

2021/22 Winter Weather Response — Prepare. Respond. Follow-up.



2021/22 winter storm presentation overview

- Preparation
- Activation
- Response
- Follow-up
 - Pothole repair
 - Landslide management
- Long-term asset management
- Lessons learned



Preparation

Prepare year-round for winter weather events, including ongoing public education, employee training, and regional coordination

Public education goals

- Guide people to prepare in advance for winter weather
- Educate public about responsibility to clear sidewalks
- Inform public about how to travel safely during a storm

SAFETY TIPS & RESOURCES FOR WINTER WEATHER

Find out how to prepare and stay safe during snow and icy conditions.



Learn more at
seattle.gov/winterweather



 **Seattle**
Department of
Transportation



Preparation

Training familiarizes staff with routes and tests equipment

Contract agreements and de-icer procurement help meet needs during activation



Snow Routes—Preparation

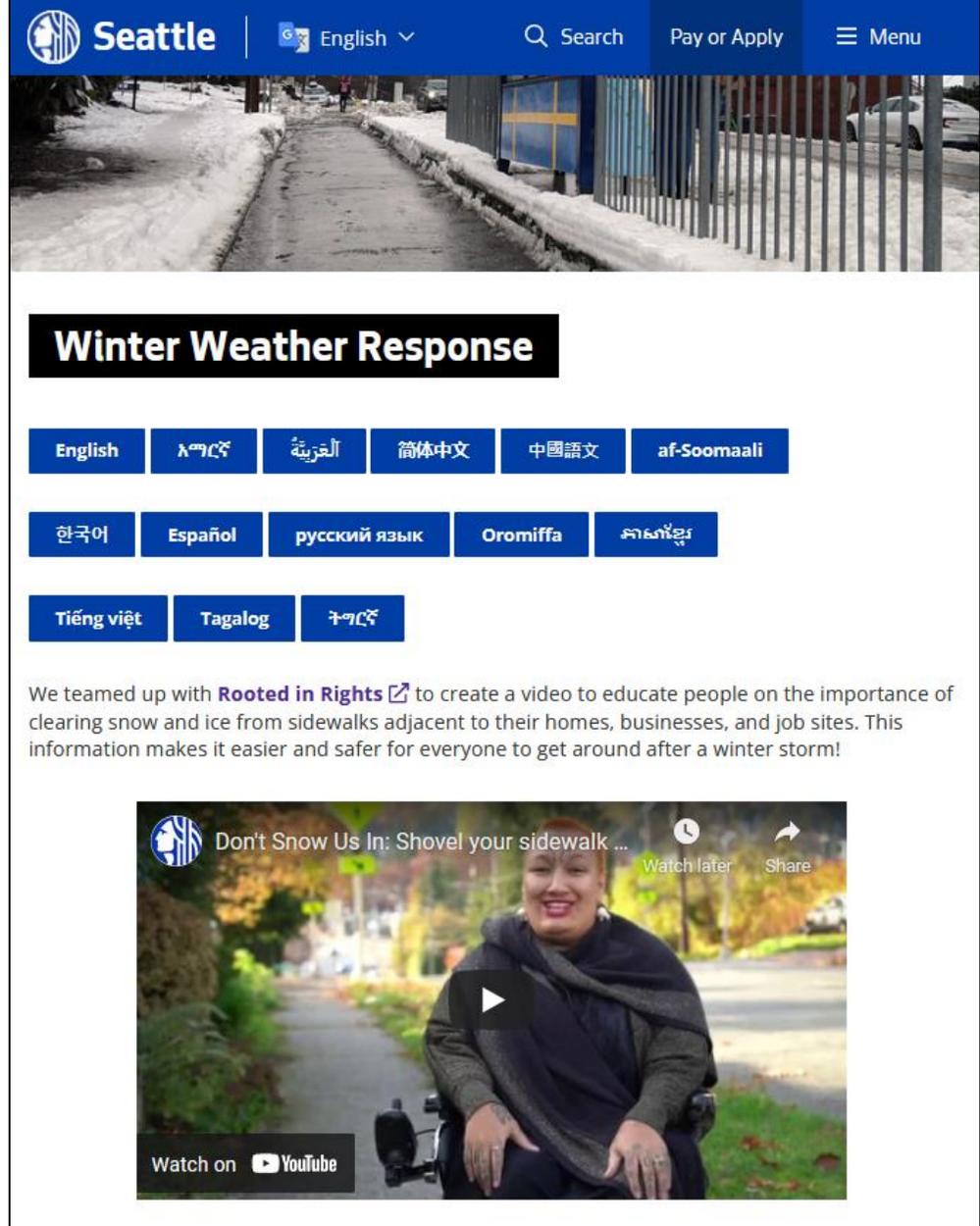
Update Winter Weather Plan annually

- Focus on over 1,000 miles of most critical routes for transit, emergency services, and hospitals
- Supports access to critical facilities such as schools and public health sites
- Why these routes are prioritized:
 - Maintain key transit corridors
 - Optimize staff and resources
 - Avoid locations where plows are unable to navigate



Public Outreach Campaign

- Encourage **preparation** via website, blog, and social media streams
- Participate in annual regional winter weather conference
- Work with 35 community groups to distribute 20,000 brochures in 14 languages
- Translate public service announcements and distribute to multicultural news outlets
