

File No. 180571

Committee Item No. 2

Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Sub-Committee

Date July 12, 2018

Board of Supervisors Meeting

Date _____

Cmte Board

- Motion
- Resolution
- Ordinance
- Legislative Digest
- Budget and Legislative Analyst Report
- Youth Commission Report
- Introduction Form
- Department/Agency Cover Letter and/or Report
- MOU
- Grant Information Form
- Grant Budget
- Subcontract Budget
- Contract/Agreement
- Form 126 – Ethics Commission
- Award Letter
- Application
- Public Correspondence

OTHER (Use back side if additional space is needed)

| | | |
|--------------------------|--------------------------|-------|
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Completed by: Linda Wong Date July 5, 2018
 Completed by: Linda Wong Date _____

1 [General Obligation Bond Election - Seawall and Other Critical Infrastructure - Ballot Question]

2
3 Ordinance adopting a question to appear on the November 6, 2018 ballot regarding the
4 proposed ordinance to incur \$425,000,000 of bonded debt of the City and County to
5 finance the construction, reconstruction, acquisition, improvement, demolition, seismic
6 strengthening and repair of the Embarcadero Seawall and other critical infrastructure,
7 and related costs necessary or convenient for the foregoing purposes.

8 NOTE: Unchanged Code text and uncodified text are in plain Arial font.
9 Additions to Codes are in *single-underline italics Times New Roman font*.
10 Deletions to Codes are in *strikethrough italics Times New Roman font*.
11 Board amendment additions are in double-underlined Arial font.
12 Board amendment deletions are in ~~strikethrough Arial font~~.
13 Asterisks (* * * *) indicate the omission of unchanged Code
14 subsections or parts of tables.

15 Be it ordained by the People of the City and County of San Francisco:

16 Section 1.— Findings.

17 a.— ~~The Embarcadero Seawall (the “Seawall”), which serves as the foundation of the
18 northern waterfront, is one of San Francisco’s oldest pieces of infrastructure.~~

19 b.— ~~Constructed by the State of California over one hundred years ago, the Seawall
20 supports San Francisco’s historic piers, wharves, local businesses, maritime uses, iconic tourist
21 destinations, recreation facilities, and restaurants, which bring an estimated 24 million people
22 to the waterfront annually.~~

23 c.— ~~The Seawall also supports key lifeline utility networks and infrastructure, including
24 the Bay Area Rapid Transit (BART), Muni Metro, and ferry transportation networks.~~

25 d.— ~~The Seawall serves as a critical emergency response, evacuation and recovery
area and provides flood protection to downtown San Francisco (“City”) neighborhoods. All told,
the Seawall protects over \$100 billion of assets and economic activity.~~

1 e. Recent analysis by the City and the Port of San Francisco (the "Port") found that
2 the Seawall will likely suffer significant damage during a major earthquake, causing widespread
3 harm to the Embarcadero; historic buildings and piers; critical transportation, utility, and
4 emergency response infrastructure; and the residents, workers, and visitors who depend on
5 them. A major earthquake would likely cause the Seawall to move towards the bay, potentially
6 by as much as five feet. This seismic risk is compounded by the accelerating risk of flooding,
7 which occurs today during high tides and larger storm events.

8 f. The Seawall is named as a critical infrastructure priority in the City's Lifelines
9 Interdependency Study published in 2014, and the Bond (as defined below) is planned for the
10 November 2018 election as part of the General Obligation Bond Program in the City's FY 2018-
11 27 Capital Plan.

12 g. The Embarcadero Roadway encircles downtown San Francisco. After a major
13 seismic event, up to 250,000 people are expected to exit downtown towards the waterfront.
14 The Embarcadero must provide access to first responders, safe locations for people exiting
15 downtown, and routes for transporting emergency supplies and equipment.

16 h. To address earthquake and flood risks to the Seawall, the Port is leading the
17 Seawall Earthquake Safety and Disaster Prevention Program ("Seawall Program"), a program
18 that will invest a projected \$2.5 billion over the next three decades to protect the San Francisco
19 waterfront from imminent seismic risk and increasing flood risk due to sea level rise.

20 i. This Board of Supervisors (this "Board") recognizes the need to improve the
21 earthquake safety and performance of the Seawall and other critical infrastructure, provide
22 near-term flood protection improvements, and plan for long-term resilience and sea level rise
23 adaptation along this important stretch of the City's waterfront.

24 j. The Seawall Earthquake Safety Bond (the "Bond") will provide funding to the
25 Seawall Program and other critical infrastructure (as described below in Section 3).

