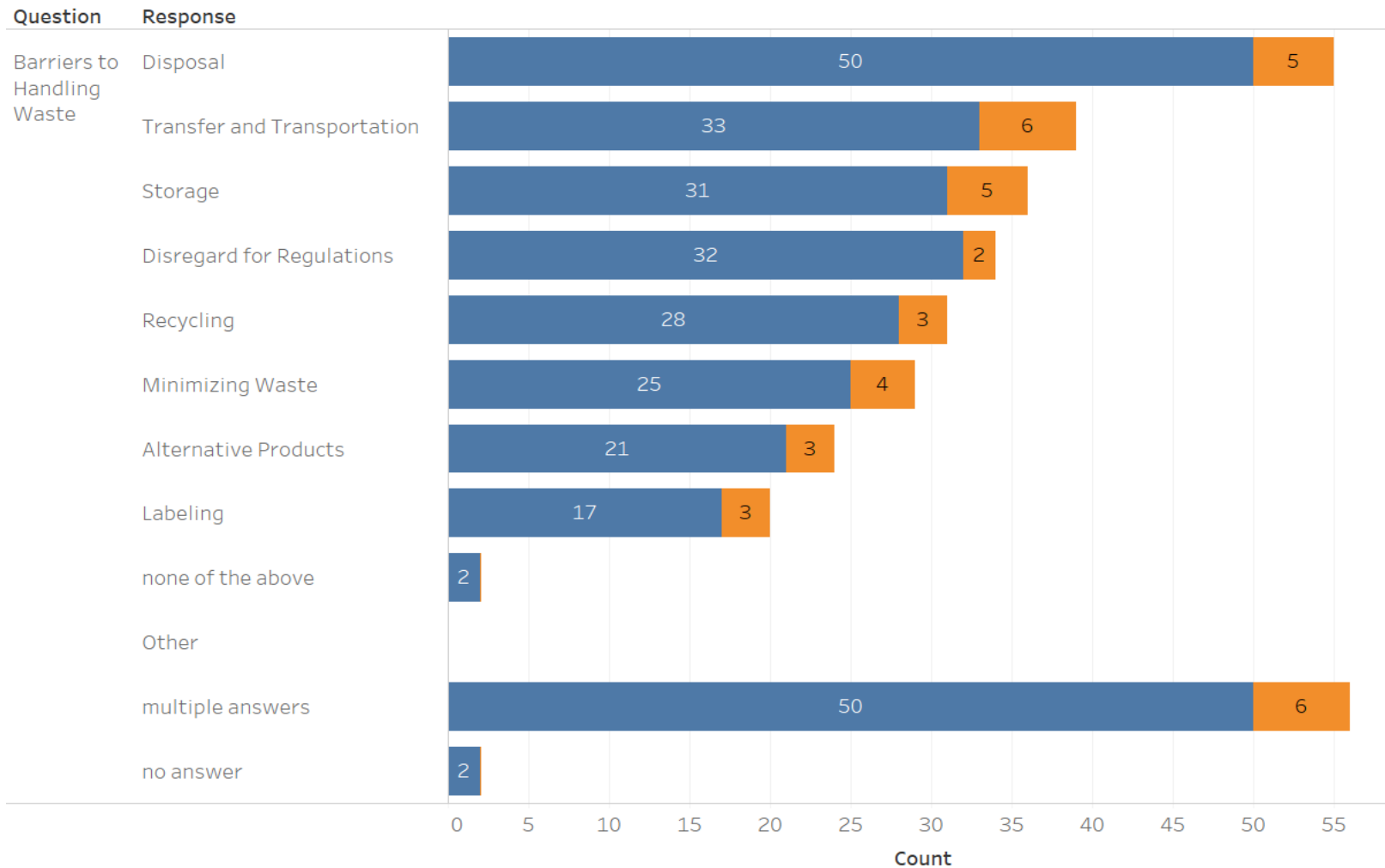
Permittee Type  
■ Phase I  
■ Phase II

**Aspect Consulting**  
 May 2022

V:\200212 KC Mobile Businesses SAM Study\Deliverables\Survey of Mobile Business Municipal Source Control\Figures\MB Survey\_Figures

**Figure 8**  
**Staff Training Topics**  
 Survey of Source Control and Mobile Businesses  
 Project No. 200212-A-02C  
 Mobile Business SAM Study