- Promote video created with Rooted in Rights on importance of clearing sidewalks



The screenshot shows the top navigation bar of the City of Seattle website with the Seattle logo, 'Seattle' text, a language dropdown set to 'English', a search icon, and links for 'Pay or Apply' and 'Menu'. Below the navigation is a header image of a snow-covered sidewalk. The main content area features a black box with the text 'Winter Weather Response'. Underneath are two rows of language selection buttons: the first row includes English, አማርኛ, العربية, 简体中文, 中國語文, and af-Soomaali; the second row includes 한국어, Español, русский язык, Oromiffa, and සිංහල; the third row includes Tiếng việt, Tagalog, and ትግርኛ. A paragraph of text follows: 'We teamed up with [Rooted in Rights](#) to create a video to educate people on the importance of clearing snow and ice from sidewalks adjacent to their homes, businesses, and job sites. This information makes it easier and safer for everyone to get around after a winter storm!'. Below the text is a video player with a play button, a title 'Don't Snow Us In: Shovel your sidewalk ...', and icons for 'Watch later' and 'Share'. At the bottom left of the video player is a 'Watch on YouTube' button.

Activation

- Activate SDOT Incident Management Team
- Monitor conditions through site visits and 24/7 Transportation Operations Center
- Coordinate with Citywide Emergency Operations Center
- Promote online storm response map
- Provide real-time information
- Implement temporary closures and detours



Response

Crews worked day and night from December 24 to January 5. (Nearly two weeks straight).

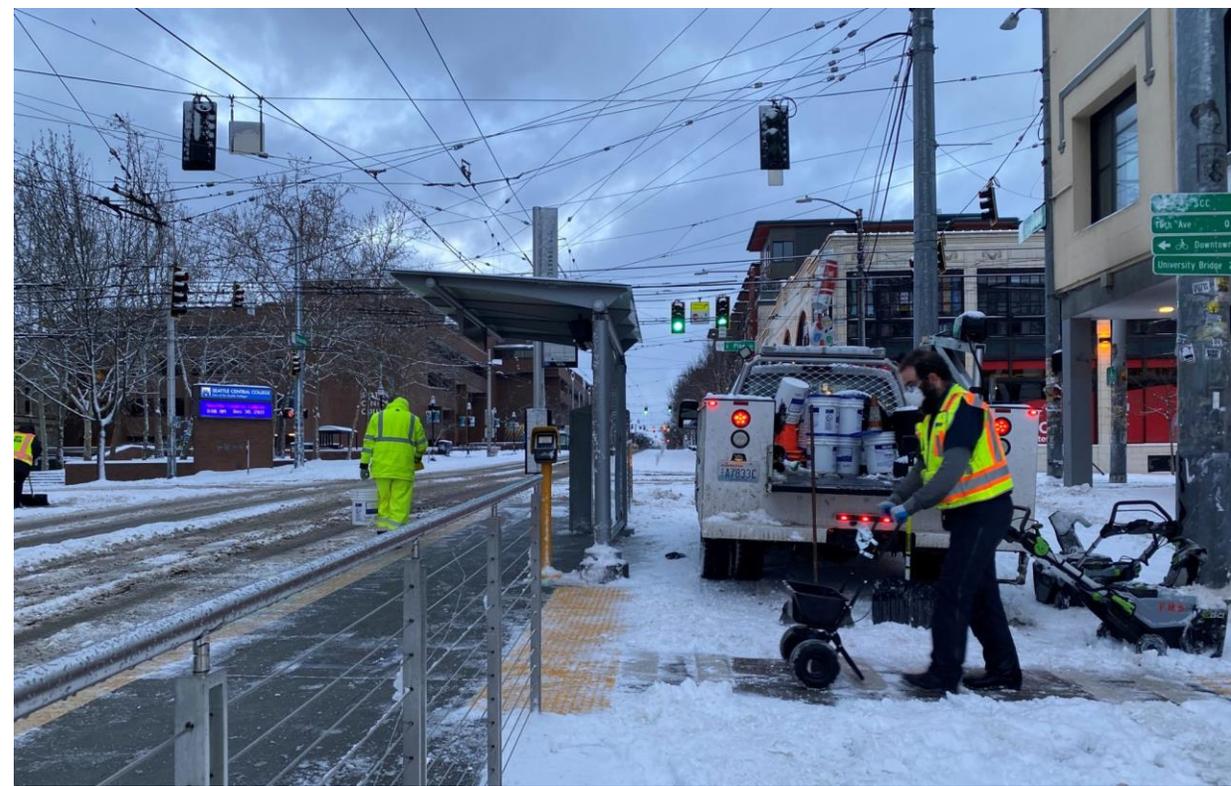
Snow response vehicles plowed, treated, and patrolled 40,000 miles of road. (1 ½ times the distance around planet Earth).