1 k. ~~The Bond sets up a financing mechanism to be used for certain kinds of work,~~
2 ~~and specific projects at specified locations will not be determined until additional design and~~
3 ~~budget development, as well as further planning and environmental review processes, are~~
4 ~~complete.~~

5 l. ~~This Board now wishes to describe the terms of a ballot measure seeking approval~~
6 ~~for the issuance of general obligation bonds to finance all or a portion of the City's Seawall and~~
7 ~~other critical infrastructure needs as described below.~~

8 Section 2. ~~A special election is called and ordered to be held on Tuesday, November~~
9 ~~6, 2018, for the purpose of submitting to the electors of the City a proposition to incur bonded~~
10 ~~indebtedness of the City for the project described in the amount and for the purposes stated:~~

11 ~~"SAN FRANCISCO SEAWALL EARTHQUAKE SAFETY BOND, 2018. \$425,000,000 of~~
12 ~~bonded indebtedness to finance the cost: repairing and upgrading the City's 100 year old~~
13 ~~Embarcadero Seawall; strengthening the Embarcadero; protecting transit infrastructure and~~
14 ~~utilities that provide water, wastewater, power and telecommunications to residents and~~
15 ~~businesses; and to pay related costs, subject to independent citizen oversight and regular~~
16 ~~audits, all to protect San Francisco's waterfront, BART and Muni tunnels, buildings, historic~~
17 ~~piers, and roads from earthquakes, flooding and rising sea levels; and authorizing landlords to~~
18 ~~pass through to residential tenants in units subject to Chapter 37 of the Administrative Code~~
19 ~~(the "Residential Rent Stabilization and Arbitration Ordinance") 50% of the increase in the real~~
20 ~~property taxes attributable to the cost of the repayment of the bonds."~~

21 ~~The special election called and ordered shall be referred to in this ordinance as the~~
22 ~~"Seawall Earthquake Safety Bond Special Election."~~

23 Section 3. ~~PROPOSED PROGRAM. All contracts that are funded with the proceeds~~
24 ~~of bonds authorized hereby shall be subject to the provisions of Chapter 83 of the Administrative~~
25 ~~Code (the "First Source Hiring Program"), which fosters construction and permanent~~

1 employment opportunities for qualified economically disadvantaged individuals. In addition, all
2 contracts that are funded with the proceeds of bonds authorized hereby shall be subject to the
3 provisions of Chapter 14B of the Administrative Code (the "Local Business Enterprise and Non-
4 Discrimination in Contracting Ordinance"), which assists small and micro local businesses to
5 increase their ability to compete effectively for the award of City contracts. To the extent
6 permitted by law, eligible costs for the proposed program include all costs associated with
7 Seawall Program development and planning, including planning for future sea level rise
8 adaptation, pre design, design, engineering and other soft costs; and construction
9 management. The proposed program can be summarized as follows:

10 a. ~~EARTHQUAKE PROJECTS.~~ Several construction options are available to
11 improve Seawall seismic reliability. All or a portion of these options may be implemented
12 together, individually, or sequenced over time. A portion of the Bond may be allocated to:

- 13 ~~1) Ground strengthening and liquefaction remediation~~
- 14 ~~2) Constructing a new Seawall~~
- 15 ~~3) Bulkhead wall, wharf and pier retrofits and replacements~~
- 16 ~~4) Bulkhead building retrofits and seismic joints~~
- 17 ~~5) Critical facility retrofits and replacements~~
- 18 ~~6) Utility replacements, relocations and bypasses~~
- 19 ~~7) Matching funds for public and private sources or~~
- 20 ~~8) Other life safety improvements.~~

21 b. ~~FLOOD PROTECTION PROJECTS.~~ The Port will co design flood mitigations with
22 seismic improvements and will evaluate the applicability, effectiveness, risks, and costs of the
23 short and mid term seismic reinforcements and flood mitigations to Seawall reaches. Among
24 the projects a portion of this Bond may be allocated to are the following:

- 25 ~~1) Flood walls and barriers~~

- ~~2) Changes to surface grading~~
- ~~3) Flood proofing~~
- ~~4) Enhanced foundation for future adaptation or~~
- ~~5) Other flood control improvements.~~

~~c. MITIGATION AND ENHANCEMENT PROJECTS. The Port will decide whether to include enhancements for both the urban landscape and the bay environment based on the scale and location of the site specific seismic and near term flood risk reduction methods and the cost benefit ratio of these infrastructure investments. A portion of the Bond may be allocated to:~~

- ~~1) Public access enhancements~~
- ~~2) Transportation/mobility improvements~~
- ~~3) Environmental benefits or~~
- ~~4) Other public benefits.~~