## 8\_Barriers to Waste Handling

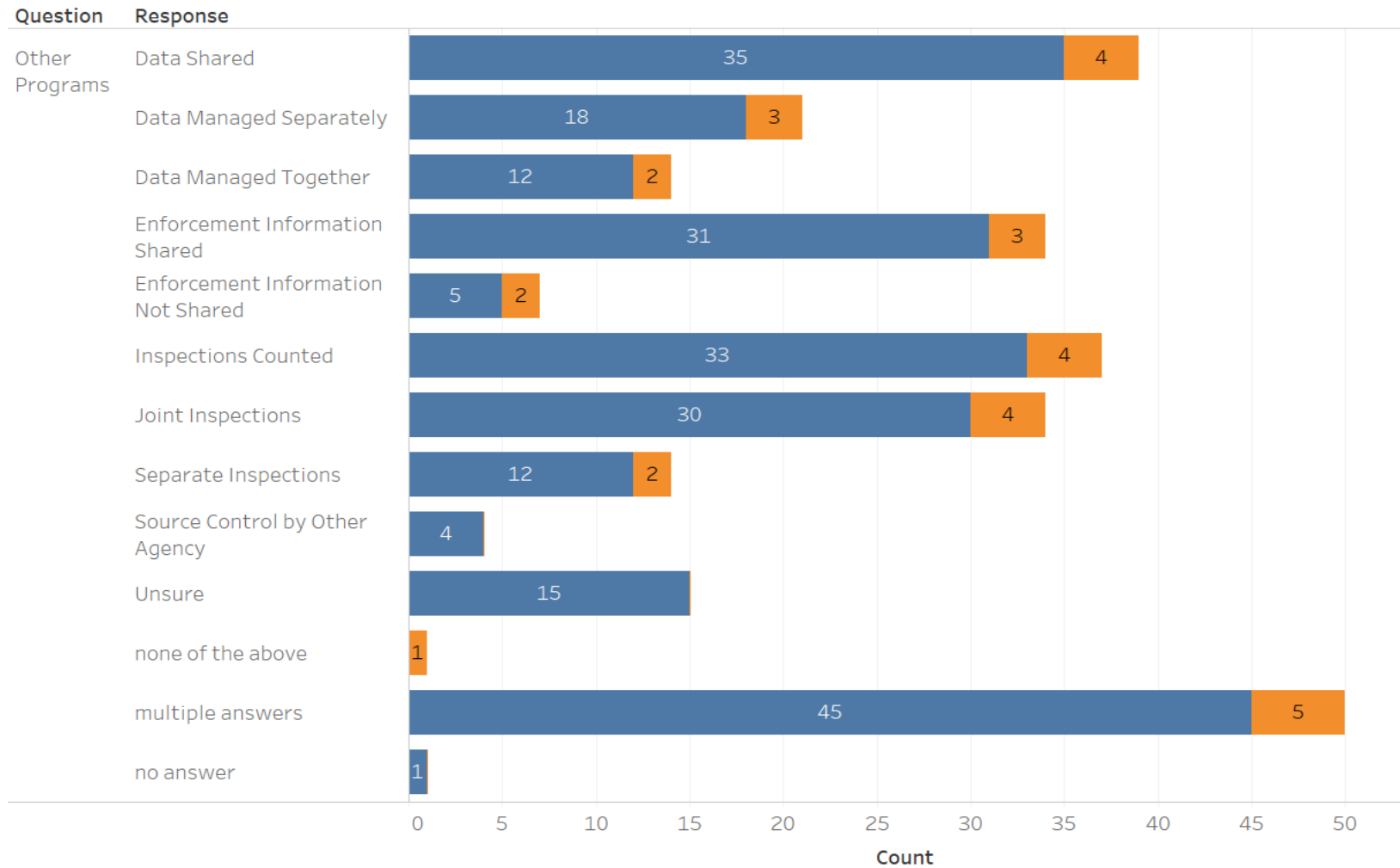


### Permittee Type

- Phase I
- Phase II

**Figure 9**  
**Barriers to Waste Handling**  
 Survey of Source Control and Mobile Businesses  
 Project No. 200212-A-02C  
 Mobile Business SAM Study

## 9\_Coordination with Other Programs



**Permittee Type**  
■ Phase I  
■ Phase II

**Figure 10**  
**Coordination w/ Other Programs**

**APPENDIX A**  
**Survey Questions**

---

# Survey - Source Control & Mobile Businesses, SAM Source Identification Study

This survey is for **NPDES municipal stormwater permittees** to fill out regarding their existing or planned Source Control Programs for Existing Development. One response per permittee is requested.

