

# **Five Steps the City of Seattle Should Take to Reduce Trash Around Unsanctioned Encampments**

**February 24, 2020**

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**Seattle Office of City Auditor**

# Five Steps the City of Seattle Should Take to Reduce Trash Around Unsanctioned Encampments

## Background

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The Navigation Team is an approach for addressing the issue of people living unsheltered in Seattle. The Navigation Team has a dual mission of constructively engaging people living outdoors in unsanctioned encampments on public property and mitigating negative community impacts by removing such encampments as needed. The City of Seattle has spent millions of dollars removing millions of pounds of trash from unsanctioned encampments. In 2018, the Navigation Team removed 2.4 million pounds of trash from unsanctioned encampments. In the first three quarters of 2019, the Navigation Team removed over 2.3 million pounds of trash from unsanctioned encampments.

## What We Found

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We identified five steps that the City could take to develop a more strategic approach that would help reduce or prevent unsanctioned encampment trash from accumulating, and to track whether encampment trash accumulation is increasing or decreasing: 1) Track trash accumulation systematically, 2) Develop and implement strategies for persistent trash “hot spots”, 3) Protect urban streams and watersheds, 4) Improve needle recovery efforts, and 5) Use best practices to deter metal theft. We offer five specific recommendations associated with these steps that are directed at the City as a whole, rather than the Navigation Team specifically. This recognizes that the complex issues surrounding unsheltered homelessness require a systematic, coordinated, multi-pronged response.

## Executive Response

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Our report incorporates feedback from the Mayor’s Office, the City Budget Office, Human Services Department, Seattle Police Department, Public Health – Seattle and King County, Seattle Parks and Recreation, Seattle Public Utilities, Seattle City Light, and Seattle Office for Civil Rights. The Executive Response is included as Appendix A.

As part of the 2020 budget, the Seattle City Council passed [Proviso HOM-15-C1](#) that requires the Executive to provide a written report to the Council by November 19, 2020 discussing the City’s compliance with the Office of City Auditor recommendations on Checkpoint 2.3, Strategies to Prevent Trash Accumulation.



### WHY WE DID THIS AUDIT

This audit focuses specifically on **Checkpoint 2.3: Assessment of Strategies to Prevent Trash Accumulation** from our [November 2017 Navigation Team Reporting Plan](#). Seattle City Councilmember Lisa Herbold requested the Reporting Plan and our subsequent reports. These reports promote continuous improvement in the City of Seattle’s (City’s) approach to addressing unsanctioned encampments.

### HOW WE DID THIS AUDIT

To accomplish the audit’s objectives, we:

- geocoded, mapped, and analyzed 2017-18 encampment clean-ups;
- conducted interviews with City staff and analyzed reports from City contractors using qualitative analysis software;
- conducted systematic field surveys using a mobile application;
- researched best practices and consulted with public health and public safety researchers.

### Seattle Office of City Auditor

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## INTRODUCTION

### Audit Overview

This audit focuses on **Checkpoint 2.3: Assessment of Strategies to Prevent Trash Accumulation** from our [November 2017 Navigation Team Reporting Plan](#). Seattle City Councilmember Lisa Herbold requested the Reporting Plan and our subsequent reports. These reports are intended to promote continuous improvement in the City of Seattle's (City's) approach to addressing unsanctioned encampments.

**Navigation Team Overview.** The Navigation Team is an approach implemented by former Mayor Murray's administration for addressing the issue of people living unsheltered in Seattle. The Navigation Team became operational in February 2017. The 2020 budget for the Navigation Team is \$8.4 million;<sup>1</sup> this includes a team of 38 people including 11 police officers, 2 police sergeants, 17 civilian City staff, and 8 contracted outreach workers.

The Executive Branch (Executive) has stated<sup>2</sup> that the Navigation Team is meant to accomplish a dual mission: to constructively engage people living outdoors in unsanctioned encampments (i.e., tents or improvised shelters) on public property and to mitigate negative community impacts by removing such encampments as needed.<sup>3</sup> The Executive has identified four major responsibilities for the Navigation Team, as stated in the [Executive's Quarter 1 2019 Proviso Report](#):

1. *Engage unsheltered people, conduct needs assessments and make the appropriate referrals to alternative shelter and offer other services.*
2. *Gather data about conditions at unauthorized encampments and in those circumstances when unsheltered people are asked to vacate a site, assist with the storage of personal property as is requested and/or practicable.*
3. *Remove waste and debris from sites after encampments have been removed.*
4. *Enforce lawful orders to vacate an unauthorized encampment site.*

The City has spent millions of dollars in removing trash from unsanctioned encampments. In 2018, the Navigation Team removed 2.4 million pounds of trash from unsanctioned encampments. In the first three quarters of 2019, the Navigation Team removed over 2.3 million pounds<sup>4</sup> of trash from unsanctioned encampments.

**Unsanctioned Encampments Lack Hygiene and Sanitation.** As our office has [previously reported](#), hundreds of unsanctioned encampments in Seattle currently lack hygiene facilities (e.g., showers, hand washing, laundry, toilets)

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<sup>1</sup> The 2020 proposed budget for the Navigation Team is \$8,387,000; however, this does not include Seattle Public Utilities costs for solid waste disposal for the Navigation Team clean-ups of unsanctioned encampments.

<sup>2</sup> For more information on the dual mission of the Navigation Team, see the [Executive's Quarter 1 2019 Proviso Report](#).

<sup>3</sup> For the purposes of this audit, our definition of unauthorized encampments does not include those living in motor vehicles.

<sup>4</sup> See the City of Seattle's [Homelessness Response performance data](#) for updated information on pounds of garbage removed from unsanctioned encampments.

and sanitation (e.g., human waste and trash disposal). This is a serious public health risk<sup>5</sup> for all Seattle residents and an especially high risk for the individuals currently experiencing homelessness at these undeveloped sites.

Increasing access to enhanced shelters<sup>6</sup> is an important strategy that would prioritize hygiene and could reduce environmental and public health risks. In our previous reports, we have recommended the City increase its enhanced shelter capacity. Our [November 2017 report](#) and [October 2018 report](#) provided examples from other jurisdictions that have quickly increased the number of enhanced shelters. In addition, our [February 2019 report](#) identified additional steps that the City could take to improve the provision of hygiene services. The Mayor's budget for 2020 did not include funding to expand current enhanced shelter capacity. Therefore, to protect public health, the City should develop and implement a more strategic approach for addressing trash accumulation associated with unsanctioned encampments. This report identifies five steps that the City should take in developing a more strategic approach:

1. Track trash accumulation systematically
2. Develop/implement strategies for persistent hot spots
3. Protect urban streams/watersheds
4. Improve needle recovery efforts
5. Use best practices to deter metal theft.

The following page contains a summary of our key report findings. Our recommendations are directed at the City as a whole, rather than the Navigation Team specifically. This recognizes that the complex issues surrounding unsheltered homelessness require a systematic, coordinated, multi-pronged response. As part of the 2020 budget, the Seattle City Council passed [Proviso HOM-15-C1](#) that requires the Executive to provide a written report to the Council by November 19, 2020 discussing the City's compliance with the Office of City Auditor recommendations on Checkpoint 2.3, Strategies to Prevent Trash Accumulation.

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<sup>5</sup> [The Seattle Times](#) and [The Atlantic](#) have recently reported on the spread of infectious diseases from fecal contamination in unsanctioned encampments. Open defecation poses significant risk for disease transmission. Just one gram of fresh feces from an infected person can contain around 1 million viral pathogens and 1-100 million bacterial pathogens. Ending the practice of open defecation by providing adequate sanitation (i.e., the safe disposal of human excreta) is recognized as the most effective means of preventing the transmission of disease through feces. Source: [Sanitation and Health, Public Library of Science – Medicine, November 2010.](#)

<sup>6</sup> Enhanced shelters provide access to drinking water, heat and electricity, showers, laundry, safe cooking facilities, storage for belongings, and can accommodate couples and pets. Tiny house villages might also provide these features (e.g., showers, laundry, storage, etc.). We noted in our [October 2018 report](#) that several jurisdictions received private funding to cover the start-up costs for the enhanced shelters.



Photo Credit: City of Seattle Navigation Team, April 2019

### Key Report Findings

Seattle's current system for identifying trash accumulation risks underserving important areas of the city. The City should use systematic geographic surveys to ensure full-city coverage and track progress.

Navigation Team clean-ups are resource-intensive, and some sites have required multiple clean-ups. These persistent hot-spots for encampment trash accumulation could benefit from site-specific approaches, including improved Good Neighbor Agreements.

Seattle has made substantial investments in protecting urban streams and watersheds. These environmentally-sensitive areas require focused efforts to prevent harm from accumulation of trash and human waste.

Improperly discarded needles are concentrated around unsanctioned encampments. Seattle-funded outreach organizations could play a larger role in recovery of needles as they do in other cities.

Debris from metal scrapping is often found in and around unsanctioned encampments. The City should use best practices to deter metal theft.