Commitment: Clear lanes on snow routes within 12 hours of a break in the storm



Working as One Seattle with our regional partners

Partner with other City departments including Seattle Public Utilities, Seattle City Light, Seattle Parks and Recreation, Seattle Police Department, Seattle Fire, and others – and our partners, including King County Metro, Sound Transit, and WSDOT during **response**



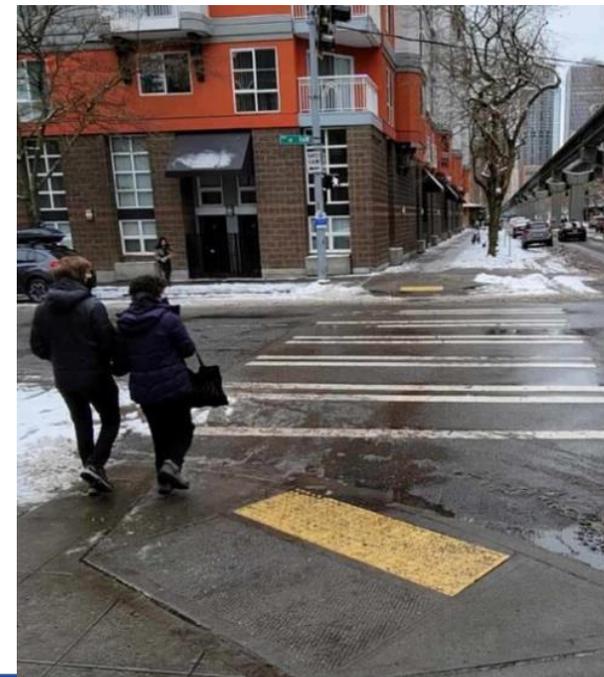
Keeping pedestrians moving

Respond by shoveling public stairways, pedestrian overpasses, bridges, curb ramps, bus stops

- Deployed 30 to 45 people each day
- Shoveled over 3,300 curb ramps
- Cleared trouble spots near public health facilities & about 30 schools

Respond by reminding businesses and contractors who have not cleared sidewalks of their legal responsibility

- Deployed a dozen inspectors each day
- Completed over 10,000 sidewalk inspections
- Knocked on doors & left literature in multiple languages