The results from this survey will support the Ecology SAM Source Identification Study on *Mobile Businesses and Source Control*.<sup>\*</sup> As a subset of commercial enterprises, mobile businesses have unique challenges related to stormwater and pollution prevention due to their mobile nature and working at dispersed sites across multiple jurisdictions. The Study is developing new tools and guidance to support NPDES permittees in identifying, inspecting, enforcing, and coordinating on source control activities and addressing issues specific to mobile businesses.

Please complete the survey by January 31, 2022.

Thank you,  
Alison Schweitzer and Todd Hunsdorfer, King County  
James Packman, Aspect Consulting

<sup>\*</sup>Study webpage: <https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring/SAM-source-identification/Mobile-business-source-control>

...

<sup>\*</sup> Required

1. What type of entity do you represent? <sup>\*</sup>

- Phase I municipal permittee
- Phase II municipal permittee
-

Phase I secondary permittee

Phase II secondary permittee

Other

2. How many staff currently work or are expected to work in your jurisdiction's source control program when the program begins in January 2023?

Pick an answer type first from the first two options (current or planned staffing), and then pick one associated FTE level (FTE = full-time equivalent) from the last five options. Use the Other option for any comments. \*

My answers represent current staffing

My answers represent planned staffing starting January 2023

0 FTEs

0.1-2 FTEs

2.1-5 FTEs

5.1-10 FTEs

More than 10 FTEs

Other

3. Here is a working definition for mobile businesses in the context of stormwater and source control:

*Mobile businesses are defined by travel to customer sites to deliver or provide goods and services, including performing work at sites that often includes some outdoor activities, such as transfer, treatment, and/or discharge of material or waste; mobile businesses can include those with fixed workspaces, too.*

Do you think this is an adequate and useful definition of mobile businesses for the purposes of municipal source control programs?

Indicate Yes, No, or Unsure, and if desired provide additional ideas for how to define mobile businesses in the context of stormwater and source control. \*

Enter your answer

4. Which of the following data sources does or will your jurisdiction use to build the inventory of qualifying sites? (select all that apply) \*

- Business license data
- Other city programs, such as Fats Oils Grease (FOG), Pollution Prevention Assistance (PPA), or Private Facility Inspections (PFI)
- Water quality permits
- Parcel-based GIS data
- ESRI ArcGIS Business Analyst data
- Google maps or Google Earth (or other mapping program)
- Complaints, spill hotline
- Stormwater utility database or water utility accounts
- Zoning data
- Windshield surveys/screenings
- Permit outreach and education contacts
- None of the above
- Unsure at this time
- Other

5. The following is a list of specific types of mobile businesses that could be included in source control site inventories. Indicate which, if any, of these mobile business types does or will your jurisdiction's source control inventory include. (select all that apply) \*



- Auto repair or auto detail
- Building and/or construction contractors
- Building materials delivery (lumber, gravel, soil, etc.)
- Carpet cleaners
- Concrete, asphalt, and/or masonry contractors
- Equipment repair
- Fats Oils Grease (FOG) vendors
- Food delivery (groceries or restaurants)
- Food trucks
- Home-based businesses
- Landscapers
- Painters (interior or exterior of buildings, structures, etc.)
- Pesticide applicators
- Pet care, animal grooming, and/or dog walking
- Plumbers or pipe cleaners
- Pressure washing and exterior surface cleaning
- Tree service/arborists
- Vactoring and street sweeping
- Vent hood cleaners
- Unsure at this time
- |       |
|-------|
| Other |
|-------|

6. Does or will your jurisdiction use any of the following outreach information or technical assistance resources targeted to business sectors that include mobile businesses? (select all that apply) \*

- Outreach on specific structural BMPs, such as cover or containment
- Outreach on specific operational BMPs, such as housekeeping or maintenance
- Waste management information
- Hazardous material storage or transport
- Business sector-specific messaging
- Pollutant-specific messaging
- Voucher or reimbursement program
- Business licensing
- Stormwater and receiving water quality or habitat (river, lake, sound, etc.)
- Sediment and erosion control
- Pollution prevention
- Green or alternative chemicals
- Communications or resources provided in non-English languages
- None of the above
- Unsure at this time
- 

