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City of Santa Barbara
Public Works Department

Memorandum

DATE: July 21, 2022

TO: Water Commission

Via: Joshua Haggmark, Water Resources Manager

FROM: Gaylen Fair, Water Quality Superintendent

SUBJECT: Sewer Lateral Inspection Program Updates

The intent of this memorandum is to update the Water Commission on the various efforts related to the City of Santa Barbara's Sewer Lateral Inspection Program (SLIP).

Background

There are approximately 25,000 privately owned sewer laterals throughout the City of Santa Barbara, measuring an estimated 300 miles, which is on par with the size of the City's wastewater system. The private sewer laterals connect private plumbing fixtures to the City's wastewater collection system. Aging laterals require regular maintenance to continue to function properly. If not properly maintained, sewer laterals will become vulnerable to root intrusion and rainwater/groundwater infiltration. The result can lead to costly blockages in homes, businesses, and the wastewater system, leading to sewer overflows spilling into creeks and ultimately into the ocean. City wastewater staff responded to 26 private sewer lateral spills in 2021, and 13 to date in 2022.

SLIP, which was established in 2007, addresses the increasing number of private sewer lateral spills and public spills by working with property owners to identify the best repair solutions to their failing private sewer laterals. The program continues to develop based on the community's needs.

Software Interface - Forward Lateral

As of July 01, 2021, the City of Santa Barbara requires all SLIP inspections to be submitted via web-based software called Forward Lateral. Forward Lateral serves as a digital interface between the City, plumbing contractors, and property owners for receiving and reviewing sewer lateral inspection videos.

Forward Lateral allows property owners to easily review their sewer-lateral video inspections made by plumbers. This enables property owners to better understand the severity of defects, and make informed decisions for repairs. Property owners are automatically emailed video inspections from Forward Lateral, and are able to download the videos and view them on their smartphones. Property owners also receive the City's response to inspections as soon as staff have completed their review, rather than having to wait for a letter to arrive in the mail.

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Inspections are stored online, allowing property owners to share their sewer lateral video inspections with contractors in order to obtain multiple quotes for repair work.

Moving to cloud-based Forward Lateral has improved the City's Sewer Lateral Inspection Program in many ways. Forward Lateral has streamlined inspection and review process; and, it has provided transparency and clear communication between the City, plumbers, and property owners, which in turn has increased trust, understanding, and expectations for needed sewer lateral repairs. All inspection data is easily accessible online to all parties involved, including contractors interested in submitting bids for the needed repairs.

Residential Video Assistance Program

The residential Video Assistance Program (VAP) took effect on July 01, 2021, as a pilot project. VAP participants receive assistance of up to \$300 towards the inspection of their private sewer lateral by a City Contractor (selected through competitive bidding). Phase 1 of the VAP is available to residential property owners identified by SLIP staff as needing to submit a sewer lateral video inspection because of suspected sewer lateral defects. SLIP staff conduct a site visit to determine if there is an accessible cleanout, which is a requirement for the VAP. SLIP staff then schedules a video inspection to be performed by the City's contractor, who submits the video via Forward Lateral for the City's review.

In the VAP's first year, 105 property owners applied to participate in the program. However, the number of properties taking advantage of the program only represents about 20% of the SLIP inspections received. There are numerous reasons property owners are not using this program, which we will get into more during our presentation. In the coming year staff will continue to make changes to make the program more attractive to more of the nearly 500 SLIP cases that are inspected each year. This may include further revisions to the inspection request letter advising of the program and exploring options that would open this up to more plumbing contractors being able to provide this inspection service. As a reminder the VAP is only available to property owners where the lateral has been identified by City staff to be of concern and a risk to public health or the environment. Property owners who are required to inspect their lateral because they are adding an Accessory Dwelling Unit (ADU) or making significant improvements to their home are ineligible, since these are voluntary improvements that require the lateral to be inspected.

Condition Rating

SLIP is planning to implement a Condition Rating Scale (CRS) for sewer laterals and sewer lateral connections. The CRS is based upon the National Association of Sewer Services Companies' (NASSCO) Lateral Assessment Certification Program standard and has been modified to fit the nature of the City's SLIP program. The nationally recognized NASSCO standard is currently used by the City's Wastewater Collection System to monitor and maintain the public wastewater system.