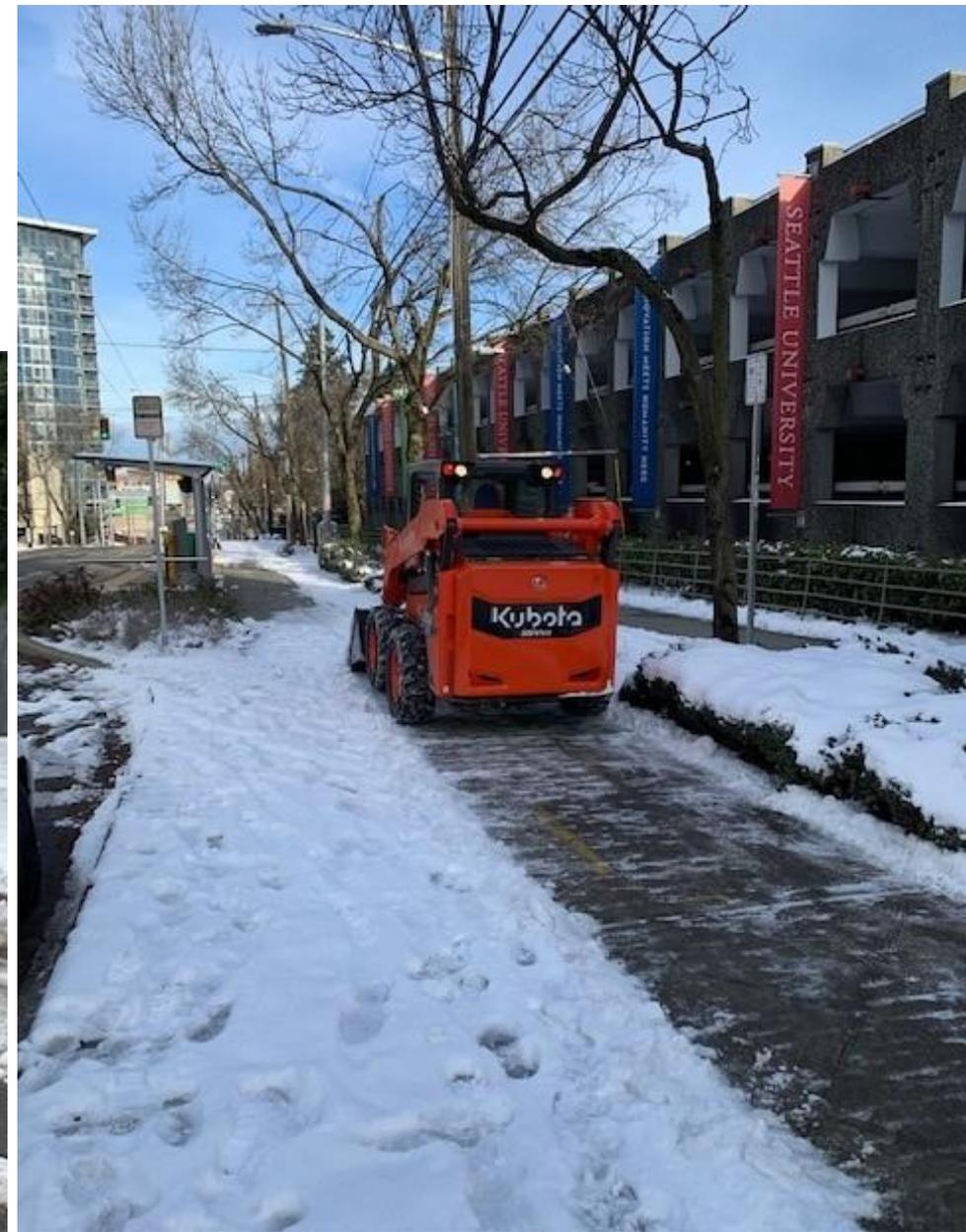


Plowing protected bike lanes

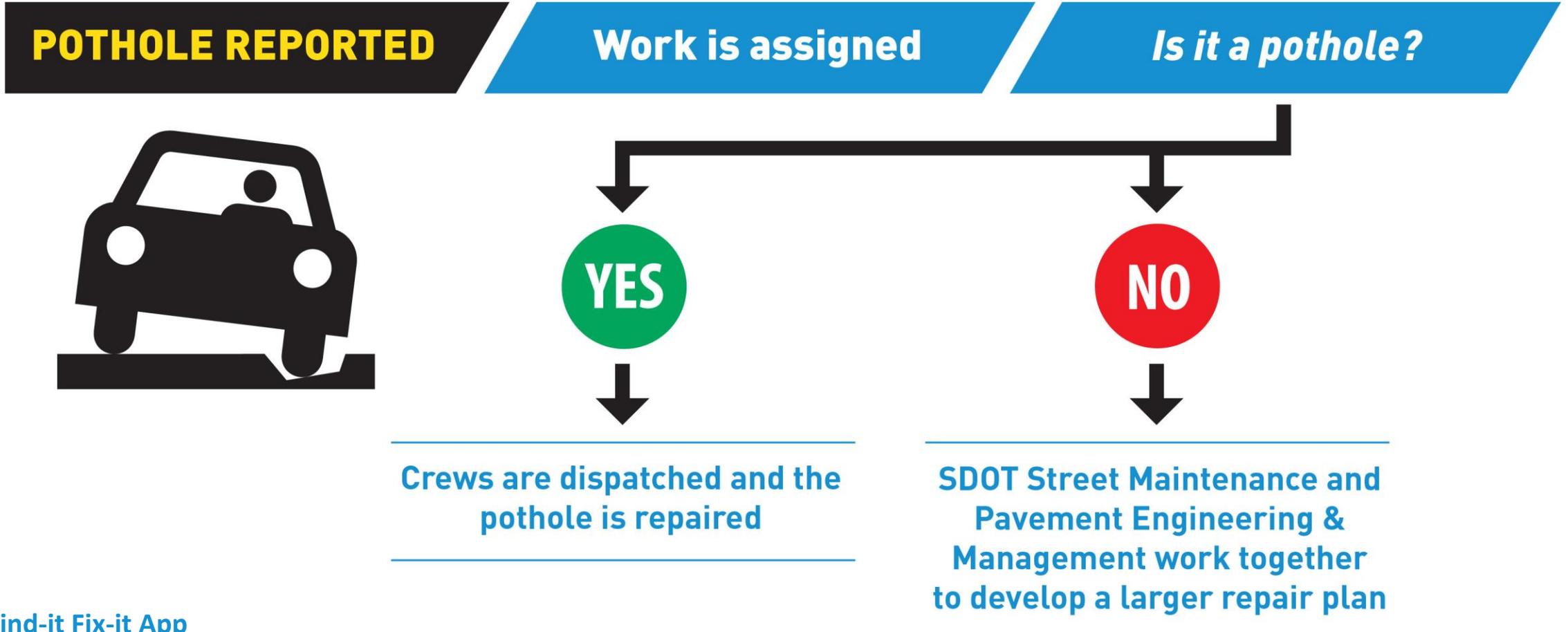
15 crew members were deployed to clear protected bike lanes during **response**

Locations:

- Western Ave
- 2nd Ave
- 4th Ave
- 7th Ave
- 8th Ave
- S Dearborn St
- Cherry St
- Broadway
- Pike St
- Pine St
- S Columbian Way
- Westlake Trail
- Green Lake
- NE Ravenna Blvd