## TRACK TRASH ACCUMULATION SYSTEMATICALLY



This October 14, 2019 photo shows remnants of a campfire and encampment debris near the flammable peat-bogs at Roxhill Park. The City's current system for determining encampment clean-ups may underserve areas of the City where residents are less likely to contact relevant authorities or where encampment trash accumulation is hidden in greenspaces. Seattle Parks and Recreation has begun to address encampment trash accumulation by conducting inspections in known Parks encampment hot spots several times per week. This type of systematic identification of encampment trash accumulation should be expanded and enhanced.

**Photo Credit:** Seattle Office of City Auditor, October 2019

A more strategic approach for identifying and mitigating trash accumulation near unsanctioned encampments could help the City improve its response to public health risks and provide better tracking of its progress. The City's current system for identifying trash accumulation from unsanctioned encampments relies heavily on reports made to the City. This can result in underserving certain areas of the city, including greenspaces and areas where residents might be less likely to report due to barriers including, language, access to technology, or available time. Unlike the City's approach to graffiti and illegal dumping, for which City crews actively monitor all areas of the city, there is insufficient proactive monitoring/identification of encampment trash accumulation. Further, jurisdictions including San Francisco and Los Angeles use systematic geographic tracking of trash accumulation to ensure equity and measure progress.

Due to potential public health risks, the City's current approach to trash accumulation would benefit by adopting a more systematic approach to identifying encampments that require trash mitigation. Exhibit 1 shows how reports of encampment trash accumulation are received from residents and

other departments (e.g., Seattle Department of Transportation, Seattle Public Utilities, etc.) and routed through the City’s Customer Service Bureau to the Navigation Team. Upon Navigation Team inspection, significant trash accumulation might result in a scheduled Navigation Team clean, a Navigation Team Obstruction/Hazard clean (i.e., a clean that does not require 72 hours notice), or no Navigation Team action. In addition, the Navigation Team may conduct “litter-picks”<sup>7</sup> at encampments that aren’t scheduled for removal, and up to ten encampments at any time may receive weekly trash pick-up from [Seattle Public Utilities \(SPU\) Encampment Trash Program](#).

**Exhibit 1: City’s Current System for Encampment Trash Accumulation Relies Heavily on Reports**



Source: Seattle Office of City Auditor analysis of the Human Services Department’s business process analysis of encampment clean-up identification.

The sites addressed in the current system are those that are reported by residents or noticed and reported by City department staff. This means that certain areas of the City might not receive Navigation Team inspections or clean-ups.

In contrast, the City’s graffiti and right-of-way illegal dumping<sup>8</sup> remediation programs use a combination of response to complaints and systematic geographic surveillance to plan its work. SPU crews regularly patrol areas of the City to pro-actively identify graffiti and illegal dumping in the right of way. This ensures that all areas of the City receive remediation services, including those areas in which residents may experience barriers to reporting.

<sup>7</sup> The Human Services Department reported that the Navigation Team conducted 220 “litter-picks” between January – September 2019.

<sup>8</sup> SPU’s illegal dumping program does not pick up illegal dumping in unsanctioned encampments; it only addresses illegal dumping in Seattle’s rights-of-way (e.g., a couch on the sidewalk).



Notably, Seattle Parks and Recreation is taking steps toward systematic tracking of encampment trash accumulation in its parks. Seattle Parks and Recreation has begun conducting routine inspections of parks with known encampment hot spots. These inspections occur two or three times per week, depending on the location. These parks are monitored for trash accumulation, and if warranted, Parks and Recreation staff may contact the Navigation Team to visit the site. Seattle Parks and Recreation is also considering the use of a software tool to collect information about trash and track changes in conditions over time, such as the mobile app developed by the City of San Francisco (Appendix C). These are important steps toward implementing a more systematic approach for tracking trash accumulation and are consistent with Recommendation 1 below.

**Current police and outreach activities do not involve systematic tracking of trash accumulation**

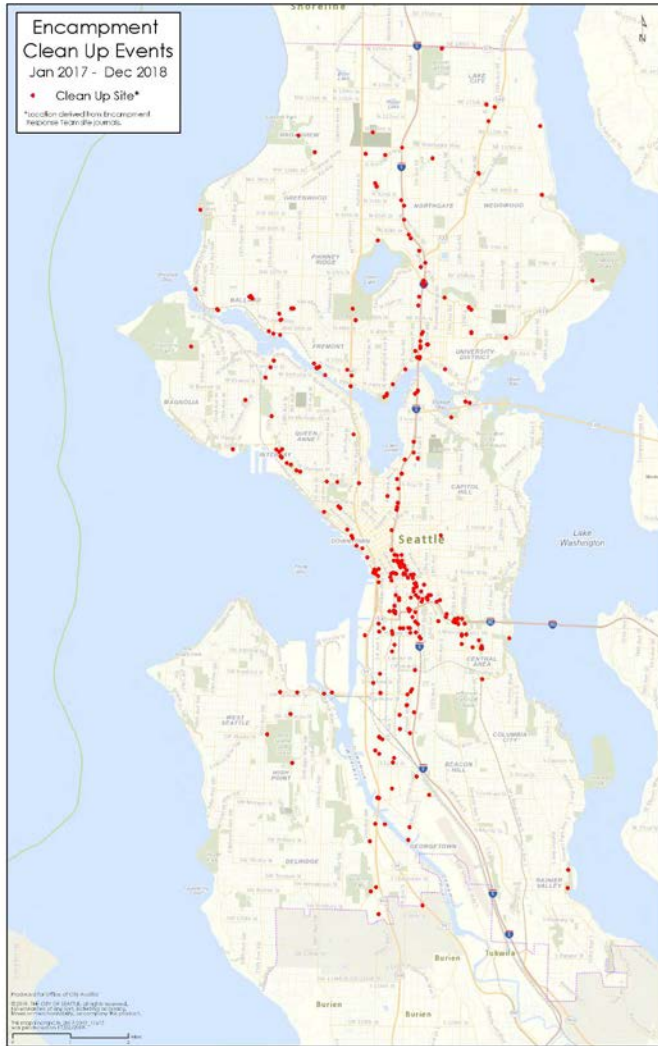
The City currently uses some proactive activities for addressing unsanctioned encampments, including using homeless outreach contractors and, since June 2019, Right of Way (ROW) Field Contacts conducted by the Seattle Police Department (SPD). We could not find evidence that these efforts involve a systematic tracking of trash accumulation.

From June 1 through November 25, 2019, SPD officers made [a total of 893 ROW Field Contacts](#) to address encampments that were considered obstructions because of their location (See Exhibit 2). Of that total, 59-percent (524) of the Field Contacts were conducted by SPD Navigation Team officers, and 41 percent (369) were conducted by SPD Community Police Team (CPT) and bike officers from the precincts. The Human Services Department (HSD) indicated that during a Field Contact: 1) the officer informs the individuals that they must move their belongings, 2) if requested by the individual, a Field Coordinator from the Navigation Team can inventory and store the individual's belongings, 3) the officer also provides information about accessing shelter and offers to call a Navigation Team System Navigator to help the individual secure a shelter referral, and 4) if needed, Navigation Team trash and biohazard crews will remove debris from the site. Many addresses are repeat locations for SPD ROW Field Contacts. The [top ten addresses](#) accounted for 164 (18 percent) of Field Contacts. The City does not currently track whether encampment trash accumulation is improving or worsening at these sites over time.

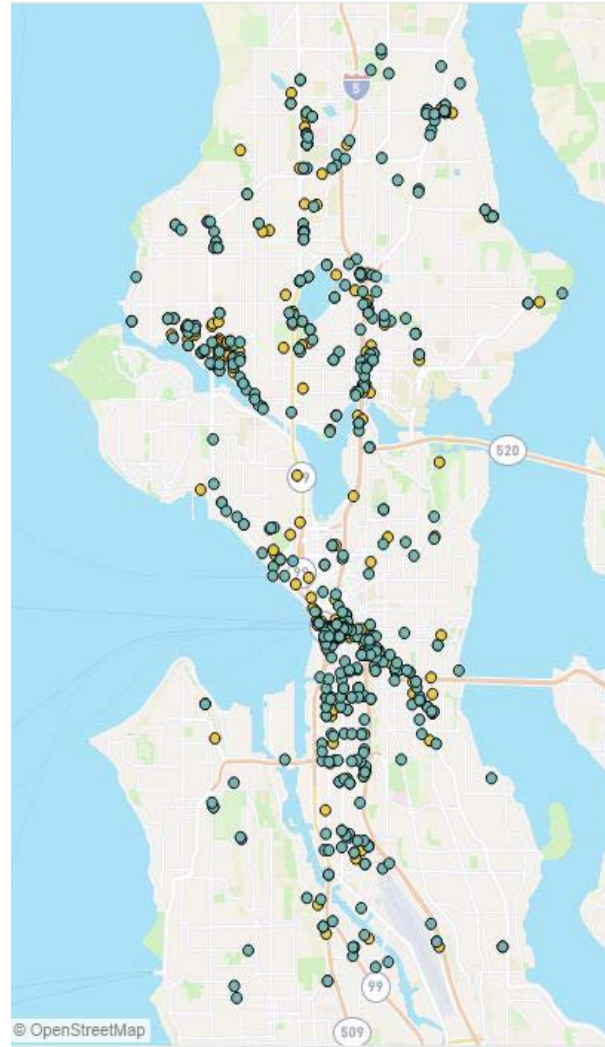
HSD indicated that proactive homeless outreach activities can lead to reduced encampment trash accumulation. However, we were unable to confirm that this is occurring in practice. We reviewed the 2019 quarterly reports provided to HSD by its nine contracted outreach providers. Three of the outreach providers indicated that the increased SPD ROW Field Contacts in 2019 have made it more difficult for outreach workers to find some of their clients and might drive individuals to harder-to-reach areas.

