

Memo

Date: March 21, 2023
To: Levy Oversight Committee
From: Seattle Department of Transportation
Subject: Move Seattle Levy Workplan Update with a Focus on the Bridge Seismic Program

Purpose:

To brief the Levy Oversight Committee (LOC) on an important update on the status of the Bridge Seismic Program presented at the City Council on March 21, 2023. This memo provides the LOC with details on the Program update and summarizes work to date on the Levy Portfolio Workplan Update.

Summary:

- The Seattle Department of Transportation (SDOT) is now on track to deliver 16 bridge seismic projects, meeting the <u>2015 Levy Ordinance commitment</u>, by investing in the seismic reinforcements of five additional bridges. Four of these bridges are pedestrian bridges that provide safe access to transit in key transportation corridors. If these bridges were to fail, there would be substantial impacts to arterial corridors, impacting both transit and freight travel as well as the safety of all users.
- Today, <u>this information was presented to Seattle City Council</u> in conjunction with SDOT's report on progress towards implementing the recommendations of the Office of City Auditor to improve our bridge management program.
- A Bridge Seismic Program Overview is scheduled for the April 4, 2023 Levy Oversight Committee meeting. At this meeting, SDOT will confirm that the LOC is aligned with the approach presented to Council.
- This is part of SDOT's effort to increase progress toward commitments to Seattle voters, as set forth in the 2015 Levy Ordinance, by identifying funding and new project opportunities to add to the Levy to Move Seattle workplan.

Background:

SDOT is focused on 1) meeting the commitments to Seattle voters outlined in the 2015 Levy Ordinance and 2) meeting workplan goals outlined in the <u>2018 Workplan Update report</u>. (See this handout for a <u>summary of those goals</u>).

Bridge Seismic Program:

In the 2015 Levy Ordinance, SDOT committed to "seismically reinforce 16 vulnerable bridges." The original list of 16 bridges was provided in 2015 Levy to Move Seattle materials, but is not outlined in the 2015 Levy Ordinance.

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In <u>a memo provided to the Levy Oversight Committee in 2020</u>, SDOT explained that upon completion of all 16 Concept Design Reports (CDRs)¹, the estimated costs to complete the full scope of work for the original 16 bridges exceeded the program budget. As a result, five bridges were removed from the workplan, leaving a total of 11 bridges to receive seismic reinforcements during the life of the Levy (2016-2024).

SDOT is committed to seismically reinforcing 16 vulnerable bridges. SDOT has now added five bridges to the workplan to meet the original goal of 16 bridges. The 16 bridges in SDOT's Bridge Seismic Program workplan are listed below. The five bridges that have been added to the workplan are **in bold**.

- 1. SW Andover Pedestrian Bridge complete
- 2. 8th Ave NW/NW 133rd St Bridge complete
- 3. Cowen Park Bridge complete
- 4. W Howe St Bridge complete
- 5. 15th Ave NE/NE 105th St Bridge
- 6. 15th Ave NW/Leary Way Bridge
- 7. Admiral Way N Bridge
- 8. Admiral Way S Bridge
- 9. Delridge Way Pedestrian Bridge
- 10. McGraw St Bridge
- 11. N 41st St Pedestrian Bridge
- 12. 45th Ave NE Pedestrian Bridge
- 13. 13th Ave NW/Holman Rd NW Pedestrian Bridge
- 14. Rainier and Empire Way (now MLK) Pedestrian Bridge
- 15. N 102nd and Aurora Pedestrian Bridge
- **16.** Lower Spokane St Swing Bridge Silt Removal (will ensure seismic performance of the bridge footing)

The five bridges were chosen based on the following criteria:

- These bridges are priorities for seismic improvements given their current vulnerability to seismic events.
- Project costs are likely to fit within program budget.
- Completing seismic reinforcements on the pedestrian bridges in the workplan align with SDOT's Vision Zero focus on pedestrian safety.
- The pedestrian bridges in the workplan provide important access to transit.
- If these bridges were to fail or become unsafe, there would be substantial impacts to arterial corridors, like Rainier Ave S, that are critical for both transit and freight travel, as well as the safety of all users.

The forthcoming 2022 Levy to Move Seattle Annual Report and 2023 Levy Delivery Plan reflect the projects added to the Bridge Seismic Program workplan.

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Levy Portfolio Workplan Update Background:

Over the past two years SDOT has continued to focus on identifying additional funding to increase progress towards commitments to Seattle voters in the 2015 Levy Ordinance. In full, this effort includes:

- Working with the Levy Oversight Committee, SDOT Race and Social Justice Change Team, Transportation Equity Workgroup, and staff to ensure Levy resources continue to advance opportunities in BIPOC communities and minimize harm during the remaining years of project delivery.
- Making equitable, strategic, and targeted investments to prioritize funds to meet our 2018 work plan goals, reprioritize funds to projects that make progress on our 2015 levy deliverable goals, and support our citywide Vision Zero, equity, climate, and asset management goals.
- Striving to advance capital projects and allocate Levy funds before 2025.
- Working with stakeholders on a financial framework and strategy to determine which capital projects to prioritize if new funds materialize.

SDOT identified additional funding and/or projects to add to the workplan that are aligned with these goals. In summary, in 2023 and beyond SDOT is:

- Investing available Levy and non-Levy funds into specific programs previously identified as at risk for not meeting 2015 Ordinance goals, getting SDOT on track to meet or get closer to 2015 Ordinance goals for the following programs:
 - Program 5 Bicycle Safety (getting closer to 2015 Ordinance Goals)
 - Program 6 Sidewalk Safety Repair (on track to meet 2015 Ordinance Goals)
 - Program 9 Arterial Roadway Maintenance (on track to meet 2015 Ordinance Goals)
 - Program 10 Paving Spot Improvements (on track to meet 2015 Ordinance Goals)
 - Program 25 New Sidewalks (on track to meet 2015 Ordinance Goals for blocks of sidewalks built; will fill 70-73% of sidewalk gaps on priority transit corridors of the goal of 75%)
- Continuing to seek funding for the Bicycle Safety Program.
- Adding five bridges to the Bridge Seismic Program workplan to meet the original goal of 16 bridges, as indicated above.

More information about investments in these programs can be found in <u>this presentation to the LOC</u> from October 2022.

¹ Per this 2020 memo, the goal of the CDR is to analyze the structure to determine its seismic deficiencies as is; to make recommendations to SDOT for retrofit strategies to achieve the desired structural performance under seismic loading; and to analyze the structure with the retrofits adopted by SDOT to ensure that those retrofits will provide the desired level of resiliency (e.g. bridge operational after a 100-year level event, bridge will not collapse after a 1000-year level event). The CDR also provides an engineering cost estimate for design and construction of the adopted retrofit strategies.