MUNICIPAL BANK FEASIBILITY TASK FORCE REPORT

Executive Summary

This report is the culmination of nine months of work by the City and County of San Francisco (City) Municipal Bank Feasibility Task Force (Task Force). The goal of this report is to provide thoughtful analysis of the financial costs and benefits of creating a municipal bank, and to outline any legal and regulatory obstacles ahead should the City choose to proceed.

Treasurer José Cisneros selected members of the Task Force which include advocates working to improve access to banking services and capital for low-income communities of color; finance professionals with years of experience in traditional consumer banks, credit unions and community development financial institutions (CDFIs); and government officials with expertise in banking, investment, affordable housing and public finance.

The formation of the Task Force was recommended by the Board of Supervisors in resolution 152-17 to "advise the Treasurer… the Mayor, the Board of Supervisors and relevant City Departments regarding the creation of a Municipal Public Bank." The request from the Board of Supervisors and members of the public was to research goals broader than the feasibility of a municipal bank, and included divestment of the pooled portfolio, and replacing commercial banks used for the City's banking needs with a public bank. Given the complexity inherent in bank formation and matching financial products and services to meet desired community goals, the Task Force focused primarily on municipal banking. The Treasurer will issue an additional report that outline opportunities to change the City's use of commercial banks and the priorities of our investment pool.

The Task Force held seven public meetings to crystallize the feasibility of and opportunities for a municipal bank, and provide some clarity about costs, legal risks, and opportunities. In addition, Task Force staff and members met with many stakeholders, including local community banks and credit unions, such as Bank of San Francisco and New Resource Bank; Community Development Financial Institutions, such as Main Street Launch and Working Solutions; affordable housing advocates and developers, such as Council of Community Housing Organizations and Tenderloin Neighborhood Development Corporation; and government officials from other jurisdictions including Los Angeles, Washington State, and Seattle. In addition, Treasurer's staff launched a monthly cross municipality exchange forum that includes eight local and state government entities.

The Task Force sought to create a financial model for a municipal bank that both achieves community goals and remains profitable. After a period of collaborative research, discussion and prioritization of community goals for a bank, the Task Force directed staff to research and report out about bank formation costs, potential bank structures, lines of business and financial models. This report provides four potential models for a municipal bank. This analysis is intended to build on the research of the San Francisco Office of the Legislative Analyst, and several recent reports on municipal banking that outline the policy and ideological reasons why a jurisdiction might choose to create a municipal bank. Given the diversity of opinion and expertise on the Task Force, this report does not opine on whether a particular model is the right option for the City, but rather, seeks to provide enough specifics to guide future policy decisions by the Board of Supervisors or the Mayor.

The Task Force, after lengthy discussions, was most interested in finding ways that a municipal bank could support the development of affordable housing. Secondary to housing was a focus on small business lending and serving the un- and underbanked. The Task Force decided not to focus on serving the cannabis industry, based on input from the industry, and legal and regulatory hurdles that would slow down bank formation and vastly increase bank operational costs.

The Task Force concluded that a municipal bank which invests in affordable housing and wholesale small business lending is feasible but would require state law changes and the identification and investment of hundreds of millions of dollars in capital and deposits. Applying for and receiving a municipal bank charter is a time- and cost-intensive endeavor, and it may take up to five years for the municipal bank to receive its charter and begin operations. The chartered banks modeled will require continued funding for up to 10 years before potentially becoming profitable. The Task Force also modeled a municipal commercial lending program that could offer similar products as a bank but achieve profitability more quickly and could help launch the lending portfolio of a municipal bank in the future.

All these models are high-quality and well-researched, but ultimately, they are just estimates. To create these bank models, the Task Force and staff made several assumptions.

1. The municipal bank models assume that depositors are paid one percent interest on their deposits (estimated based on current cost of funds), whereas the commercial lending program assumes a two percent cost of funds (because it must raise debt rather than collect deposits). Both these rates will change over time as interest rates fluctuate, but the interest paid by borrowers will also change similarly.
2. The bank will not provide personal banking services or serve as the City's banker for at least the first ten years of operation. These lines of business were excluded because the operating costs to offer retail or treasury management would subsume the bank's ability to make loans at a profit.
3. The bank will not charge fees and will make all its money from interest.
4. Interest rates on loans are based on industry comparisons but deliberately modeled at slightly below market rate to help support community goals.
5. Loss rates are based on industry comparisons where feasible but may be higher given a riskier loan portfolio.
6. Before year one in the bank models, there must be a significant investment of time and funding to lobby for legislation, create a governance structure and apply for and receive a bank charter.