**Exhibit 2: Many Addresses are Repeat Locations for Navigation Team Clean-Ups and SPD Field Contacts**

**2017-18 Navigation Team Clean-Ups** (red dots)



**2019 (June 1 – November 25) SPD Field Contacts – Right of Way Enforcement** (Navigation Team officers = blue dots; Bike and Community Police Team officers = yellow dots)



Source: Left: Seattle Office of City Auditor analysis of 2017-18 Navigation Team clean-ups (Total of 335 clean-ups with 72-hour notice); and Right: SPD Data-Driven Policing analysis of SPD ROW Field Contacts 06/01/2019-11/25/ 2019 (Total of 893 SPD Field Contacts).

A key component of a strategic approach to addressing trash accumulation in unsanctioned encampments is systematic geographic monitoring throughout the city. Systematic geographic monitoring can also help the City track its progress in addressing unsanctioned encampment trash accumulation over time.

Exhibit 2 illustrates that between Navigation Team clean-ups and SPD field contacts, the City has been active in many of the same locations since 2017. However, without systematic geographic monitoring, the City cannot

adequately track whether trash accumulation is getting better or worse over time and demonstrate that there is a sustained, positive benefit from these activities. Los Angeles and San Francisco are examples of jurisdictions that are conducting systematic geographic monitoring of trash accumulation.

**Systematic geographic monitoring is a key component of a strategic approach to reducing trash accumulation at unsanctioned encampments**

In 2016, the City of Los Angeles began implementing CleanStat, a systematic quarterly assessment of the cleanliness level for each city street and alley. CleanStat allows the City to track the cleanliness of streets and alleys while strategically deploying limited sanitation resources to address the cleanup areas of greatest need. Before CleanStat, the City's previous "complaint-driven system missed the areas where no one called in street cleaning requests. As a result, unreported conditions – often in less affluent parts of Los Angeles – went unaddressed"<sup>9</sup>. According to a [December 2018 report](#) funded by the Laura and John Arnold Foundation, since implementing CleanStat, there has been a citywide 83 percent reduction in miles of streets considered "not clean," and improvements in street cleanliness in some of the city's historically poorest neighborhoods.<sup>10</sup>

In addition, systematic geographic monitoring of street and sidewalk cleanliness is now being conducted in San Francisco. In July 2019, the City of San Francisco Controller's Office initiated a pilot program to conduct systematic geographic monitoring of street and sidewalk cleanliness for 72 miles of predetermined commercial streets and 75 miles of predetermined residential streets. The City of San Francisco Controller's office developed a mobile app<sup>11</sup> for collecting data that will be used to assess the cleanliness of these sites over time to track the City's progress in keeping these streets and sidewalks clean.

**Recommendation 1**

**The City should conduct systematic geographic surveillance throughout Seattle to identify areas of encampment trash accumulation and track its progress with addressing trash accumulation over time. This should include green-spaces and areas in which residents may experience barriers to reporting.**

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<sup>9</sup> See report: Jachimowicz, M., Headley, M., LaMotte, J., & Bergmann, S. (2018). *How to Clean City Streets? Los Angeles Begins by Collecting New Data*. Washington, DC: Results for America: Invest in What Works Policy Series. Retrieved from [https://results4america.org/wp-content/uploads/2018/12/LosAngelesCaseStudy\\_Final.pdf](https://results4america.org/wp-content/uploads/2018/12/LosAngelesCaseStudy_Final.pdf)

<sup>10</sup> Ibid.

<sup>11</sup> The City of San Francisco's Controller's Office provided its mobile app for systematic site assessments to the City of Seattle Office of City Auditor at no charge. See Appendix C for screenshots from the mobile app used for our September/October 2019 site observations.

## DEVELOP/IMPLEMENT STRATEGIES FOR PERSISTENT HOT-SPOTS



Trash clean-ups conducted by the Navigation Team are resource-intensive, sometimes requiring heavy equipment to remove contaminated soil. **Photo Credit:** City of Seattle Navigation Team, May 2, 2019

### **15 sites accounted for a disproportionate 32 percent of Navigation Team clean-ups in 2017-18**

Navigation Team clean-ups are resource-intensive for the City (staff, equipment, disposal costs). Budgeted costs for Navigation Team clean-up crews in 2020 exceed \$2.7 million; this does not include coordination and disposal costs. In 2018, the Navigation Team removed [2.4 million pounds](#) of trash from unsanctioned encampments. In the first three quarters of 2019, the Navigation Team removed over 2.3 million pounds<sup>12</sup> of trash from unsanctioned encampments. Navigation Team clean-ups require significant resources for staffing, equipment, and disposal costs.

We found that certain sites in Seattle continued to accumulate trash and required repeated Navigation Team clean-ups. This current system of repeated clean-ups is inefficient and expensive for the City.

The Navigation Team spends considerable resources cleaning up the same sites multiple times. Our office analyzed the 335 scheduled Navigation Team clean-ups (72-hour notice) conducted in 2017-18. These 335 clean-ups involved 189 sites. Nearly 30 percent of the sites (56 of 189) were cleaned by the Navigation Team multiple times during that period. Of those, 15 sites were cleaned by the Navigation Team four or more times. These 15<sup>13</sup> sites received a total of 107 clean-ups, accounting for a disproportionate 32 percent of the total 335 clean-ups in 2017-18. We refer to these 15 sites as “hot-spots” due to the number of Navigation Team clean-ups at these sites.

<sup>12</sup> See the City of Seattle’s [Homelessness Response performance data](#) for updated information on pounds of garbage removed from unsanctioned encampments.

<sup>13</sup> Although, the Navigation Team has changed its practices in 2019, and is conducting fewer scheduled clean-ups, six of these 15 sites have had scheduled clean-ups (Sources: Office of City Auditor analysis of Navigation Team Site journals for January – July 2019).

**Exhibit 3: 15 Locations with more than four Navigation Team Clean-ups in 2017-18**

| Site                                 | Navigation Team Cleans<br>2017-July 2019 | Trash Accumulation Observed<br>September-October 2019 | City Auditor Observations |      |        |        |
|--------------------------------------|------------------------------------------|-------------------------------------------------------|---------------------------|------|--------|--------|
|                                      |                                          |                                                       | FENCE                     | SIGN | NEEDLE | CONST. |
| Airport Way/East Duwamish Greenbelt* | 16                                       | No                                                    |                           |      |        |        |
| James St & I-5                       | 13                                       | No                                                    |                           |      |        |        |
| I-90 near Rainier Ave S*             | 13                                       | Yes                                                   |                           |      |        |        |
| Dearborn Corridor                    | 12                                       | Yes                                                   |                           |      |        |        |
| Alaskan Way Waterfront*              | 9                                        | No                                                    |                           |      |        |        |
| Cascade*                             | 7                                        | Yes                                                   |                           |      |        |        |
| 4th Ave S & S Royal Brougham Way*    | 6                                        | Yes                                                   |                           |      |        |        |
| 6th Ave S & Yesler Way               | 6                                        | Yes                                                   |                           |      |        |        |
| Kinnear Park                         | 5                                        | Yes                                                   |                           |      |        |        |
| I-5 & NE 45th                        | 6                                        | Yes                                                   |                           |      |        |        |
| Southwest Queen Anne Greenbelt       | 6                                        | Yes                                                   |                           |      |        |        |
| Ravenna Park                         | 4                                        | No                                                    |                           |      |        |        |
| Woodland Park                        | 4                                        | No                                                    |                           |      |        |        |
| S Jackson St from 7th to 9th Ave*    | 4                                        | Yes                                                   |                           |      |        |        |
| Bell St & Western Ave                | 4                                        | No                                                    |                           |      |        |        |

**KEY**  
 = Trash present      = Item(s) present  
 = Trash not present      = Item(s) not present

Source: Seattle Office of City Auditor site assessments, September-October 2019; and Seattle Office of City Auditor analysis of 2017-19 Navigation Team clean-ups (72-hour notice).

\*Located within a City of Seattle emphasis area

In September and October 2019, we conducted systematic site assessments at these 15 sites. We used a mobile app for systematic site assessments developed by the City of San Francisco’s Controller’s Office,<sup>14</sup> that they provided to the City of Seattle at no charge. See Appendix C for screenshots from the mobile app.