7. Which of the following elements does (or will) your jurisdiction's source control staff training include regarding mobile businesses? (select all that apply) \*

- Definition and identification of mobile businesses
- Example of pollutant generating activities by mobile businesses

- Special inspection methods for mobile businesses
- BMPs to manage materials and wastes from mobile businesses
- Coordination with other permittees regarding mobile businesses
- Procedures for enforcement of violations by mobile businesses
- Working with multicultural audiences
- Plain language explanations
- Communication with fixed businesses about mobile businesses they may hire
- None of the above
- Unsure at this time
- 

8. Regarding the proper handling of waste, which of the following do you consider to be knowledge gaps or barriers to successful source control for mobile businesses? (select all that apply) \*

- Minimizing the generation of waste
- Waste storage
- Waste labeling
- Waste transfer and transportation
- Recycling of waste products
- Disposal of waste products
- Knowledge about relevant alternative products
- Disregard for following regulations or working with government, or other attitude issue
- None of the above
-

9. Considering the list below of programs that may overlap with source control (both within and external to your jurisdiction), how does or will your jurisdiction work with these other programs that have some overlap with source control? (select all that apply) \*

Examples of programs—both intrajurisdiction and interjurisdiction—that may overlap with Source Control programs:

- Illicit discharge detection and elimination (IDDE) program
- FOG (fats, oils, and grease) program
- Wastewater Pretreatment inspections
- Private facility or private BMP inspections
- Spill response
- Municipal Outreach and Education
- Public health inspections
- Water quality permit inspections by state or federal agencies
- Industrial wastewater inspections
- Ecology’s Pollution Prevention Assistance (PPA) program (<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Pollution-prevention-assistance>)

- Some site visits or inspections by one program count for another program
- Some site visits or inspections are done jointly among staff from different programs
- Site visits and inspections are done solely separately by the various programs
- Some relevant data or records, such as violations, are shared among programs
- Data from the various programs are recorded and managed altogether
- Data from the various programs are recorded and managed completely separately
- Enforcement information is shared among the programs
- Enforcement information is not shared among the programs
- Source control program activities in my jurisdiction are performed by another program or agency
- None of the above
- Unsure at this time
-

## **APPENDIX B**

### **Email Announcement of Survey Distribution**

**From:** [Larson-Pugh, Laurie J](#)  
**To:** [Larson-Pugh, Laurie J](#)  
**Subject:** Time sensitive Request for your assistance - Source Control and Mobile Business Survey  
**Date:** Tuesday, January 11, 2022 1:22:31 PM  
**Attachments:**

---

Hi All,

King County is requesting assistance from the Central NPDES group with information gathering for the SAM source control and mobile business project. Please look at the information below. Thank you –  
Laurie Larson-Pugh

### **SOURCE CONTROL AND MOBILE BUSINESSES SURVEY**

We are asking **NPDES municipal stormwater permittees** to fill out this [Source Control & Mobile Businesses survey](#). The survey is just nine (9) questions and **should only take between 5 and 10 minutes to complete**.

The results from this survey will support the Ecology [SAM Source Identification Study on Mobile Businesses and Source Control](#). As a subset of commercial enterprises, mobile businesses have unique challenges related to stormwater and pollution prevention due to their mobile nature and working at dispersed sites across multiple jurisdictions. This study will develop and test new tools and guidance to support NPDES municipal stormwater permittees in identifying, inspecting, enforcing, and coordinating on source control activities and addressing issues specific to mobile businesses.

Please complete the [survey](#) by **January 31, 2022**.

Thank you,  
Alison Schweitzer and Todd Hunsdorfer, King County  
James Packman, Aspect Consulting

Thank you!

**Alison Schweitzer** (she/her/hers)  
Program/Project Manager II  
Stormwater Services Section  
Water and Land Resources Division  
King County Department of Natural Resources and Parks  
**E:** [alison.schweitzer@kingcounty.gov](mailto:alison.schweitzer@kingcounty.gov)  
**T:** 206-263-6917

**Laurie Larson-Pugh**

Municipal Program & MuniCon 2023 Manager  
WSU Puyallup Research Center | Washington Stormwater Center  
2606 W. Pioneer, Puyallup, WA 98371  
253-445-4593 office 360-271-8032 cell  
<https://www.wastormwatercenter.org/permit-assistance/municipal/>