For all four models, the Task Force identified several possibilities for source of funds for capitalization and deposits and noted the associated considerations and challenges for each. For capitalization, the viable options include general fund appropriation, philanthropic dollars and crowdfunding. For deposits, the viable options include general fund appropriation, short-term Certificates of Deposit from government institutions, and deposits (or debt) from large institutions. In the first five-to-ten years the bank cannot accept money from retail clients, cannabis businesses or the City's cash management account due to legal restrictions and/or the cost to manage those funds. Any money that is appropriated from the general fund, either for capital or deposits, must compete with other City funding priorities that include similar impact areas associated with the bank's lines of business.

Aside from sourcing capital and deposits, a new bank must secure a bank charter and deposit insurance and engage in other administrative and regulatory process to operate. Receiving these approvals may be more time-consuming and costly for a municipal bank as compared to a traditional bank, particularly because several state and local laws may need to be changed to facilitate a municipal bank, such as creating a public bank charter at the state level and a charter amendment at the local level.

Model One: Wholesale Municipal Bank

This wholesale bank provides real estate, small business and student loans. It is modeled after the offerings of the Bank of North Dakota but adjusted for San Francisco costs and community values. It would require an upfront investment of $134 million in capital, and $425 million in deposits over the course of ten years. From year one to nine, Model One would lose $60 million cumulatively, and in year ten it would make $300,000. Bank profits could increase over time after year ten.

Table 1: Model One Bank Year-by-Year Profitability, Capital & Deposit Requirements

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Deposits Added Per Year ($ miliion)	Deposits Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Charter Year	--	--	--	134	--	--	--	--
Year 1	25	256	(14.5)	0	134	20	20	(0.3)
Year 2	50	511	(9.0)	0	120	20	40	(0.5)
Year 3	85	868	(8.2)	0	111	28	68	(0.9)
Year 4	125	1,277	(7.4)	0	102	32	100	(1.3)
Year 5	175	1,787	(6.4)	0	95	40	140	(1.8)
Year 6	225	2,298	(5.4)	0	88	40	180	(2.3)
Year 7	275	2,808	(4.3)	0	83	40	220	(2.8)
Year 8	350	3,574	(2.8)	0	79	71	291	(3.5)
Year 9	425	4,340	(1.2)	0	76	62	353	(4.3)
Year 10	500	5,105	0.3	0	75	72	425	(5.0)
Total			(59.0)	134		425		(22.4)

Capital to Cover Net Losses	(59.0) million
Capital for Balance Sheet	(75.0) million
Total	(134.0) million

Table 2: Model One – Wholesale Bank – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2.0%	10 years

Model Two: Wholesale Municipal Bank Plus Specialty Products

Model Two offers all the lines of business in Model One plus two direct lending specialty finance products: direct small business loans and small-dollar consumer loans. It would require almost $160 million in upfront capital and $425 million in deposits over ten years. The model estimates that this bank will never become profitable, losing $84 million over ten years, including almost five million dollars in year ten. There is significantly more uncertainty about this model and particularly its loss rates because the specialty lines of business are not typically offered by traditional banks because of the perceived risk and high operating costs.

Table 3: Model Two Year-by-Year Profitability, Capital & Deposit Requirements

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Deposits Added Per Year ($ miliion)	Deposits Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Charter Year	--	--	--	159	--	--	--	--
Year 1	25	2,827	(15.0)	0	159	20	20	(0.3)
Year 2	50	5,652	(10.0)	0	144	20	40	(0.5)
Year 3	85	9,609	(10.0)	0	134	28	68	(0.9)
Year 4	125	14,130	(9.9)	0	124	32	100	(1.3)
Year 5	175	19,782	(9.9)	0	114	40	140	(1.8)
Year 6	225	25,434	(9.9)	0	104	40	180	(2.3)
Year 7	275	31,085	(4.9)	0	94	40	220	(2.8)
Year 8	350	39,564	(4.8)	0	89	71	291	(3.5)
Year 9	425	48,042	(4.8)	0	85	62	353	(4.3)
Year 10	500	56,519	(4.8)	0	80	72	425	(5.0)
Total			(83.9)	159		425		(22.4)