For some of the sites we observed, physical changes to the environment — such as fencing and construction—may have contributed to keeping them clean. Six of the 15 hot spot locations did not have observable trash accumulation. For two of those sites (Alaskan Way Waterfront and Bell/Western), construction activities had considerably altered the conditions, such that it would make camping difficult or impossible. For example, the removal of the Alaskan Way Viaduct means that much of the space beneath the former roadway was being used to stage construction equipment or was covered in rubble. At the Airport Way/East Duwamish Greenbelt, we observed sturdy perimeter fencing and visible signage

<sup>14</sup> The City of San Francisco Controller’s Office developed a mobile app to conduct periodic street and sidewalk cleanliness evaluations. In 2019-20, the City of San Francisco plans to evaluate about 72 miles of predetermined commercial streets five times throughout the year and about 75 miles of randomly selected residential streets once over the course of the year. See Appendix C for screenshots from the mobile app.

indicating that this is one of the [City's emphasis areas](#); we did not observe trash accumulation at this site.

However, at nine of the 15 sites, we observed unsanctioned encampment trash accumulation. In some cases, such as the Dearborn Corridor, we found significant trash accumulation despite recent clean-ups by the Navigation Team.

**Use of City's existing encampment trash program and emphasis areas could be optimized**

The City has some tools that it could use to address unsanctioned encampments where trash accumulation is a chronic problem:

- **Optimize use of SPU encampment trash program.** The City currently provides weekly trash collection through SPU's encampment trash program<sup>15</sup> (commonly known as the purple bag program) at eight sites. From January 1 – September 10, 2019, SPU collected 948,030 pounds of trash through the program. To the extent that sites are suitable candidates for the encampment trash program<sup>16</sup>, the City could expand beyond the eight sites.
- **Optimize use of emphasis areas.** Section 13 of [Finance and Administrative Services \(FAS\) Rule 17-01](#) allows the City to identify up to ten emphasis areas, defined as "an identifiable area where the City has removed an encampment and has designated an encampment-prohibited area by installing signage." The City will post signage at an emphasis area, stating that: camping is prohibited, and any material found in that area may be removed without further notice. Additionally, the signs state where personal property removed from the site is stored and how the owner can retrieve their belongings. City rules currently permit up to ten emphasis areas; and there are currently [eight](#). Therefore, the City has capacity to add two additional emphasis areas.

**Other cities use "Good Neighbor Agreements" with homeless service providers to help address nearby trash accumulation**

We found that trash is accumulating at chronic hot spots near City-funded homeless service facilities. Other cities use "Good Neighbor Agreements" with their contracted agencies to address trash accumulation in the areas around their facilities. HSD does not currently address trash accumulation in their Good Neighbor Agreements with homeless service agencies.

During our September 2019 observations, we found encampment trash accumulation at two persistent hot spot locations (Dearborn Corridor and Cascade) that were adjacent to two City-funded homeless services facilities. HSD contracts require homeless services facilities (e.g., shelters, permanent supportive housing) to maintain a [Good Neighbor Plan](#). HSD's contract language states that Good Neighbor Plans will include a process for

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<sup>15</sup> Trash collection services are delivered by way of outreach workers distributing bags. Persons living in encampments voluntarily fill the bags and place trash 20 feet from encampment for collection.

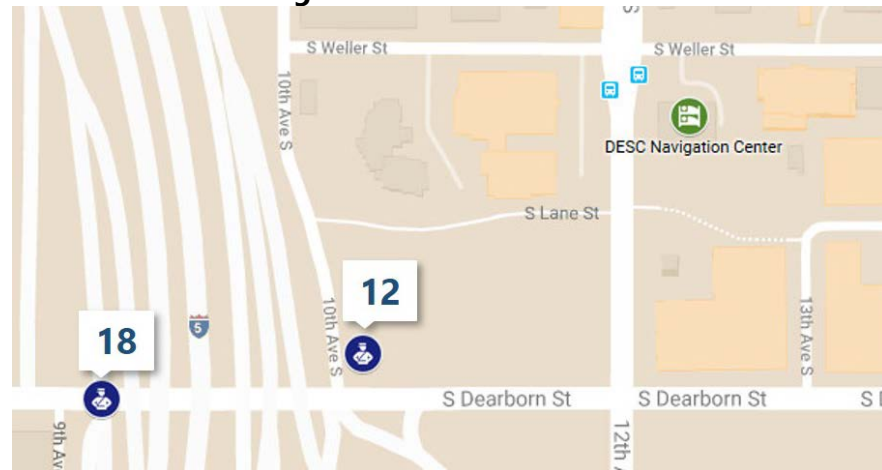
<sup>16</sup> SPU indicates that the encampment trash program depends on the identification of established, self-organized encampments that are able to collect their own trash within the spaces they occupy and deliver them to a specified drop-off point for contractor pick-up. Not all encampments fit these criteria.

communicating with neighboring businesses and residents, policy/procedure to address neighborhood concerns, written policy concerning the rights and responsibilities of clients, program rules and restrictions, and opportunities for providers, clients and community members to participate in supporting program and client success in healthy and safe neighborhoods.

HSD's 2019 Good Neighbor agreements ask for a "commitment to neighborhood health and safety standards," but they do not specifically mention trash or litter mitigation. Further, HSD does not currently require its contractors to address trash accumulation adjacent to its facilities. In contrast, in other cities, including Portland, Vancouver BC, and San Francisco, Good Neighbor Agreements with homeless services providers include expectations about maintaining cleanliness in the area surrounding the facility. For example, a ['Good Neighbor Agreement' between a homeless shelter and Portland's Joint Office for Homeless Services](#) includes "all spaces within 1000 feet of the shelter site."

We obtained HSD's [2019 'Good Neighbor Plan' for the DESC Navigation Center](#). This facility is adjacent to the "Dearborn Corridor" site. This hot spot for trash accumulation was cleaned 10 times by the Navigation Team in 2017-18; Navigation Team site journals for 2019 indicate that it had been cleaned twice between January and July 2019, and the site is on SPU's litter route. In addition, two of SPD's top ten ROW Field Contact addresses (accounting for 30 SPD ROW Field Contacts) are near the Navigation Center (See Exhibit 4). Despite these efforts, during our September 2019 field observation, we noted significant trash accumulation at the site, including directly adjacent to the Navigation Center facility.

**Exhibit 4: Two of SPD's Top Ten ROW Field Contact Locations are Near the DESC Navigation Center**



Source: SPD Analysis of the [top ten addresses](#) for SPD ROW Field Contacts, June 1-November 25, 2019

Exhibit 5 provides a cross-walk between the Portland Good Neighbor Agreement example and the Seattle’s (HSD) Good Neighbor Plan for the Navigation Center. Unlike Portland’s Good Neighbor Agreements, Seattle’s agreements are not very robust. For example, they do not require signatures from stakeholders, and they do not address trash accumulation.

**Exhibit 5: Portland’s Good Neighbor Provisions are More Extensive Than Seattle’s**

| Agency                           | City of Seattle Human Services Department        | Portland Joint Office for Homeless Services (JOHS)                                                                              |
|----------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Signatories</b>               | None                                             | JOHS, Shelter Provider, Neighborhood Association, Police Department, Local Businesses, Local School, Local Business Association |
| <b>Physical Area Covered</b>     | Not stated                                       | All spaces within 1000 feet of the shelter                                                                                      |
| <b>Provisions for Litter</b>     | Not stated                                       | Voluntary litter patrols; staff pick up litter around perimeter                                                                 |
| <b>Community Meetings</b>        | Homeless shelter staff attend community meetings | Homeless shelter staff attend community meetings; Homeless shelter hosts quarterly community meetings                           |
| <b>Mediation Resources</b>       | Not stated                                       | JOHS will provide mediation                                                                                                     |
| <b>Legal Status of Agreement</b> | Non-binding                                      | Non-binding                                                                                                                     |

Source: Seattle Office of City Auditor analysis of the Human Services Department’s [2019 ‘Good Neighbor Plan’ for the DESC Navigation Center](#) and [‘Good Neighbor Agreement’ between a homeless shelter and Portland’s Joint Office for Homeless Services](#).

**Recommendation 2**      **The City should apply specific strategies to address persistent hot spots of encampment trash accumulation in Seattle that may include, but are not limited to: 1) expanding and increasing the frequency of the Seattle Public Utilities encampment trash program, 2) designating more emphasis areas,<sup>17</sup> and 3) requiring specific litter mitigation activities in a designated area around the facilities as part of Good Neighbor Agreements with City-funded agencies.**

<sup>17</sup> Designating more than ten emphasis areas would require amending the [FAS Encampment Rule 17-01](#), section 13.6.



## PROTECT URBAN STREAMS/WATERSHEDS



During this clean-up of unsanctioned encampments at the Thornton Creek Natural Area, the Navigation Team removed corrosive materials and human waste.

**Photo Credit:** City of Seattle Navigation Team, July 23, 2018

The City has made significant long-term investments in protecting creeks, watersheds, receiving waters, and habitat. Therefore, it will be important to ensure that these dollars are not undercut by the City's actions or inactions related to encampment trash accumulation and fecal contamination.

Seattle contains several urban creek watersheds, as well as two large regional watersheds. Preserving and improving the health of the urban watersheds is essential for providing healthy and livable communities. Urban creek watersheds not only are home to fish and wildlife, but help to filter stormwater before it enters lakes, the Duwamish River, and Puget Sound. For certain environmentally sensitive sites, exposure to chronic litter, dumping, and human waste contamination associated with unsanctioned encampments could slow gains from long-term City investments. Therefore, the City should consider whether its actions or inactions related to encampment trash clean up undercut other City efforts to keep the water clean.