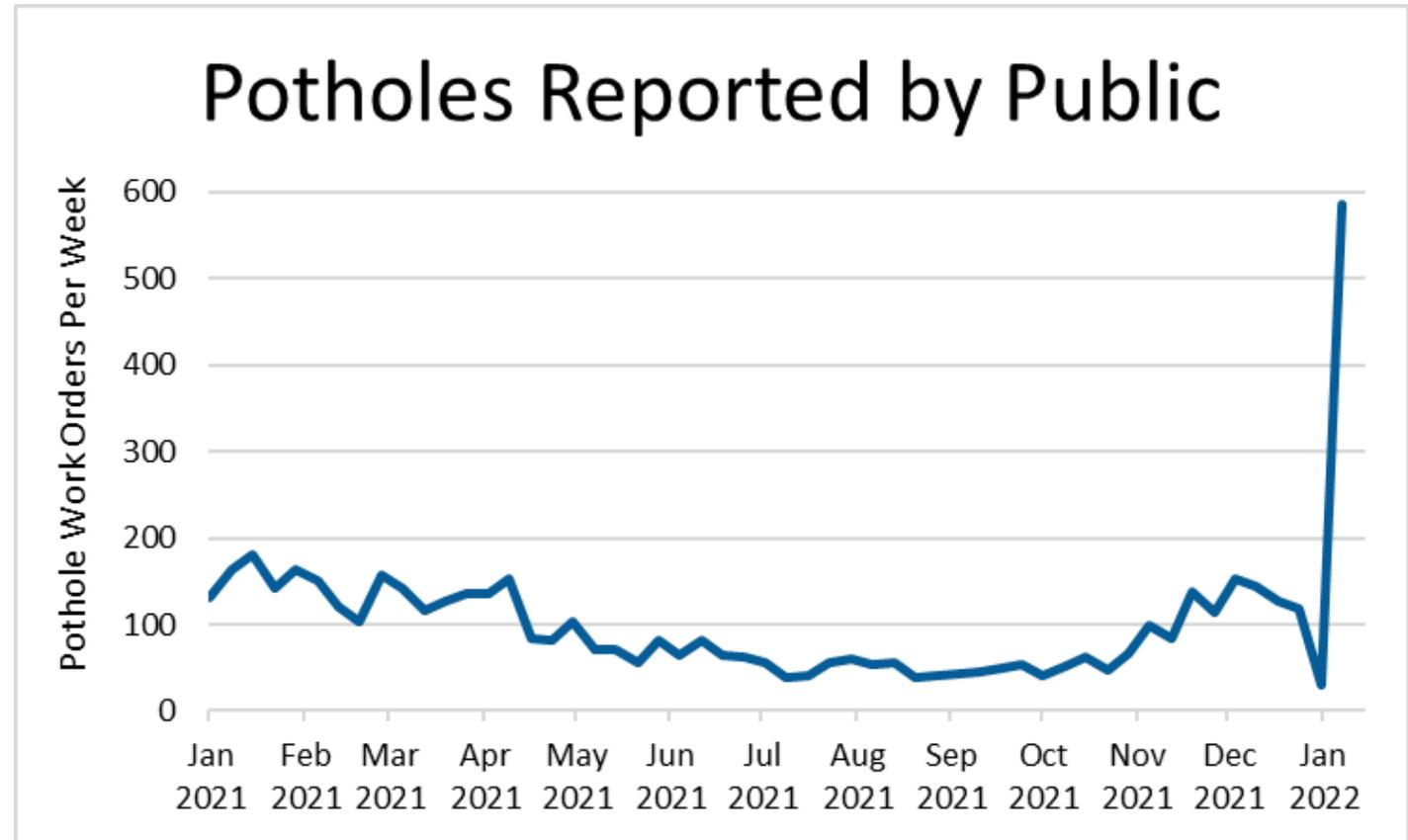
Typical pothole response



- 1. Find-it Fix-it App
- 2. SDOT Customer Care: 684-ROAD; 684-ROAD@seattle.gov

Post 2021/22 winter storm pothole response

1. Filled nearly 3,500 potholes so far this month.
2. Add up to 70 staff; and deploy 11 versus 4 trucks
3. Prioritize Emerald and Gold snow routes
4. Address Find It Fix It requests on non-arterials, on first come, first served basis