~~d. CITIZENS' OVERSIGHT COMMITTEE. A portion of the Bond shall be used to perform audits of the Bond, as further described in Section 15.~~

~~e. ART ENRICHMENT. Consistent with Section 3.19 of the San Francisco Administrative Code and to the extent permitted by law, up to 2% of Bond proceeds may be used to 1) fund educational and interpretative art to inform the public about the Seawall and earthquake and flood risks to the City's waterfront, and 2) fund other art enrichment, in either case on Port property as approved by the Port Commission in consultation with the Arts Commission.~~

~~Section 4. BOND ACCOUNTABILITY MEASURES.~~

~~The Bond shall include the following administrative rules and principles:~~

~~a. OVERSIGHT. The proposed bond funds shall be subjected to approval processes and rules described in the Charter and Administrative Code. Pursuant to Administrative Code~~

1 ~~Section 5.31, the Citizens' General Obligation Bond Oversight Committee shall conduct an~~
2 ~~annual review of bond spending, and shall provide an annual report of the bond program to the~~
3 ~~Mayor and the Board of Supervisors.~~

4 ~~##~~

5 ~~_____ b. _____ TRANSPARENCY. The City shall create and maintain a Web page outlining and~~
6 ~~describing the bond program, progress, and activity updates. The City shall also hold an annual~~
7 ~~public hearing and reviews on the bond program and its implementation before the Board of~~
8 ~~Supervisors, the Port Commission, the Capital Planning Committee, and the Citizens' General~~
9 ~~Obligation Bond Oversight Committee.~~

10 ~~Section 5. _____ The estimated cost of the bond financed portion of the project described in~~
11 ~~Section 2 above was fixed by the Board by Resolution No. _____, in the amount of~~
12 ~~\$425,000,000. Said resolution was passed by two thirds or more of the Board and approved by~~
13 ~~the Mayor. In such resolution it was recited and found by the Board that the sum of money~~
14 ~~specified is too great to be paid out of the ordinary annual income and revenue of the City in~~
15 ~~addition to the other annual expenses or other funds derived from taxes levied for those~~
16 ~~purposes and will require expenditures greater than the amount allowed by the annual tax levy.~~

17 ~~_____ The method and manner of payment of the estimated costs described in this ordinance~~
18 ~~are by the issuance of bonds of the City not exceeding the principal amount specified.~~

19 ~~Such estimate of costs as set forth in such resolution is adopted and determined to be~~
20 ~~the estimated cost of such bond financed improvements and financing, as designed to date.~~

21 ~~Section 6. _____ The Bond Special Election shall be held and conducted and the votes~~
22 ~~received and canvassed, and the returns made and the results ascertained, determined, and~~
23 ~~declared as provided in this ordinance and in all particulars not recited in this ordinance such~~
24 ~~election shall be held according to State law and the Charter and any regulations adopted under~~

1 State law or the Charter, providing for and governing elections in the City, and the polls for such
2 election shall be and remain open during the time required by such laws and regulations.

3 ~~Section 7. The Bond Special Election is consolidated with the General Election~~
4 ~~scheduled to be held in the City on Tuesday, November 6, 2018. The voting precincts, polling~~
5 ~~places, and officers of election for the November 6, 2018 General Election are hereby adopted,~~
6 ~~established, designated, and named, respectively, as the voting precincts, polling places, and~~
7 ~~officers of election for the Bond Special Election called, and reference is made to the notice of~~
8 ~~election setting forth the voting precincts, polling places, and officers of election for the~~
9 ~~November 6, 2018 General Election by the Director of Elections to be published in the official~~
10 ~~newspaper of the City on the date required under State law.~~

11 Section 18. The ballots to be used at the Bond Special Election shall be the ballots
12 used at the November 6, 2018 General Election. The word limit for ballot propositions imposed
13 by Municipal Elections Code Section 510 is waived. On the ballots to be used at the Bond
14 Special Election, in addition to any other matter required by law to be printed thereon, shall
15 appear the following as a separate proposition:

16 "SAN FRANCISCO SEAWALL EARTHQUAKE SAFETY BOND, 2018. "To protect San
17 Francisco's waterfront, BART and Muni tunnels, buildings, historic piers, and roads from
18 earthquakes, flooding and rising sea levels by: repairing and upgrading the City's 100 year old
19 Embarcadero Seawall; strengthening the Embarcadero; protecting transit infrastructure and
20 utilities that provide water, wastewater, power and telecommunications to residents and
21 businesses; shall the City of San Francisco issue \$425,000,000 in bonds, subject to
22 independent citizen oversight and regular audits?"