The SLIP's CRS is on a scale of one through five, with a score of five being the most severe defect, requiring accelerated or immediate repairs; and, a score of one being a minor defect, which can be monitored over time before repairs are needed. The CRS provides property owners with a better understanding of the severity of existing defects, so they can develop an appropriate plan and timeframe for making needed repairs.

The CRS allows SLIP staff to focus on the most severe sewer lateral defects, and work with property owners to find the best repair option, while lower-rated defects may require routine monitoring, occasional cleaning, which would allow the Slip case to be closed or moved to a monitoring phase. The SLIP has inspection triggers in place for reopening a closed SLIP case.

Commercial Program

One of the triggers for a SLIP inspection applies to common interest developments and multi-unit developments. These properties are required to inspect their sewer lateral once every fifteen years. Due to the financial impacts of COVID-19, the commercial program was temporarily suspended in April 2020.

With the Commercial activity returning to a new normal with Covid-19 SLIP staff have re-instated the commercial program in June 2022 and properties are being scheduled for inspection. Picking up where we left off it is estimated we will complete the first round of Commercial property lateral inspections by 2025. This is based on current staffing levels which we estimate can process approximately 45 properties per month in addition to our residential SLIP cases.



PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION

SEWER LATERAL INSPECTION PROGRAM UPDATE

Water Commission – July 21, 2022

Presentation Overview



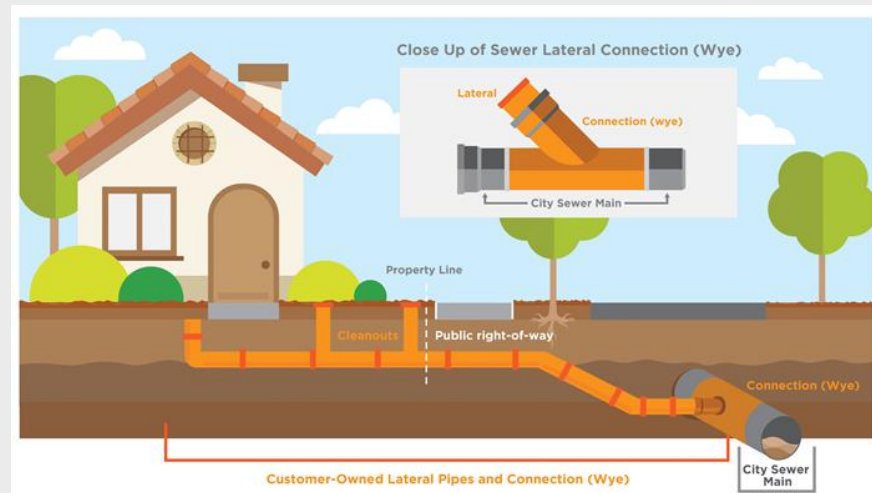
- Background
- Inspection Submission Platform
- Video Assistance Program
- Condition Rating
- Program Updates



BACKGROUND

SLIP Background

- Sewer Lateral - Pipe that connects a house or building to the publicly owned sanitary sewer main
- Property owners are responsible for maintaining their private sewer lateral and wye connection
- Developed to address failing laterals and increase public awareness on lateral maintenance
- SLIP continues to develop and change based on community needs



Inspection Triggers for SLIP

Residential Properties

- Permit Initiated
 - Addition of 400sf, or
 - Addition of two (2) or more new fixtures
- Defect observed during City main inspections
- Private Lateral Spill