### **Environmentally sensitive areas are at risk of contamination**

A recent SPU analysis describes the kind of contamination that can be caused by unsanctioned encampments. For example, there are encampments in the Thornton Creek watershed, and a [2018 SPU analysis](#) showed elevated levels of human-source fecal bacteria in Thornton Creek near Matthews Beach. Exhibit 6 identifies environmentally sensitive areas in Seattle that could be contaminated by trash and human waste, including urban streams, wetlands, public beaches, and shoreline. These areas highlighted on the map have the highest likelihood of surface water contamination from unsanctioned sites.

Until a comprehensive solution is implemented to help those experiencing homelessness, or to provide these individuals with access to appropriate sanitary facilities, the risks associated with the uncontrolled inputs of human waste at environmentally sensitive areas need to be mitigated. One method to reduce these risks is to not allow camping in locations that have the highest likelihood of moving trash and feces generated at these sites into the surface waters.

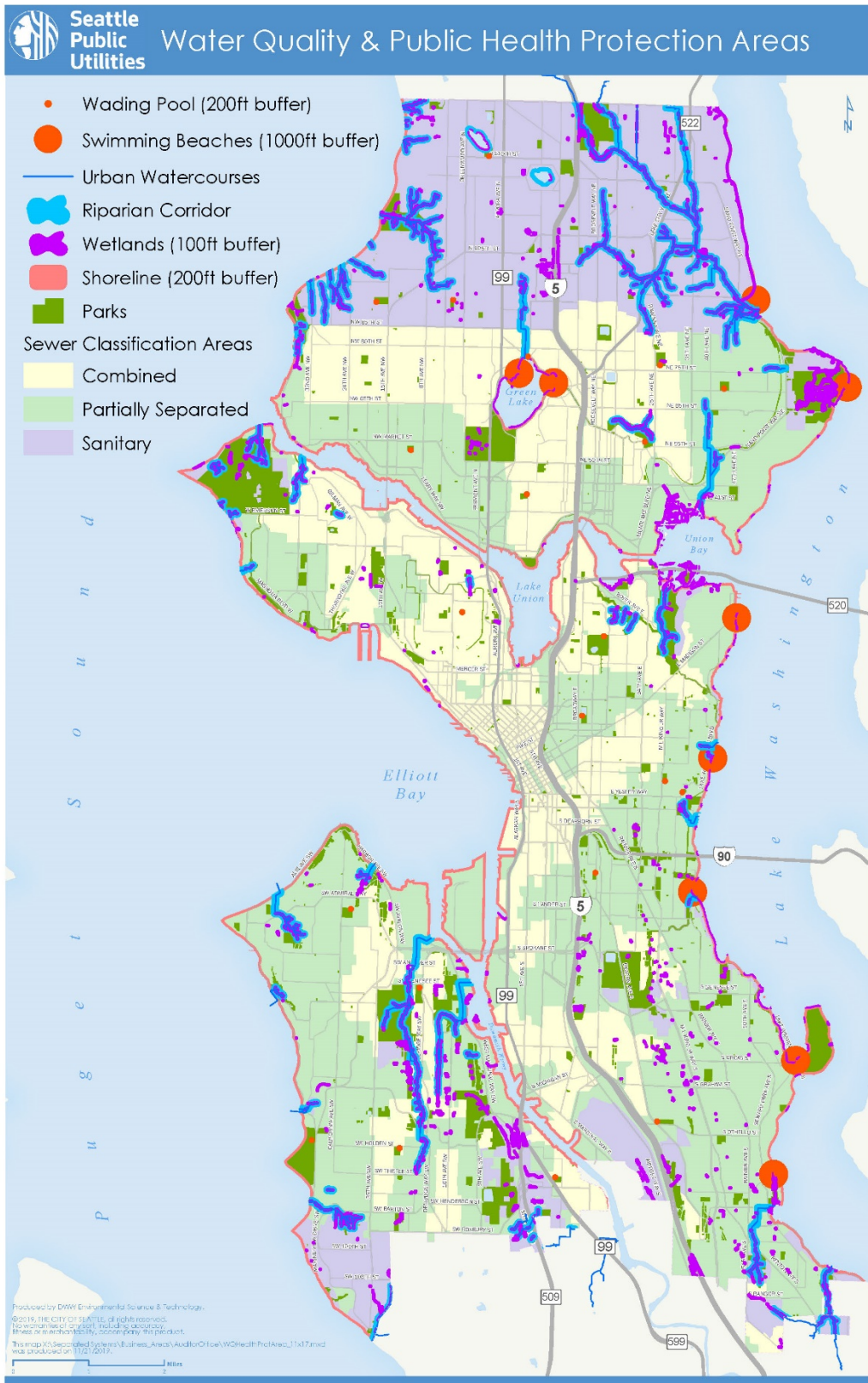
It will also be important for the City to continue to investigate and fund effective interventions for addressing human waste generation from unhoused populations. For example, in 2020, the Seattle City Council funded a short-term pilot project in SPU to test innovative solutions to manage and dispose of wastewater generated from unauthorized homeless encampments. SPU's pilot program's charter indicates that "unmanaged waste from unhoused populations represent a significant risk to public health and the environment."<sup>18</sup> The pilot will include field testing of potential wastewater service delivery models, and SPU is coordinating with various stakeholders including SPD, the Navigation Team, Department of Neighborhoods, Public Health - Seattle & King County (PHSKC), and community stakeholders.

**Recommendation 3**      **We recommend that the City prohibit camping in Water Quality and Public Health Protection Areas, and systematically monitor these locations to ensure that unsanctioned camping is not occurring.**

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<sup>18</sup> The SPU Wastewater for Unhoused Populations Pilot Program Charter indicates "Using a conservative estimate of human waste generation; the unhoused population in the City of Seattle is producing approximately 1280 gallons of highly concentrated human waste every day. No data exists on the proportion of this waste which is being disposed of onto streets or into storm-drains. Based on the rate of incidents being referred to SPU's Spill Response team, it appears that a significant portion of this waste is being improperly managed. SPU Spill Response responded to 142 sewage spills with 117 requiring cleaning due to human waste from unhoused populations in drains or on the public right of way from 1/1/2018 to 8/1/2019."

**Exhibit 6: Environmentally Sensitive Areas Risk Greater Harms from Trash and Human Waste Accumulation**



Source: Seattle Public Utilities, Environmental Science and Technology Section

## IMPROVE NEEDLE RECOVERY EFFORTS



86 percent of Navigation Team clean-ups from January – July 2019 involved the recovery and disposal of needle waste.

**Photo Credit:** City of Seattle Navigation Team, June 12, 2019

Hypodermic needles (needles) are improperly disposed in Seattle’s public areas by housed individuals as well as individuals who are experiencing homelessness. Discarded needles and syringes are a common component of the trash that accumulates at unsanctioned encampments. City-funded outreach workers currently bring clean needles to unsanctioned encampments but do not have any responsibility for recovery and disposal of those needles. Consequently, improperly discarded needles pose health risks for the general population and require significant City resources to clean up.

It is important for people who inject drugs to have adequate access to clean needles. Using clean needles significantly reduces the risks of transmitting infections including, HIV, Hepatitis B, and Hepatitis C. There are [four needle exchange locations](#)<sup>19</sup> in Seattle. In addition, at least three<sup>20</sup> of HSD’s homeless outreach providers deliver clean needles to unsanctioned encampments. However, these HSD-funded homeless outreach providers do not accept or collect used needles.<sup>21</sup> This results in a burden for the City to

<sup>19</sup> According to Public Health Seattle and King County each needle exchange provides sharps containers and receives both sharps containers and individually discarded needles.

<sup>20</sup> HSD indicated that three of its funded homeless outreach providers provide needles to unsheltered individuals: REACH (Navigation Team), REACH (Neighborhood Outreach), and YouthCare Street Outreach. None of these three outreach providers provide needle recovery and disposal of used needles. HSD indicated that three of its funded outreach providers do not provide clean needles or recover used needles: Mary’s Place, Chief Seattle Club, Urban League Street Team. HSD was unable to provide information about needle exchange for the following funded homeless providers: Seattle Indian Center, DESC HOST, Seattle Indian Health Board, Mother Nation.

<sup>21</sup> In contrast, as part of their encampment trash program, SPU’s three contracted hepatitis education outreach workers (15 hours per week total) provide needle distribution and collection to eight unsanctioned encampments.

find, recover, and dispose of the used needles around unsanctioned encampments.

Currently, the [City advises](#) people to report used needles to 1) the Customer Service Bureau or, 2) Seattle Parks and Recreation, or 3) SPU's Illegal Dumping hotline.<sup>22</sup> [SPU removes needles](#) from public property within 24 hours and provides advice regarding safe clean-up and disposal of needles from private property. From August 2016 through December 2019, SPU staff have collected 30,905 needles in response to 9,333 community reports. People disposed since February 2017 a total of 253,050 syringes in boxes located in City public rights-of-way and small bathroom needle disposal units.