Landslide response

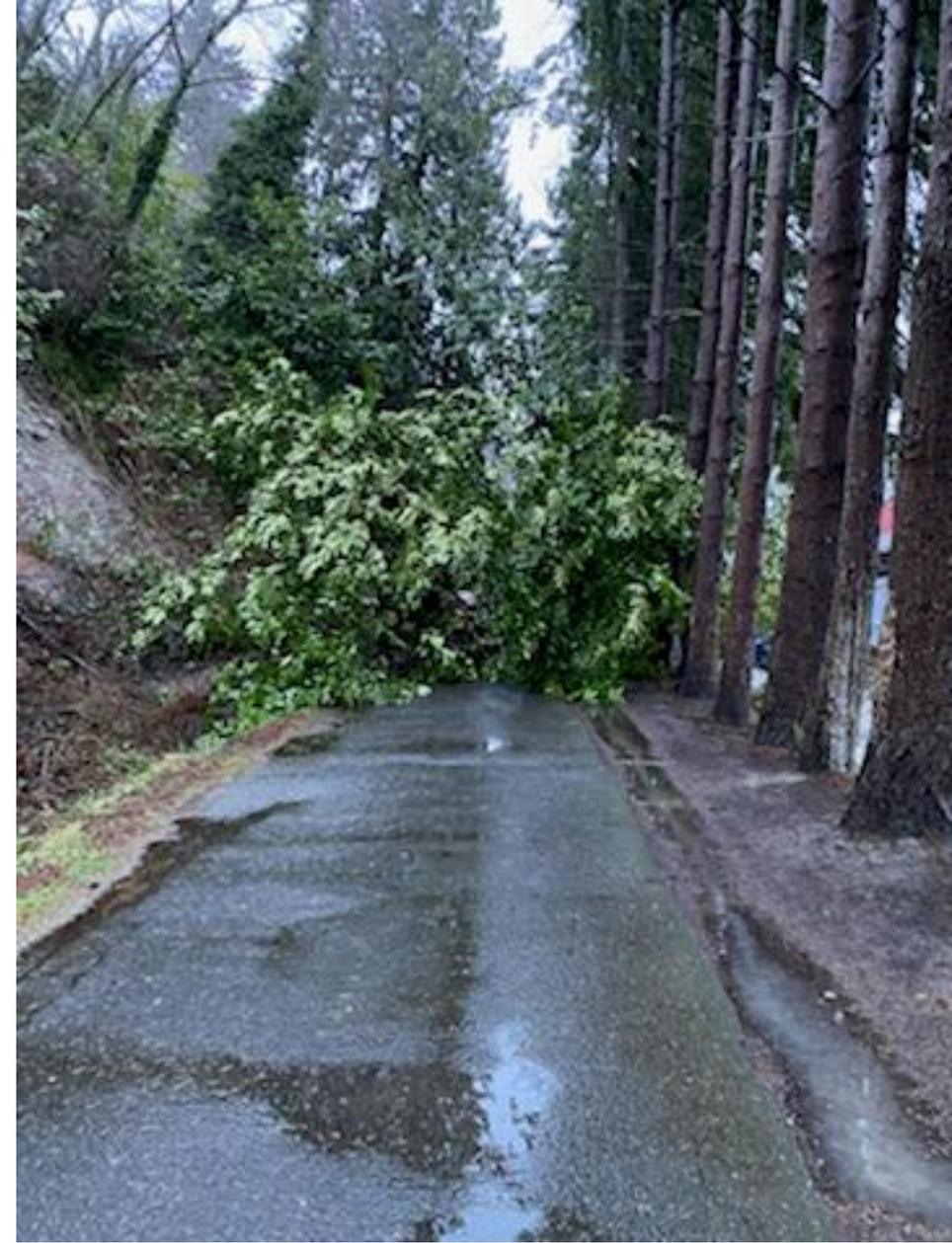
- Winter of 1996/97
 - More than 300 landslides occurred
 - Over \$30 million damage from lawsuits
 - Creation of a Citywide Landslide team
 - Improved coordination of departments, including:
 - Consolidate landslide information
 - Start coordination at beginning of wet season
 - Communicate closely during periods of wet weather
 - Created SDOT Landslide Mitigation Prioritization List



Rainier Ave S Landslide Mitigation project

January 2022 landslide response

- About a dozen landslides occurred across the City
- SDOT responded to 8 impacting public right of way
- Priority was public safety, arterial streets, and reducing impacts to pedestrian and street traffic



Highland Park Way SW

- Landslides occurred along Highland Park Way SW, a W Seattle Bridge detour route on 1/7 and 1/11. SPU, SCL, Parks, and SPD joined to quickly close, clear, and reopen the street
- Near-term safety precaution: installed concrete blocks at the base of the hill to support the land
- Next steps: Coordinate with Parks to install additional erosion control measures and promote vegetation growth this spring



Keeping the public informed during follow-up actions

Frequent updates were shared with the public via our SDOT Twitter accounts (@SDOTtraffic and @SeattleDOT), through media releases, along with updating and adding blog posts.

SDOT Tweet: Highland Park Way SW re-opened



SDOT Tweet: Pothole repair work in Capitol Hill



Long-term asset management & lessons learned

Long-term asset management:

- Repaving and maintaining streets reduces potholes —163 lane miles have been paved through Q3 2021 thanks to voter-approved Levy to Move Seattle
- Constructing projects on SDOT landslide mitigation prioritization list minimizes risk of future slides

Lesson learned:

- Seattle residents generally understand their responsibility for clearing sidewalks; but struggle due to abilities, resources, and time
- More education needed on where and why streets are selected for snow plowing
- More message amplification across departments on winter storm response (i.e. SDOT sharing SPU's messages about solid waste pick up)
- Additional CDL training across departments could help better meet staffing demands of 12-hour shifts, 24/7 for extended response periods and related follow-up activities

Celebrating City staff

This winter event was one of the more significant storms in recent times

- This storm was particularly challenging due to COVID-19, holiday schedules, and staff traveling out of town
- We are deeply appreciative of the workers who sacrificed time with families and gave up holiday weekends and other vacation plans to respond
- Workers from Parks and Recreation, Seattle Public Utilities and Seattle City Light were instrumental in this effort



Questions & Discussion

www.seattle.gov/transportation