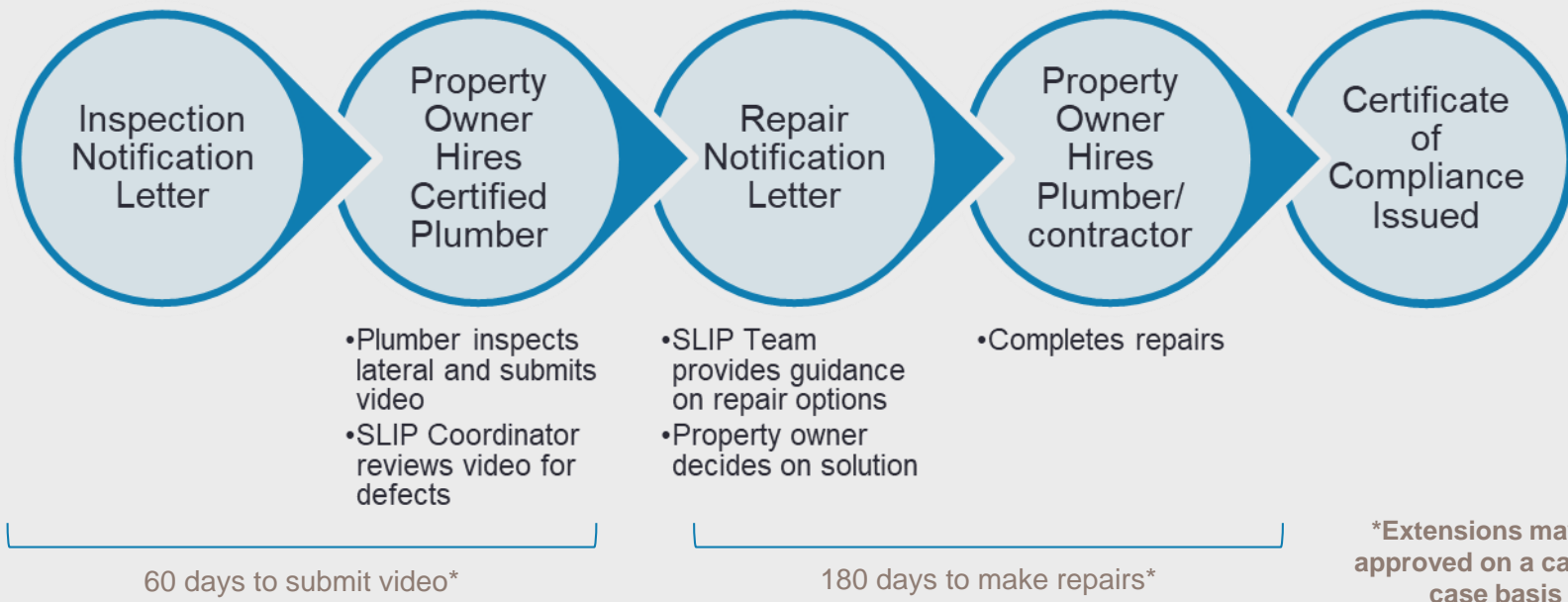
Commercial Properties

- 15 year re-inspection frequency
 - Required every 15 years regardless of condition
- Private Lateral Spill





SLIP Process





SLIP INSPECTION SUBMISSION PLATFORM

Web Based Software: Forward Lateral

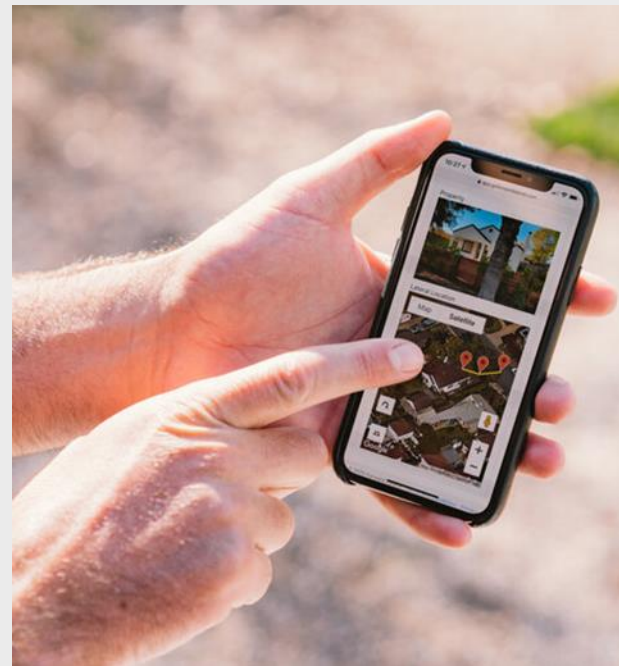
SLIP Inspection Platform

- Interface between the City, the plumbing contractor, and the property owner
- Forward Lateral is a web-based program for uploading and reviewing sewer lateral CCTV inspections
- Mandatory usage since July 1, 2021



Forward Lateral Benefits

- Accessible on the field
- Automated status updates
- Inspections available to property owner
- Defect are coded per industry standards
- Digital delivery of repair letters
- Long term video storage with option to download and share



VIDEO ASSISTANCE PROGRAM

Mariana Cruz

Video Assistance Program (VAP)



- Pilot residential program started October 2021
- Must use City's Contractor
 - Selected through competitive bid
 - City coordinates inspection
- City covers up to \$300 per inspection
 - If costs >\$300, property owner pays difference