In addition to the SPU staff who clean up needles based on complaints, the Downtown Seattle Association's (DSA) Metropolitan Improvement District (MID) staff routinely pick up needles in the DSA service area. From January through November 2019, MID staff cleaned up 10,797 needles.<sup>23</sup> Further, the Navigation Team often cleans up needles during its clean-ups of unsanctioned encampments. Exhibit 7 maps the 335 Navigation Team encampment clean-ups in 2017-18 and the 4,473 (unduplicated) reports of needles to SPU for that same period. The map shows geographic clusters of concentration of needles and encampment clean-ups.<sup>24</sup> Further, our analysis of Navigation Team site journals from January through July 2019 indicates that 86 percent of these clean-ups involved the recovery of needles.

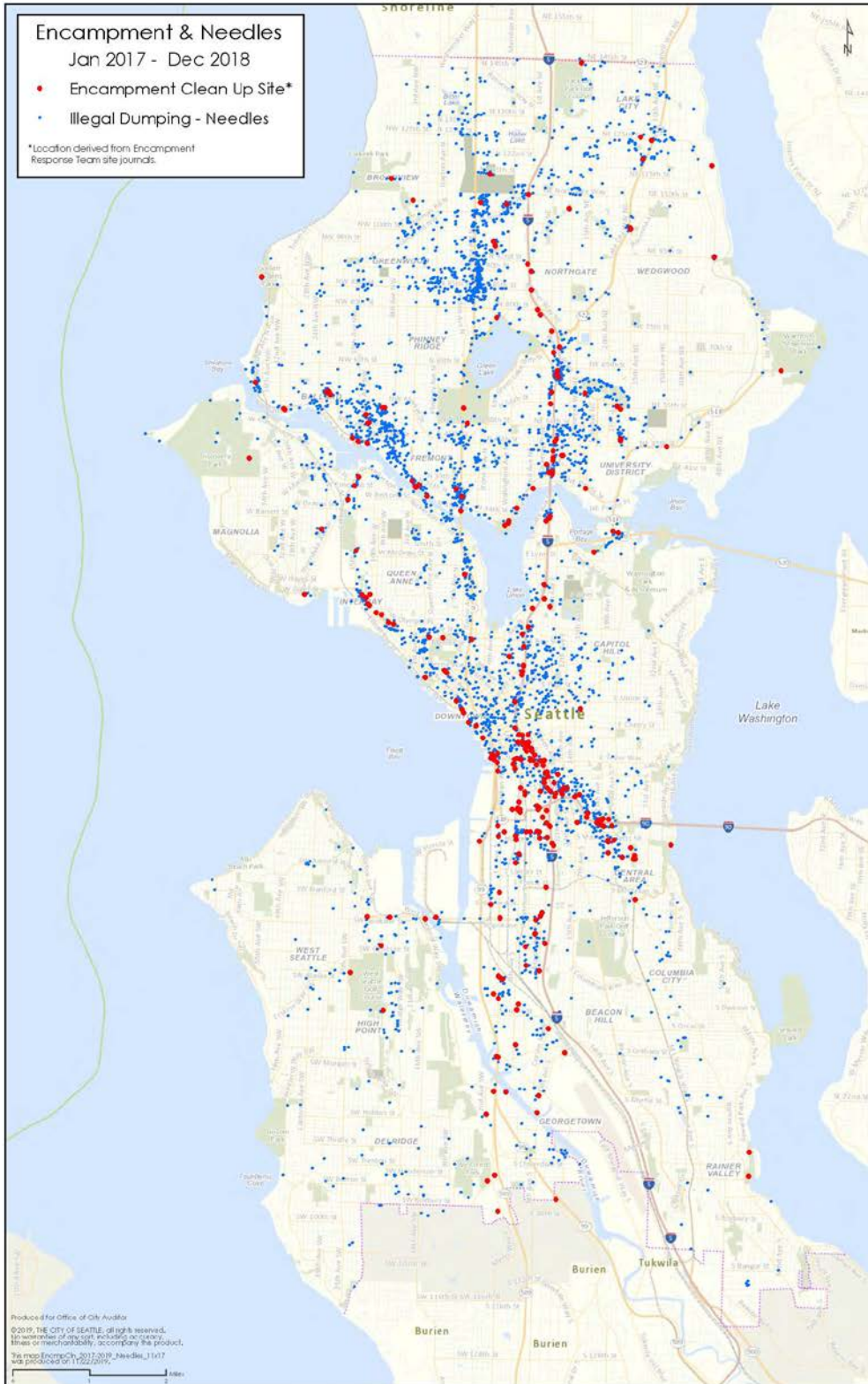
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<sup>22</sup> SPU also advises people to safely dispose of needles at any of the secure public disposal boxes located in the right of way, public parks, and public libraries. [SPU's sharps collection website](#) provides an interactive map of sharps disposal locations.

<sup>23</sup> The total of 10,797 needles collected by the DSA MID from January – November 2019 represents a 15 percent increase over the same period in 2018.

<sup>24</sup> The Office of City Auditor did not correlate the locations of needles with other features including transit corridors, proximity to service providers, etc.

**Exhibit 7: Navigation Team encampment clean-ups (red) and reported needle waste (blue) are geographically clustered.**



Source: Map by Seattle Public Utilities, Environmental Science and Technology Section based on SPU needle data and Navigation Team clean-up data (72-hour notice), 2017-18.

**In other cities outreach agencies conduct proactive “needle sweeps” to recover used needles**

In Boston, the City’s needle exchange and harm reduction services provider, [AHOPE](#), has a four-person team that picks up used needles 12 hours per day, seven days a week. In addition to the dedicated sharps team, 10 to 15 AHOPE outreach workers collect used needles as they are doing outreach in the community. “We are in the midst of a crisis, and we have to work together,” said Sarah Mackin, director of AHOPE, in a [recent interview](#). “The reality is that we are not only taking responsibility for the syringes that we give out, we’re taking responsibility for any syringes found in a public way.”

The San Francisco Department of Public Health considers syringe recovery and disposal to be an important part of [their collective impact approach](#).

Each of San Francisco’s 13 syringe sites has a written disposal plan that includes syringe recovery, street area “sweeps,” and targeted clean-ups throughout the city. In addition, the San Francisco Department of Public Health funds a ten-person clean-up crew that picks up discarded syringes seven days per week.

**Ottawa’s “Needle Hunter” Program Creates Jobs and Protects Public from Discarded Needles**

The [City of Ottawa](#) partners with the [Causeway Work Centre](#) to hire, train, and supervise up to forty men and women who are at risk of homelessness due to recovery from addiction and/or some form of mental illness. They call themselves “Needle Hunters,” and they work seven days a week to recover discarded needles and other drug paraphernalia from public spaces. In 2018, the Needle Hunters recovered about 20,000 needles. Needle Hunters are paid employees who have had difficulty integrating into the traditional workforce.



Above: Needle Hunter Theresa, photo by Nicholas Galipeau. For the full video produced by Nicholas Galipeau about the Needle Hunters click here: [https://www.youtube.com/watch?v=PcICu7\\_9kE8](https://www.youtube.com/watch?v=PcICu7_9kE8)

**Recommendation 4      The City should engage outreach agencies in needle recovery and track its progress in reducing improperly discarded needle waste.**

## USE BEST PRACTICES TO DETER METAL THEFT



58 percent of Navigation Team clean-ups from January – July 2019 involved the recovery and disposal of debris from metal scrapping.

**Photo Credit:** City of Seattle Navigation Team, January 8, 2019

### **Deterring metal theft can reduce related trash accumulation**

While metal scrapping in public places in Seattle may be carried out by housed individuals as well as individuals experiencing homelessness, metal scrapping activities around unsanctioned encampments can contribute to trash accumulation at these sites. For example, piles of insulation and coating are left behind when copper wire is stripped, and tires and trash accumulate when bikes and other metal objects are dismantled. We found evidence of debris from metal scrapping at 58 percent of Navigation Team clean-up sites between January and July 2019. The metal scrapping at unsanctioned encampments may not be related to metal theft. However, to the extent that these scrapping activities are theft-related, any progress that the City can make in deterring metal theft could also reduce the amount of related trash accumulation.

One proven approach for cities in deterring metal theft is working with metal recycling businesses to reduce the incentives for metal theft. The [Problem-Oriented Policing Guide to Theft of Scrap Metal](#), states that “the scrap metal theft problem is driven entirely by the ability to sell stolen goods to recyclers.” Our analysis indicated that there are eight scrap metal recycling businesses in Seattle, and it is important for the City to ensure that these scrap metal dealers are operating responsible<sup>25</sup> recycling businesses. In the past year, SPD has conducted preliminary compliance checks with three of the eight recycling businesses and found one business out of compliance. However, SPD indicated that it has not been able to dedicate resources to

<sup>25</sup> [RCW Chapter 19.290](#) describes the requirements for scrap metal businesses in Washington state including record-keeping and reporting to law enforcement.