Capital to Cover Net Losses	(83.9)	million
Capital for Balance Sheet	(75.0)	million
Total	(158.9)	million

Table 4: Model Two – Wholesale Bank Plus Specialty Finance – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	325	65%	65	$5,000,000	5%	1%	3-5 years
Wholesale Small Business	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2%	10 years
Direct Small Business Lending	50	10%	1,428	$35,000	15%	15%	3-5 years
Small-Dollar Consumer Lending	25	5%	50,000	500	30%	30%	6 months

Model Three: Municipal Commercial Lending

Model Three envisions a commercial lending program, where the City secures funding (through a general fund appropriation and/or debt from outside investors) and lends this money out as a commercial lender. This model would not require a bank charter, because it would not accept deposits, but it would need similar capitalization as a bank per regulators. Model Three offers the wholesale products of Model One, wholesale real estate and small business lending (but not direct student lending) as a commercial lender. With $500 million in assets, it would require $75 million in upfront capital and $425 million in funding for lending over ten years. The model estimates that this municipal commercial lending program will make a profit starting in year two, and by year ten it will make over five million dollars per year. Over ten years, it will make about $17 million. The lending program is more profitable than a municipal bank with a similar loan portfolio because it has lower overhead and operational costs.

Table 5: Model Three Year-by-Year Profitability, Capital & Deposit Requirements

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Funds Added Per Year ($ miliion)	Funds Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Start-Up Year	--	--	--	58	--	--	--	--
Year 1	25	7	(1.7)	0	58	20	20	(0.5)
Year 2	50	13	(0.2)	0	56	20	40	(1.0)
Year 3	85	22	0.2	0	56	28	68	(1.7)
Year 4	125	33	0.7	0	56	32	100	(2.5)
Year 5	175	46	1.3	0	57	40	140	(3.5)
Year 6	225	59	1.9	0	58	40	180	(4.5)
Year 7	275	72	2.4	0	60	40	220	(5.5)
Year 8	350	91	3.4	0	62	71	291	(7.0)
Year 9	425	111	4.2	0	66	62	353	(8.5)
Year 10	500	130	5.1	0	70	72	425	(10.0)
Total			17.2	58		425		(44.7)

Capital to Cover Net Losses	17.2
Capital for Balance Sheet	(75.0)
Total	(57.8)

Table 6: Model Three – Commercial Lending – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	100	10%	50	$2,000,000	2.5%	0.5%	5 years

Model Four: Hybrid Approach

Model Four offers a hybrid approach to wholesale lending, which blends Model Three and Model One, and models a municipal commercial lending program that transitions to become a municipal bank in year six. With $500 million in assets, it would require $75 million in upfront capital and $425 million in funding for loan principal and deposits. The model estimates that a phased approach will have a combined net loss of $13.3 million over ten years but begin to make a consistent profit starting in year ten. While a phased approach does not accelerate a municipal bank's consistent profits, it greatly limits exposure in the first ten years, and allows the City to pursue community goals while the bank is securing a charter and establishing a governance model.

Table 7: Model Four Bank Year-by-Year Profitability, Capital & Deposit Requirements

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Funds Added Per Year ($ miliion)	Funds Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Start-Up Year	--	--	--	88	--	--	--	--
Year 1	25	7	(1.7)	0	88	20	20	(0.5)
Year 2	50	13	(0.2)	0	86	20	40	(1.0)
Year 3	85	22	0.2	0	86	28	68	(1.7)
Year 4	125	33	0.7	0	86	32	100	(2.5)
Year 5	175	46	1.3	0	87	40	140	(3.5)
Year 6 (Bank Charter)	225	2,298	(5.4)	0	88	40	180	(2.3)
Year 7	275	2,808	(4.3)	0	83	40	220	(2.8)
Year 8	350	3,574	(2.8)	0	78	71	291	(3.5)
Year 9	425	4,340	(1.2)	0	76	62	353	(4.3)
Year 10	500	5,105	0.3	0	74	72	425	(5.0)
Total			(13.3)	88		425		(27.0)

Capital to Cover Net Losses	(13.3)
Capital for Balance Sheet	(75.0)
Total	(88.3)

Table 8: Model Four – Hybrid Approach – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2.0%	10 years

MUNICIPAL BANK FEASIBILITY TASK FORCE MEETING #6

September 13, 2018 from 3:00-5:00pm

What questions are we answering?