VAP Workflow

- Property owner applies for VAP
- Site visit to verify accessible cleanout
- Staff schedules inspection
- Contractor inspects and submits inspection
- City reviews inspection and provides comments as needed



Video Assistance Program

- 105 applications received
 - 91 inspections completed
 - 3 applicants ineligible for not having an accessible cleanout
 - 11 applicants withdrew their applications in order to use their own plumber
- ~ 20% of inspections submitted in FY 22



VAP Property Owner Feedback

- Convenient
 - Eliminates shopping for contractor
 - City schedules the inspection
- Reasons for not using VAP
 - Fear the city's contractor will identify defects their plumber would not increasing the cost of repair
 - They trust their local plumber, they do not know the city's contractor



VAP Adjustments

- Updated request to inspect letter to clearly state inspection options
- Hosted a webinar to introduce VAP
- Switched to offering VAP inspections twice a month
 - Lead to less cancelations and rescheduling



Video Assistance Program's future

SLIP staff is exploring feasibility of:

- Offering the contract to multiple contractors
- Allowing property owners to use their own plumber if their plumber will honor the VAP contract price





LATERAL CONDITION RATING

SLIP Condition Rating Scale (CRS)

- Modeled after the National Association of Sewer Services Companies' (NASSCO) Lateral Assessment Certification Program
 - SLIP staff are all certified through NASSCO
- NASSCO standards are used by the City's Wastewater Collection System to monitor and maintain the public wastewater system.
- SLIP Condition Rating Scale modifies the NASSCO scale to rate sewer laterals and sewer lateral connections

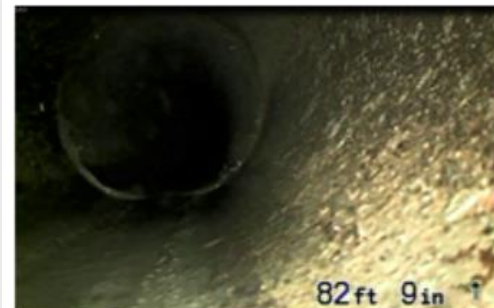


Condition Rating Scale (CRS)

- Scale of 1-5
- 5 being the most severe defect, requiring accelerated or immediate repairs
- 1 being a minor defect, which can be monitored over time before repairs are needed.



Defect C: Large offset with roots at 65 feet.



Defect G: Roots Fine Joint at 83 feet

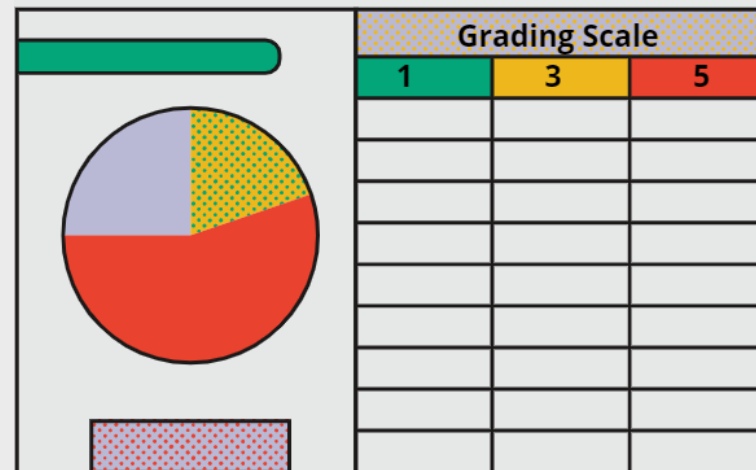
CRS Benefits to Property Owners

- Maintain and make repairs over time
- Plan for future repairs
- Work with staff to develop a maintenance plan
- Compare lateral condition over time