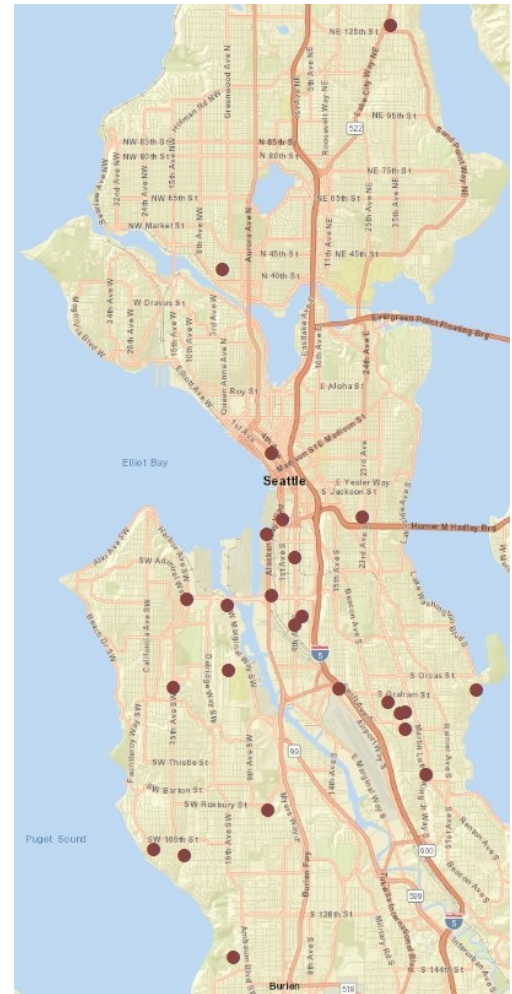
conduct follow-up compliance checks or to look at the five remaining businesses.

**Use Proven Practices.** It is important that the City approach metal theft deterrence by using practices that are effective, procedurally just, and fair to the affected parties. The U.S. Department of Justice, Office of Community Oriented Policing Services has developed guidebooks for police agencies that identify proven practices for reducing [bicycle theft](#) and [metal theft](#). In addition, the [Institute of Scrap Recycling Industries, Inc.](#) provides free technical assistance to law enforcement agencies on strategies for working with scrap metal recycling businesses to deter metal theft.

### Recent Street Light Wire Thefts Put Certain Seattle Communities at Risk

In addition to contributing to trash accumulation, metal theft can also reduce community safety. In 2019, Seattle City Light has experienced an increase in wire thefts in its street light system. City Light officials are aware of 25 wire thefts that year that disrupted street light service in the affected areas. At least four of the 25 thefts disrupted street light services near low-income housing complexes. Disruption of street light services is dangerous for pedestrians and drivers. Lack of street lighting can also increase risk for and fear of crime and may cause residents to curtail normal activities.

Addressing wire theft is costly and complicated for Seattle City Light. Thieves generally remove the wires from street light poles by breaking into the access covers at the base of the poles and handholes in the street. Four wires, at about 100 feet each, can be removed from a single pole. Seattle City Light has taken preventative measures including installing tamper-proof screws and replacing copper wires with steel (which has no monetary value), but these measures have not deterred the theft. Now, City Light crews are welding handholes shut and blocking access with heavy environmental blocks. These measures, while they may prevent theft, make maintenance more difficult and costly for Seattle City Light.



Seattle City Light Street Light Wire Thefts, January – November 2019  
**Source:** Office of City Auditor analysis of Seattle City Light street light wire theft report

**Recommendation 5**     **The City should use proven strategies for deterring metal theft to reduce the accumulation of trash accumulation from metal scrapping around unsanctioned encampments.**

## OBJECTIVES, SCOPE, AND METHODOLOGY

### Audit Scope and Methodology

This audit was conducted at the request of Councilmember Lisa Herbold for our office to assess the Executive's [Quarter 2 response to the Navigation Team reporting plan](#), which responded to 5 of the 14 reporting checkpoints from the Office of City Auditor's [November 2017 Navigation Team Reporting Plan](#). This audit focuses specifically on **Checkpoint 2.3: Assessment of Strategies to Prevent Trash Accumulation**.

This report was written by Claudia Gross Shader with input from Megumi Sumitani, Melissa Alderson, and Sean DeBlieck.

The Office of City Auditor would like to extend its appreciation to the GIS staff in SPU and Seattle Information Technology for their assistance in creating the maps included in this report as well as their assistance in supporting our pilot use of the Survey 123 mobile app developed by the City of San Francisco.

We would also like to thank the following researchers for their review and comment on our draft report: Dr. Karen Snedker from Seattle Pacific University, Dr. Cody Telep and Katherine Brown from Arizona State University, and Dr. Benjamin Bearnot, Division of General Internal Medicine, Department of Medicine, Massachusetts General Hospital, Boston, and Department of Medicine, Harvard Medical School.

A preliminary draft of this report was shared with staff from HSD, SPD, SPU, Parks, PHSKC, Seattle Office for Civil Rights, the City Budget Office, and the Mayor's Office. We made changes to the final report based on their input.

We conducted this audit using various methodologies, as follows:

- We reviewed the Executive's August 10, 2018 Quarter 2 Response to Statement of Legislative Intent 242-1-A-1;
- We interviewed officials from several City departments: HSD, SPU, SPD, PHSKC;
- With data we obtained from the Navigation Team and assistance from SPU GIS staff, we geocoded, mapped, and analyzed 2017-18 encampment clean-ups;
- With assistance from the Seattle Information Technology GIS staff and SPU GIS staff we loaded the Survey 123 mobile app developed by the City of San Francisco;
- We made site visits to the 15 locations with the most frequent Navigation Team clean-ups from 2017-18 and evaluated the conditions at these sites with the Survey 123 mobile app;
- We made site visits to locations for the SPU encampment trash program;

- We researched the processes of how the City is notified of new encampments;
- We analyzed data provided by SPD on its Right of Way Field Contacts;
- We used NVivo, a qualitative analysis software tool, to analyze key themes from the 2019 quarterly reports of HSD's contracted outreach providers;
- We researched examples of systematic geographic tracking of trash accumulation, needle recovery, and good neighbor agreements from other jurisdictions.

Per our standard practice, we conducted a process based on the City's [Racial Equity Toolkit](#) for our work on this report. Further, we intentionally sought opportunities to incorporate into our analysis the experience of people living unsheltered. This included our site observations of the 15 sites most frequently cleaned by the Navigation Team in 2017-18.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objectives.

### **NOTE: RATS IN UNSANCTIONED ENCAMPMENTS**

During our audit, officials from Public Health Seattle & King County (PHSKC) noted that unsecured food, human waste, and solid waste accumulations at unsanctioned encampments provide food and harborage for rats. Individuals living in unsanctioned encampments are at risk of exposure to rat bites, urine, and feces that can carry diseases. Further, when a rat infestation becomes established at an unsanctioned encampment, the rodents will migrate to neighboring properties increasing the risk of damage caused by rats to neighboring homes and businesses.

We did not conduct fieldwork for this audit to assess Seattle's public health risks related to rats.

In July 2018, PHSKC developed a [flyer](#) about rodents in response to outreach workers reporting rats and rat bites that were affecting people who were living outside.

## APPENDIX A

### Executive Response

#### Executive Response to Auditor's Report on Checkpoint 2.3

Reviewing the final draft of the City Auditor's report *Five Steps the City of Seattle Should Take to Reduce Trash Around Unsanctioned Encampments*, raised several areas of concern for the Executive:

- A. The report characterizes the City's approach to trash mitigation as being "complaint driven" and reactive in nature. The Human Services Department's (HSD) Navigation Team weighs multiple inputs in planning its work including information on public health, accessibility, safety, and infrastructure concerns provided by other departments. Community reports are important to the work of the Navigation Team but are not the sole driver of its work.

Community members report a variety of concerns to the City through the Find It Fix It app and via the City's Customer Service Bureau. Providing communities with avenues to express neighborhood needs and concerns is a valuable customer service tool. Information gathered directly from communities allows the City to be *responsive* to community needs and is a cost-effective way of alerting city Departments of situations that need attention.

In addition to being responsive, the City is also *proactive* in addressing waste:

- Seattle Public Utilities (SPU) has City-wide systems in place to proactively address illegal dumping and litter.
- Seattle Parks & Recreation (SPR) crews inspect their properties daily for areas that are being impacted by debris from unsheltered homelessness.
- The Seattle Police Department's (SPD) Community Police and Bikes Teams consistently scan their precincts for property and debris that impedes accessibility to public rights-of-way. When obstructions are identified the Navigation Team responds to support individuals' shelter and storage needs, and debris/bio-waste removal occurs.

- B. The report implies that the City's water quality is in jeopardy based on a point-in-time location-specific report that does not appear to take into account upstream conditions or historical trends of water quality at this location. To better understand the potential environmental impacts of unsanctioned encampments, the report must be thorough and rigorous in analyzing available data rather than make assumptions based on visually apparent correlations. The City of Seattle is in compliance with its Clean Water Act permits through the Washington Department of Ecology and is exploring innovative solutions to RV and encampment waste management via a pilot project operated by SPU.