23 Each voter to vote in favor of the issuance of the foregoing bond proposition shall mark
24 the ballot in the location corresponding to a "YES" vote for the proposition, and each voter to
25

1 vote against the proposition shall mark the ballot in the location corresponding to a "NO" vote
2 for the proposition.

3 ~~Section 9. If at the Bond Special Election it shall appear that two thirds of all the voters~~
4 ~~voting on the proposition voted in favor of and authorized the incurring of bonded indebtedness~~
5 ~~for the purposes set forth in such proposition, then such proposition shall have been accepted~~
6 ~~by the electors, and bonds authorized shall be issued upon the order of the Board. Such bonds~~
7 ~~shall bear interest at a rate not exceeding applicable legal limits.~~

8 ~~Section 10. For the purpose of paying the principal and interest on the bonds, the Board~~
9 ~~shall, at the time of fixing the general tax levy and in the manner for such general tax levy~~
10 ~~provided, levy and collect annually each year until such bonds are paid, or until there is a sum~~
11 ~~in the Treasury of the City, or other account held on behalf of the Treasurer of the City, set apart~~
12 ~~for that purpose to meet all sums coming due for the principal and interest on the bonds, a tax~~
13 ~~sufficient to pay the annual interest on such bonds as the same becomes due and also such~~
14 ~~part of the principal thereof as shall become due before the proceeds of a tax levied at the time~~
15 ~~for making the next general tax levy can be made available for the payment of such principal.~~

16 ~~Section 11. This ordinance shall be published in accordance with any State law~~
17 ~~requirements, and such publication shall constitute notice of the Bond Special Election and no~~
18 ~~other notice of the Bond Special Election hereby called need be given.~~

19 ~~Section 12. The Board, having reviewed the proposed legislation, makes the following~~
20 ~~findings in compliance with the California Environmental Quality Act, California Public~~
21 ~~Resources Code Sections 21000 et seq., the CEQA Guidelines, 15 California Administrative~~
22 ~~Code Sections 15000 et seq., and San Francisco Administrative Code Chapter 31 (collectively,~~
23 ~~"CEQA"): The Planning Department has determined that this legislation is not defined as a~~
24 ~~"project" under CEQA, because it is only the creation of a government funding mechanism and~~
25

1 does not involve any commitment to any specific project, as defined in CEQA Guidelines
2 Section 15378(b)(4). The Board affirms this determination.

3 Section 13. The Board finds and declares that the proposed Bond is in conformity with
4 the priority policies of Section 101.1(b) of the San Francisco Planning Code and consistent with
5 the City's General Plan, and adopts the findings of the Planning Department, as set forth in the
6 General Plan Referral Report dated _____, a copy of which is on file with the
7 Clerk of the Board of Supervisors in File No. _____ and incorporates such findings by
8 reference.

9 Section 14. Under Section 53410 of the California Government Code, the bonds shall
10 be for the specific purposes authorized in this ordinance and the proceeds of such bonds will
11 be applied only for such specific purposes. The City will comply with the requirements of
12 Sections 53410(c) and 53410(d) of the California Government Code.

13 Section 15. The Bonds are subject to, and incorporate by reference, the applicable
14 provisions of Administrative Code Sections 5.30—5.36 (the "Citizens' General Obligation Bond
15 Oversight Committee"). Under Section 5.31, to the extent permitted by law, one-tenth of one
16 percent (0.1%) of the gross proceeds of the Bonds shall be deposited in a fund established by
17 the Controller's Office and appropriated by the Board of Supervisors at the direction of the
18 Citizens' General Obligation Bond Oversight Committee to cover the costs of said committee.


19 Section 16. The time requirements specified in Section 2.34 of the Administrative Code
20 are waived.

21 Section 17. The appropriate officers, employees, representatives, and agents of the
22 City are hereby authorized and directed to do everything necessary or desirable to accomplish
23 the calling and holding of the Bond Special Election, and to otherwise carry out the provisions
24 of this ordinance.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

~~Section 18. Documents referenced in this ordinance are on file with the Clerk of the Board of Supervisors in File No. _____ which is hereby declared to be a part of this ordinance as if set forth fully herein.~~

APPROVED AS TO FORM:
DENNIS J. HERRERA,
City Attorney

By: 
Kenneth David Roux
Deputy City Attorney
n:\financ\as2018\1800446\01279867.docx

LEGISLATIVE DIGEST

[General Obligation Bond Election - Seawall and Other Critical Infrastructure - Ballot Question]

Ordinance adopting a question to appear on the November 6, 2018 ballot regarding the proposed ordinance to incur \$425,000,000 of bonded debt of the City and County to finance the construction, reconstruction, acquisition, improvement, demolition, seismic strengthening and repair of the Embarcadero Seawall and other critical infrastructure, and related costs necessary or convenient for the foregoing purposes.