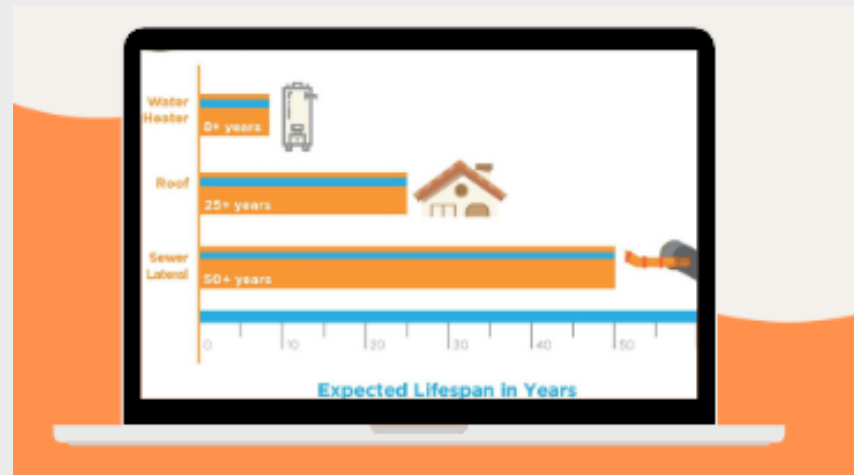
CRS Benefits to Staff

- Focus on more severe cases
- Reschedule less severe cases
- Increases communication and education opportunities between staff and the public
- CRS rubric allows for transparency



CRS Next steps

- Develop CRS implementation plan
- Develop educational material for the public
- Update website to reflect changes





SLIP UPDATES

Gaylen Fair

Commercial Program

- Requires sewer laterals to be inspected every 15 years
- On hold since April 2020 due to the COVID 19 pandemic and staff shortages
- Re-started in July 2022
- Approximately 45 inspection requests monthly
 - Goal: all commercial properties will be inspected by 2025



Webinar Series

- Webinars were popular with property owners in FY 22
 - 4 hosted in FY 22
 - SLIP will continue to offer these virtual events