- C. Finally, the Auditor's report is a snapshot in time. Department-led projects and practices mentioned in the report continue to evolve and new and promising initiatives and collaborations have developed since the Auditor's research was completed.
- The Navigation Team and King County Department of Natural Resources and Parks/Wastewater Treatment Division have begun exploring ways to enhance their partnership to address encampments at Matthew's Beach and other areas with joint property ownership.
  - SPU is collaborating with the Navigation Team to identify **additional** locations suitable for the Purple Bag program.
  - SPD Navigation Team officers are diverting abandoned bicycles and shopping carts from the landfill by returning them to their original owners when possible.

The [combined efforts of the departments](#) engaged in this work have resulted in millions of pounds of garbage and waste removed from Seattle's streets and have greatly reduced public health risks for both the unhoused and housed communities. This work—carried out in some of the most unsafe and unseen places in our growing city—demonstrates dedication to the mission of keeping Seattle safe and clean for all.

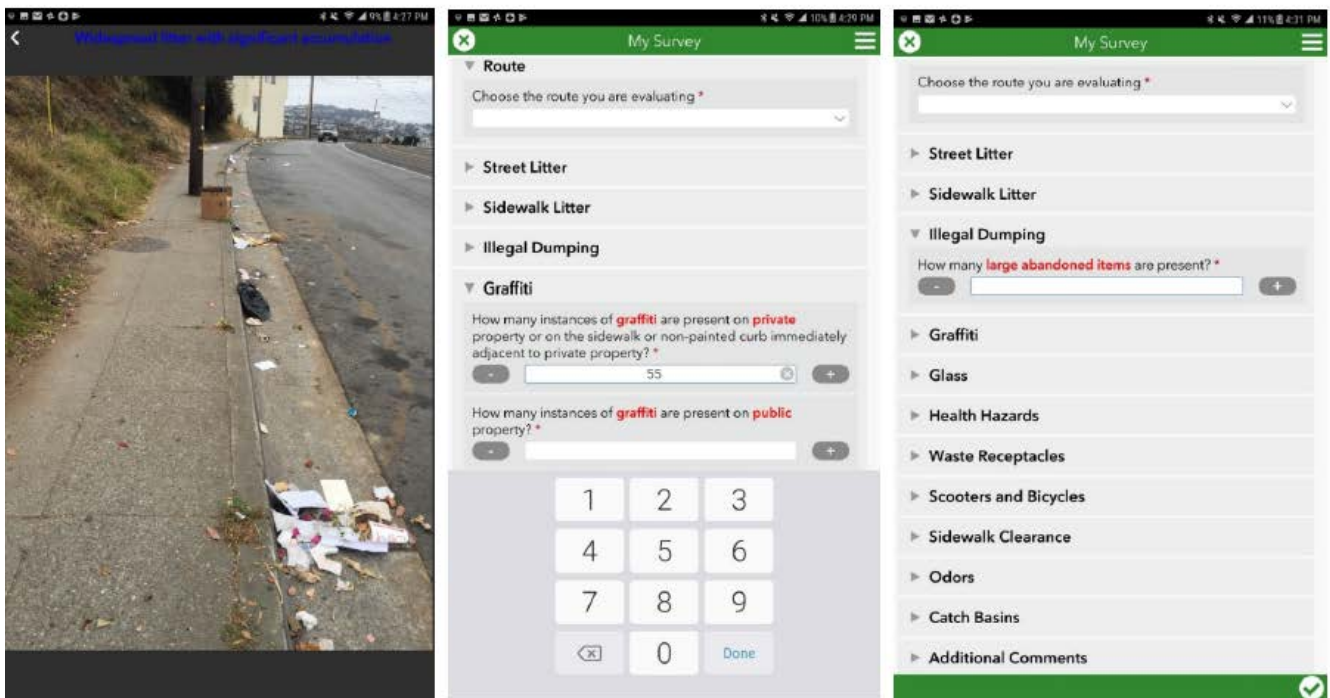
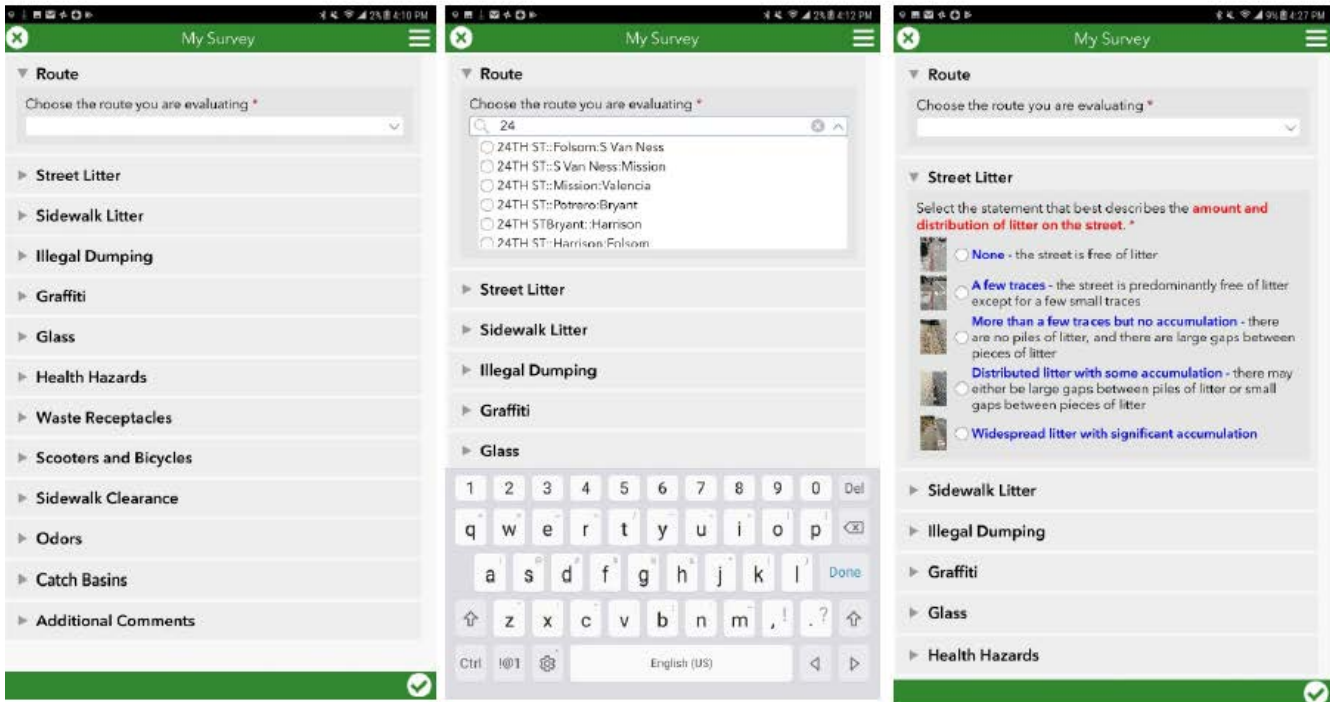
## APPENDIX B

### List of Recommendations

- Recommendation 1: The City should conduct systematic geographic surveillance throughout Seattle to identify areas of encampment trash accumulation and track its progress with addressing trash accumulation over time. This should include green-spaces and areas in which residents may experience barriers to reporting.
- Recommendation 2: The City should apply specific strategies to address persistent hot spots of encampment trash accumulation in Seattle that may include, but are not limited to: 1) expanding and increasing the frequency of the SPU encampment trash program, 2) designating more emphasis areas, and 3) requiring specific litter mitigation activities in a designated area around the facilities as part of Good Neighbor Agreements with City-funded agencies.
- Recommendation 3: We recommend that the City prohibit camping in Water Quality and Public Health Protection Areas, and systematically monitor these locations to ensure that unsanctioned camping is not occurring.
- Recommendation 4: The City should engage outreach agencies in needle recovery and track its progress in reducing improperly discarded needle waste.
- Recommendation 5: The City should use proven strategies for deterring metal theft to reduce the accumulation of trash accumulation from metal scrapping around unsanctioned encampments.

## APPENDIX C

### Screenshots of Mobile App for Systematic Site Observations



## APPENDIX D

### Seattle Office of City Auditor Mission, Background, and Quality Assurance

#### **Our Mission:**

To help the City of Seattle achieve honest, efficient management and full accountability throughout City government. We serve the public interest by providing the City Council, Mayor and City department heads with accurate information, unbiased analysis, and objective recommendations on how best to use public resources in support of the well-being of Seattle residents.

#### **Background:**

Seattle voters established our office by a 1991 amendment to the City Charter. The office is an independent department within the legislative branch of City government. The City Auditor reports to the City Council and has a four-year term to ensure her/his independence in deciding what work the office should perform and reporting the results of this work. The Office of City Auditor conducts performance audits and non-audit projects covering City of Seattle programs, departments, grants, and contracts. The City Auditor's goal is to ensure that the City of Seattle is run as effectively, efficiently, and equitably as possible in compliance with applicable laws and regulations.

#### **How We Ensure Quality:**

The office's work is performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. These standards provide guidelines for audit planning, fieldwork, quality control systems, staff training, and reporting of results. In addition, the standards require that external auditors periodically review our office's policies, procedures, and activities to ensure that we adhere to these professional standards.

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