Existing Law

In Board of Supervisors File No. 180454, the Board of Supervisors is considering placing a General Obligation Bond ordinance on the ballot at the November 6, 2018 election to finance the construction, reconstruction, acquisition, improvement, demolition, seismic strengthening and repair of the Embarcadero Seawall and other critical infrastructure.

Amendments to Current Law

This ordinance would provide the question that would appear on the ballot for the bond measure.

n:\financlas2018\1800446\01279868.docx

Also for file #
180571

Seawall General Obligation Bond:

Economic Impact Report



CITY & COUNTY OF SAN FRANCISCO

Office of the Controller

Office of Economic Analysis

Item #180454

06.06.2018

- The proposed legislation concerns a proposed \$425 million General Obligation bond for repair and reconstruction of the Embarcadero seawall along San Francisco's northeastern waterfront.
- If approved, the measure would be placed on the November, 2018 ballot. Local General Obligation bonds in California require voter approval, with a two-thirds majority.
- The seawall, which protects downtown San Francisco from the Bay, is vulnerable to an earthquake, and also to increased flooding risk due to sea-level rise.
- The bond would require a property tax increase of approximately \$13.23 per \$100,000 of assessed value, per year, for 24 years.
- The Office of Economic Analysis (OEA) has prepared this report after determining that the proposed infrastructure spending and tax increase might have a material impact on the City's economy.

- In 2016, the Port of San Francisco released a study on the seismic vulnerability of the seawall, by a joint venture of two engineering firms (“the JV study”). It included an economic estimate of the impacts of large earthquakes on the Port and the city’s waterfront.
- The study estimated the economic activity in Port property adjacent to the seawall from AT&T Park to Aquatic Park, to be \$2 billion in annual spending.
- The study further estimated the economic loss associated with a two potential earthquakes. Total economic loss on Port properties from the former earthquake was estimated at \$1.2 billion, and \$3.2 billion from the latter; both assumed a 12-month loss of business operations.
- The report did not consider damage associated with other potential earthquakes, or present an annualized benefit from the proposed mitigation. However, the economic impact was used, along with other considerations, to rank priority areas of the seawall.

- After the JV study, in 2017 the Port released a report by BAE Urban Economics (the “Value-at-Risk study”) that estimated the property value and economic activity that would be at risk from one earthquake scenario, and two scenarios combining sea-level rise with severe floods.
- The report found that the earthquake scenario risked damage to \$17.4 billion in property, \$6.3 billion (annually) in business interruption losses, and \$902 million in taxes. The report found \$9.8 in value-at-risk relative to the full cost of seawall replacement, with higher ratios for the sea-level rise/flood scenarios.
- Two reasons for the difference in damage impacts between the two studies is that the Value-at-Risk study considered both Port-owned and privately-owned property, and reported only the value of the property and potential business loss, not an estimate of losses during an actual event.

- The Office of Economic Analysis is required to estimate the economic impact of any new legislation that would have a significant impact on the city's economy. In this case, this involves determining if the economic benefits of the project exceed the cost of the property tax required to pay for it, viewed from the perspective of the city's economy as a whole.
- Thus, while this report draws on material from the JV report and the Value-at-Risk study, it attempts to answer a different question.
- Of course, the Port's reports make clear that there are additional benefits from seawall remediation that cannot be quantified in the context of this report, including protecting critical utility and transportation infrastructure, historic resources, and emergency access.
- Additionally, even the narrow question of economic impact is unusually challenging to estimate because the details of the expenditure plan are not yet known, so certain simplifying assumptions will be made for this analysis.

Economic Impact Factors

- Overall, disaster remediation is economically beneficial to the extent that it prevents emergency costs and a large rebuilding commitment in the future, by making a smaller investment in the near term. The net economic benefit grows with the likelihood of a disaster, its potential damage to the economy, and the cost-effectiveness of the mitigation.
- The proposed legislation involves both positive and negative effects on the San Francisco economy. The positive economic effects of the seawall that are considered in this report include:
 - Prevention of future property damage, business interruption, and reconstruction costs.
 - Immediate benefits of spending on rehabilitation of the seawall.
- The primary negative economic effect is the property tax increase to fund the rehabilitation and debt service, along with the cost of disruption to businesses during construction.

