



SEATTLE CITY COUNCIL | DISTRICT 1

## COUNCILMEMBER LISA HERBOLD

During the discussion of CB 118982 (the first 2017 supplemental budget ordinance), I raised questions about the Seattle Department of Transportation's (SDOT's) practices for managing landslide risks and whether SDOT should be doing more proactive work to minimize the risk of slides rather than responding with repair work after slides occur.

17 years ago, in 2000, SDOT performed a risk assessment for slope hazards for landslides on arterial streets in the City. This evaluation was based on a set scoring matrix, and SDOT uses that ranking to prioritize our proactive landslide mitigation program.

The assessment used eight design factors to determine the priority of 73 known potential landslide locations along arterial streets. The criteria were:

1. Hazard condition of slope – this includes the height, slope inclination, amount of ground and surface water, past failures.
2. Traffic volume (Average daily number of vehicles) – total daily traffic
3. Street condition – including both the pavement condition and the condition of adjacent retaining facilities.
4. Access – how significantly would public access be impacted if a slide were to block the right of way (street or sidewalk). If the street were impacted would it result effect metro, primary emergency routes, and would a detour be difficult to implement.
5. Adjacent to other public facilities – are there public facilities (community centers, schools, city utilities) that may be impacted if a slide were to occur.
6. Slope modification history – has something been done to the slope in the past, either by SDOT, or another public or private entity that may decrease the stability of the slope.
7. Joint projects – is it possible to partner with other planned projects to decrease overall costs.
8. Adjacent to private facilities – are there houses or other facilities that may be impacted if a slide were to occur.

Of the 73 locations, 24 were rated a **high priority** and had more in-depth assessments performed. We are slowly moving through mitigation efforts for those locations. **In 17 years, only seven of twenty-four have had proactive mitigation work done**, whereas the majority of the funds each year has been used for reactive work to slides in other locations.

SDOT has approximately \$500K per year allocated in the CIP budget for SDOT landslide mitigation.

- 1 FTE geotechnical engineer that manages the program, provides response and support to our maintenance operations crews to ensure they respond safely and appropriately to landslides, and manages the programs capital improvements, and coordinates with the other landslide program managers in Parks, SPU, and SDCl.
- Crew time to install mitigation measures after landslides have occurred (either temporary or permanent)

This is a significant problem in that the majority of work that was identified 17 years ago as a high priority has not been completed in areas in known potential landslide locations along the arterials

streets. Between now and the second quarter supplemental I look forward to working with CBO and SDOT to identify 2017 funds as well as a spending plan over the six year CIP to complete the work.