Sewer Lateral Inspection Program Lunch and Learns

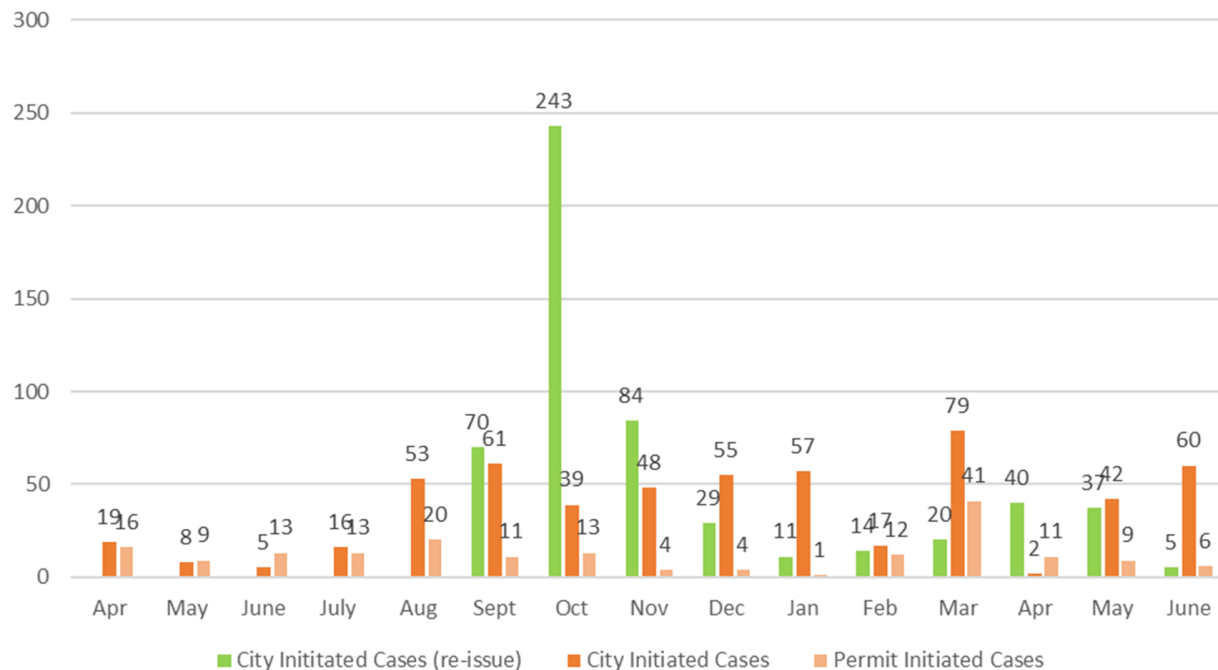




SLIP DATA

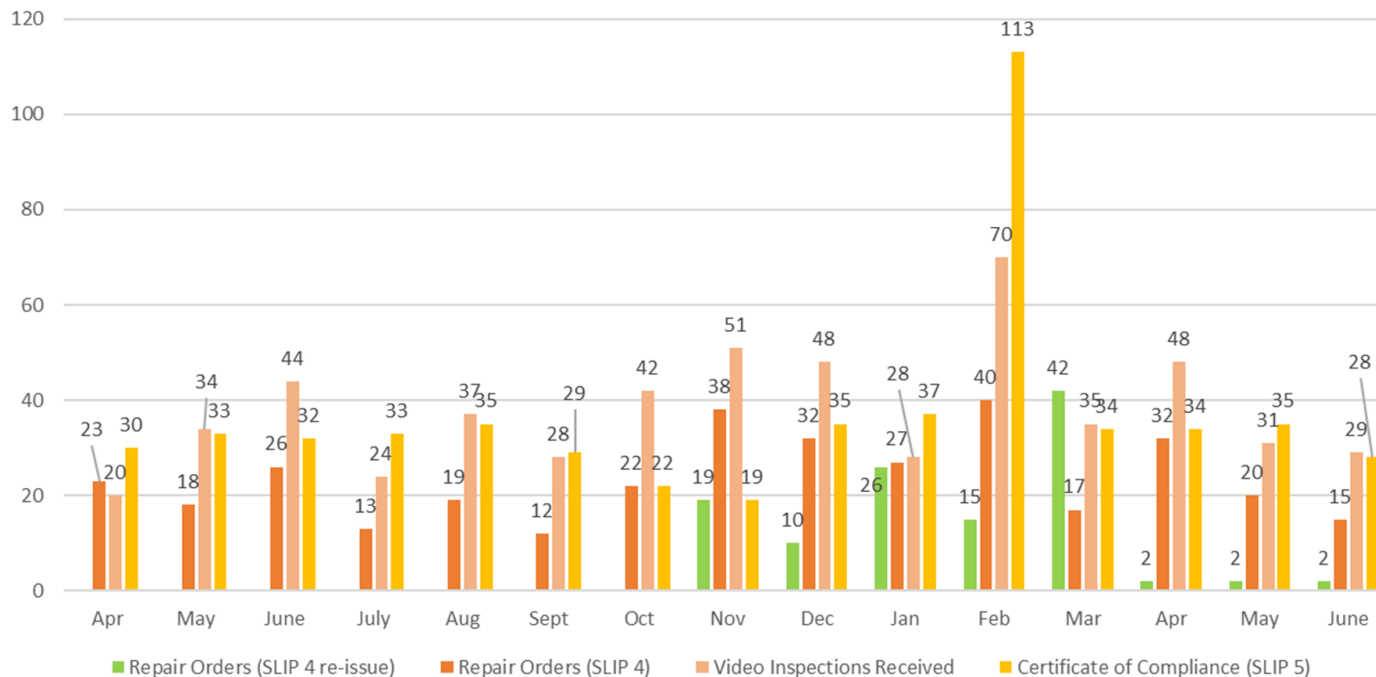


City Initiated, Permit Initiated, and Re-issued City Initiated Cases



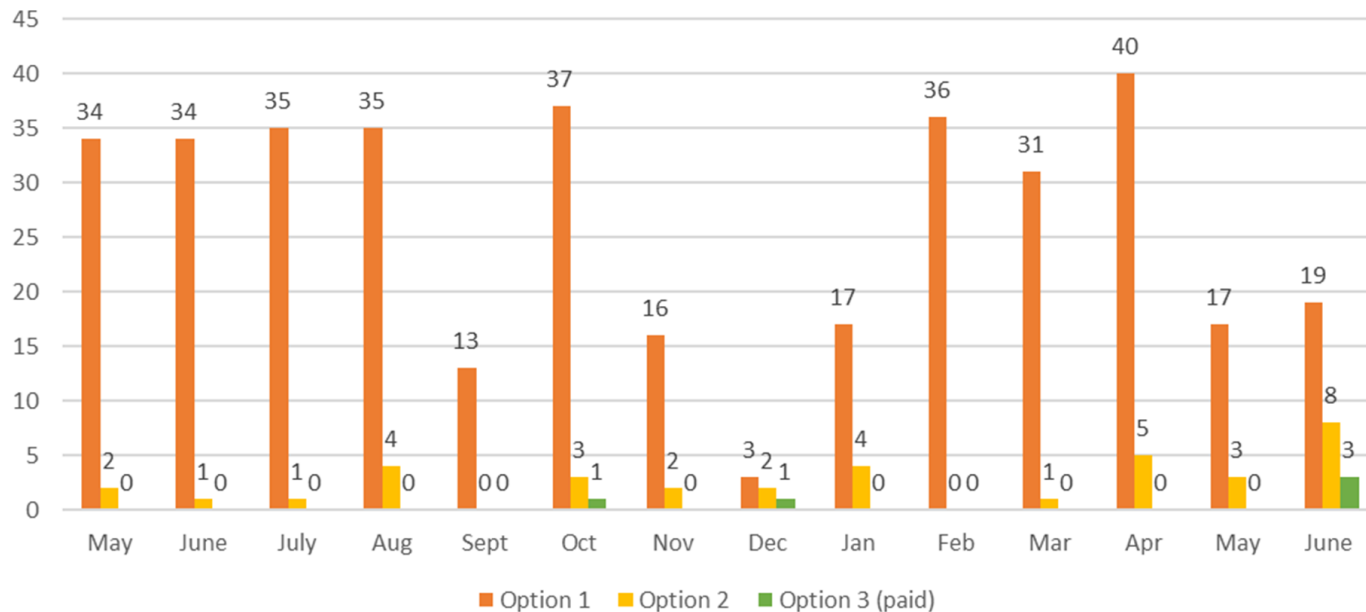


Video Inspection Received, Repair Orders (SLIP 4), Repair Orders (SLIP 4 re-issue), and Compliance Certificate Issued (SLIP 5)



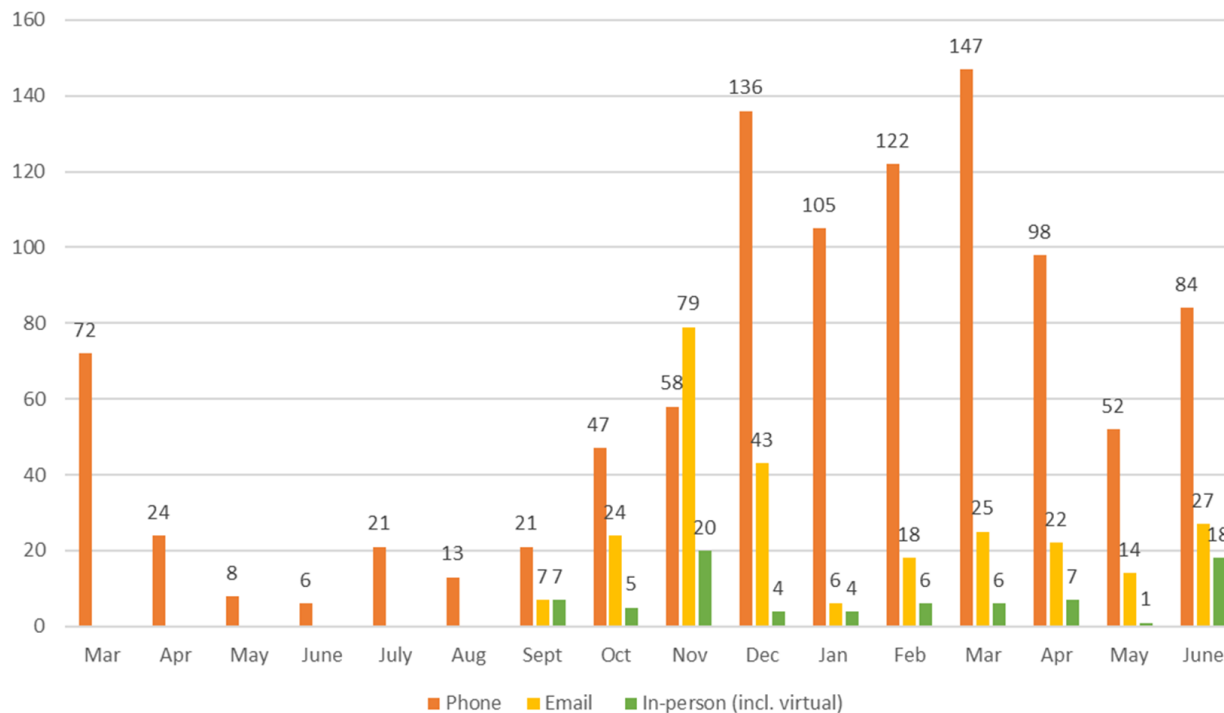
Repair Options Provided by City

Replacement by Private Contractor (Option 1),
Replacement by City Contractor (Option 2), Trenchless Rehabilitation (Option 3)





Communication with Property Owners





THANK YOU

Questions