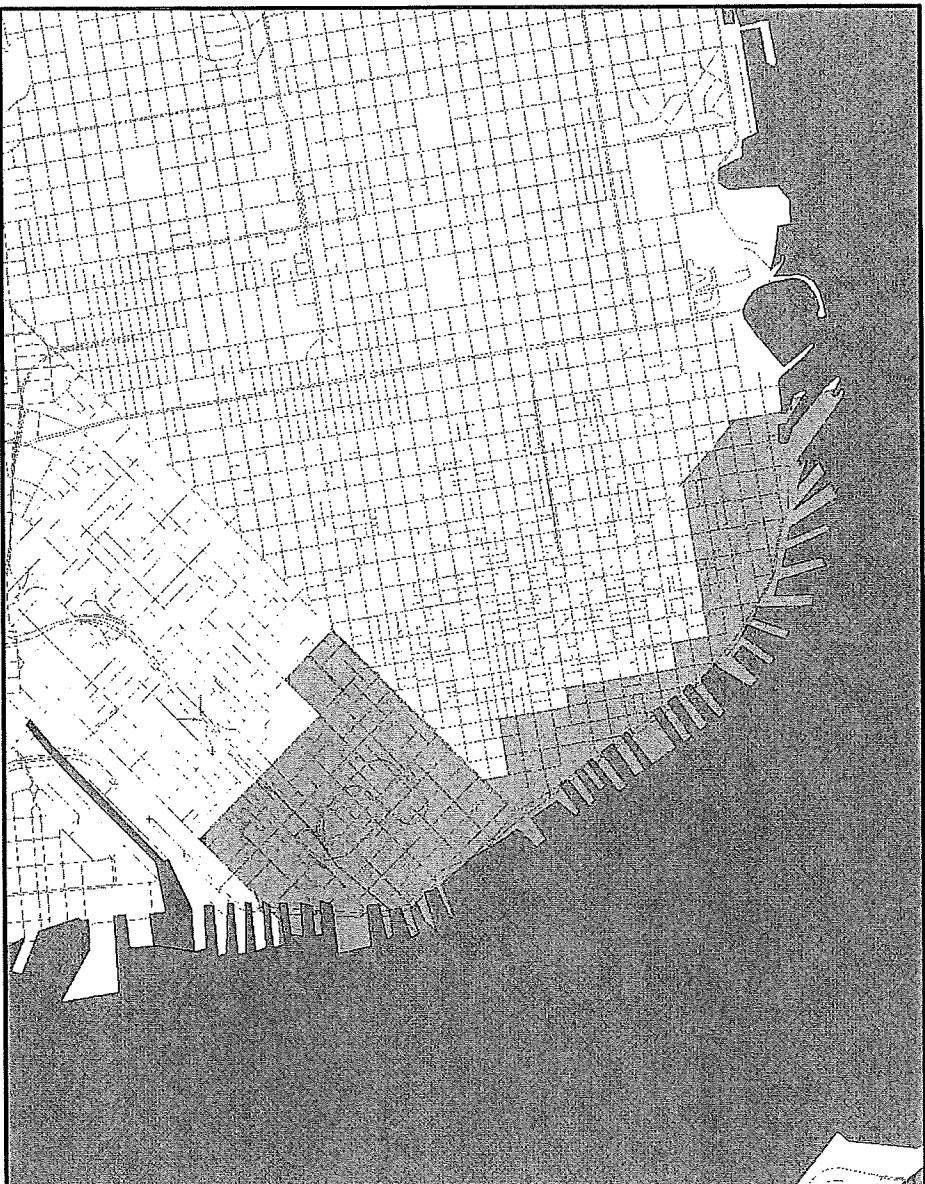
Estimating Potential Earthquake Damage

7

- As discussed earlier, the JV study included an assessment of the potential damage to Port properties associated with two potential earthquakes: one likely to occur every 275 years, and one likely to occur every 975 years.
- To get an estimate of the likely damage associated with *all* potential earthquakes, weighted by their likelihood of happening, the OEA used the HAZUS hazard modelling tool, developed by the Federal Emergency Management Agency (FEMA).
- HAZUS combines economic and seismic data for an area, to allow users to simulate the economic, social, and physical losses associated with an earthquake having a specific probability.
- By simulating different earthquakes, and weighting their damage by their likelihood of occurring in any given year, it is possible to create an overall annualized estimate of earthquake damage and economic losses*.

* FEMA has used this approach in its publication, *Hazus Estimated Annualized Earthquake Losses for the United States*, April 2017. <https://www.fema.gov/media-library/assets/documents/132305>

Area Analyzed in the HAZUS Damage Estimate



We performed the analysis at the smallest scale that HAZUS allows – 3 Census tracts adjacent to the Seawall in downtown San Francisco.

The area is somewhat larger than the area considered in the JV study, and also excludes a small area of the southern seawall.

Additionally, the base version of HAZUS provided by FEMA would not include detailed information about the seawall's condition, and may underestimate damage in the area as a result.

Results of the HAZUS Analysis

| Earthquake Return Period | Chance of Occurring Each Year | Loss to Residential Structures (\$M) | Loss to Non-Residential Structures (\$M) | Loss to Business Sales and Wages (\$M) |
|--------------------------|-------------------------------|--------------------------------------|--|--|
| 100 year | 1% | \$95.4 | \$394.7 | \$118.8 |
| 250 year | 0.4% | \$197.5 | \$919.6 | \$280.6 |
| 500 year | 0.2% | \$286.1 | \$1,435.7 | \$417.7 |
| 750 year | 0.13% | \$345.6 | \$1,797.8 | \$510.2 |
| 1,000 year | 0.1% | \$392.8 | \$2,076.4 | \$572.7 |
| 1,500 year | 0.07% | \$460.6 | \$2,480.9 | \$659.1 |
| 2,000 year | 0.05% | \$522.0 | \$2,851.5 | \$738.8 |
| 2,500 year | 0.04% | \$580.6 | \$3,213.5 | \$815.7 |

The estimated losses above only refer to the area in red in the map on the previous page; losses in other parts of the city are not included, because they were assumed to be unaffected by the seawall project. Full details on the methodology to calculate the annualized damage can be found in the FEMA study cited on page 7.

- The HAZUS simulations result in a probability-weighted estimate of earthquake damage in those areas of downtown San Francisco that are adjacent to the seawall.
- For the purposes of this report, we assume that this damage would be fully mitigated by a complete seawall replacement, which is estimated to cost \$2.5 billion. The proposed \$425 million bond measure represents 17% of this total cost, and we assume that 17% of the total damage would be reduced by the proposed measure.
- The quantifiable damage reduction includes reduced repair costs for structures, and reduced losses in business activity. The present value of these savings, discounted at a 3% discount rate, were added to the REMI simulation of the economic impact of the tax and spending, as described on the next page.
- Other short-term disaster costs which would likely be reduced by the project, including casualties and emergency response costs, debris removal, and any loss of essential facilities, are not accounted for.

- The present value of the savings in capital and business costs from the seawall was modelled in the REMI model, along with the costs of the property tax to residents and property owners, and the benefits of construction-related spending, which are detailed below.
- According to the Office of Public Finance, the \$425 million bond will require \$730.4 million in debt service payments over a 24-year borrowing period, under conservative assumptions about interest rate risk. Based on current assessments, annual property taxes payments would rise by approximately \$13.23 per \$100,000 of assessed value. Under the City's Rent Ordinance, owners of rent-controlled apartments may pass-through 50% of any property tax increase to tenants.
- The specific projects funded by the bond will not be known until CEQA analysis is completed. For the purposes of this report, based on analysis by the Budget and Legislative Analyst, we estimate 80% of the proceeds will be spent on construction, 18% on professional services, and 3% on Port staff costs.

Conclusions and Caveats

- The HAZUS and REMI simulations suggest the proposed project will have a moderately positive economic impact, creating 145 jobs and raising city GDP by \$19 million, on average over the 24-year financing plan.
- This estimate does not include the benefits of any long-term reduction in damage from sea-level rise, which cannot be estimated in HAZUS. It should therefore be considered as a conservative estimate.
- Additionally, several aspects of the project cannot be known at this time. This estimate is sensitive to three assumptions in particular:
 - the extent to which HAZUS damage estimates reflect the current structural condition of the seawall.
 - the extent to which the proposed project will prevent earthquake damage in downtown areas adjacent to the seawall.
 - the bond interest rate, which would determine how much of the property tax payment would be re-circulated in the local economy as construction spending.

Staff Contact

Ted Egan, Ph.D., Chief Economist

ted.egan@sfgov.org

Asim Khan, Ph.D., Senior Economist

asim.khan@sfgov.org

BOARD of SUPERVISORS



City Hall
Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. 554-5184
Fax No. 554-5163
TDD/TTY No. 554-5227

June 6, 2018

File No. 180571

Lisa Gibson
Environmental Review Officer
Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Dear Ms. Gibson:

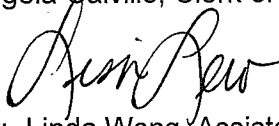
On May 31, 2018, Mayor Farrell introduced legislation for the following proposed General Obligation Bond for the November 6, 2018, Election:

File No. 180571

Ordinance adopting a question to appear on the November 6, 2018 ballot regarding the proposed ordinance to incur \$425,000,000 of bonded debt of the City and County to finance the construction, reconstruction, acquisition, improvement, demolition, seismic strengthening and repair of the Embarcadero Seawall and other critical infrastructure, and related costs necessary or convenient for the foregoing purposes.

This legislation is being transmitted to you for environmental review.

Angela Galvillo, Clerk of the Board

for 
By: Linda Wong, Assistant Clerk
Budget and Finance Committee

Attachment

c: Joy Navarrete, Environmental Planner
Laura Lynch, Environmental Planner

BOARD of SUPERVISORS



City Hall
Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. 554-5184
Fax No. 554-5163
TDD/TTY No. 554-5227

MEMORANDUM

TO: Ben Rosenfield, City Controller, Office of the Controller

FROM: *ll*
ll Linda Wong, Assistant Clerk, Budget and Finance Committee
Board of Supervisors

DATE: June 6, 2018

SUBJECT: GENERAL OBLIGATION BOND INTRODUCED
November 6, 2018 Election

The Board of Supervisors' Budget and Finance Committee has received the following proposed General Obligation Bond for the November 6, 2018, Election, introduced by Mayor Farrell on May 31, 2018. This matter is being referred to you in accordance with Rules of Order 2.22.4.

File No. 180571

Ordinance adopting a question to appear on the November 6, 2018 ballot regarding the proposed ordinance to incur \$425,000,000 of bonded debt of the City and County to finance the construction, reconstruction, acquisition, improvement, demolition, seismic strengthening and repair of the Embarcadero Seawall and other critical infrastructure, and related costs necessary or convenient for the foregoing purposes.

Please review and prepare a financial analysis of the proposed measure prior to the first Budget and Finance Committee hearing.

If you have any questions or concerns, please call me at (415) 554-7719 or email: linda.wong@sfgov.org. To submit documentation, please forward to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

c: Todd Rydstrom, Deputy City Controller
Peg Stevenson, City Performance Director


BOARD of SUPERVISORS



City Hall
Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. 554-5184
Fax No. 554-5163
TDD/TTY No. 554-5227

MEMORANDUM

TO: Andres Power, Liaison to the Board of Supervisors, Mayor's Office
Jon Givner, Deputy City Attorney, Office of the City Attorney
John Arntz, Director, Department of Elections
LeeAnn Pelham, Executive Director, Ethics Commission
Naomi Kelly, City Administrator, Office of the City Administrator
Elaine Forbes, Executive Director, Port of San Francisco
Scott Schroeder, Controller-Treasurer, Bay Area Rapid Transit
Ed Reiskin, Executive Director, Municipal Transportation Agency
Robert Collins, Executive Director, Rent Board
Phil Ginsburg, General Manager, Recreation and Parks Department

FROM:  Linda Wong, Assistant Clerk, Budget and Finance Committee
Board of Supervisors

DATE: June 6, 2018

SUBJECT: GENERAL OBLIGATION BOND INTRODUCED
November 6, 2018 Election

The Board of Supervisors' Budget and Finance Committee has received the following proposed General Obligation Bond for the November 6, 2018, Election, introduced by Mayor Farrell on May 31, 2018. This matter is being referred to you in accordance with Rules of Order 2.22.4.

File No. 180571

Ordinance adopting a question to appear on the November 6, 2018 ballot regarding the proposed ordinance to incur \$425,000,000 of bonded debt of the City and County to finance the construction, reconstruction, acquisition, improvement, demolition, seismic strengthening and repair of the Embarcadero Seawall and other critical infrastructure, and related costs necessary or convenient for the foregoing purposes.

Please review and submit any reports or comments you wish to be included with the legislative file.

If you have any questions or concerns, please call me at (415) 554-7719 or email: linda.wong@sfgov.org. To submit documentation, please forward to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

- c: Shahde Tavakoli, Mayor's Office
- Kyle Kundert, Ethics Commission
- Lynn Khaw, Office of the City Administrator
- Lihmeei Leu, Office of the City Administrator
- Daley Dunham, Port of San Francisco
- Janet Martinsen, Municipal Transportation Agency
- Kate Breen, Municipal Transportation Agency
- Dillon Auyoung, Municipal Transportation Agency
- Viktoriya Wise, Municipal Transportation Agency
- Sarah Madland, Recreation and Parks Department