- What does the report cover?
- What do the four municipal bank financial models look like? What assumptions go into them?
- What are the relative costs and benefits of each model?
- What is the timeline for the report?

What Does the Report Cover?

- Analyzes the financial costs and benefits of creating a municipal bank via four financial models
- Outlines feasibility of and opportunities for a municipal bank, and provides some clarity about costs, legal risks, and opportunities
- Does not discuss divestment of the City's pooled portfolio
- Does not address replacing commercial banks used for the City's banking needs with a public bank

MODEL ASSUMPTIONS

Eight Assumptions Used in Models

1. Cost of funds is modeled at 1% for municipal bank and 2% for commercial lender – these will change over time.
2. The bank will not provide personal banking services or serve as the City's banker initially
3. The bank will not charge fees and will make all its money from interest
4. Interest rates are modeled at slightly below market rate

Eight Assumptions Used in Models cont'd

5. Loss rates are based on industry comparisons but may be higher given a riskier loan portfolio
6. The City must invest time and money before Year 1 of models
7. Source of capital is assumed to be general fund appropriation, philanthropy, or crowdfunding
8. Source of deposits/debt is assumed to be general fund appropriation, CDs from governments or institutional money

MODEL ONE

Wholesale Bank – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2.0%	10 years

Year-by-Year Profitability, Capital and Deposits

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Deposits Added Per Year ($ miliion)	Deposits Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Charter Year	--	--	--	134	--	--	--	--
Year 1	25	256	(14.5)	0	134	20	20	(0.3)
Year 2	50	511	(9.0)	0	120	20	40	(0.5)
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Year 8	350	3,574	(2.8)	0	79	71	291	(3.5)
Year 9	425	4,340	(1.2)	0	76	62	353	(4.3)
Year 10	500	5,105	0.3	0	75	72	425	(5.0)
Total			(59.0)	134		425		(22.4)

Capital to Cover Net Losses	(59.0)	million
Capital for Balance Sheet	(75.0)	million
Total	(134.0)	million

MODEL TWO

Wholesale Plus Specialty – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	325	65%	65	$5,000,000	5%	1%	3-5 years
Wholesale Small Business	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2%	10 years
Direct Small Business Lending	50	10%	1,428	$35,000	15%	15%	3-5 years
Small-Dollar Consumer Lending	25	5%	50,000	500	30%	30%	6 months

Year-by-Year Profitability, Capital and Deposits

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Deposits Added Per Year ($ miliion)	Deposits Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Charter Year	--	--	--	159	--	--	--	--
Year 1	25	2,827	(15.0)	0	159	20	20	(0.3)
Year 2	50	5,652	(10.0)	0	144	20	40	(0.5)
Year 3	85	9,609	(10.0)	0	134	28	68	(0.9)
Year 4	125	14,130	(9.9)	0	124	32	100	(1.3)
Year 5	175	19,782	(9.9)	0	114	40	140	(1.8)
Year 6	225	25,434	(9.9)	0	104	40	180	(2.3)
Year 7	275	31,085	(4.9)	0	94	40	220	(2.8)
Year 8	350	39,564	(4.8)	0	89	71	291	(3.5)
Year 9	425	48,042	(4.8)	0	85	62	353	(4.3)
Year 10	500	56,519	(4.8)	0	80	72	425	(5.0)
Total			(83.9)	159		425		(22.4)

Capital to Cover Net Losses	(83.9)	million
Capital for Balance Sheet	(75.0)	million
Total	(158.9)	million

MODEL THREE

Commercial Lender – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	100	10%	50	$2,000,000	2.5%	0.5%	5 years

Year-by-Year Profitability, Capital and Deposits

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Funds Added Per Year ($ miliion)	Funds Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Start-Up Year	--	--	--	58	--	--	--	--
Year 1	25	7	(1.7)	0	58	20	20	(0.5)
Year 2	50	13	(0.2)	0	56	20	40	(1.0)
Year 3	85	22	0.2	0	56	28	68	(1.7)
Year 4	125	33	0.7	0	56	32	100	(2.5)
Year 5	175	46	1.3	0	57	40	140	(3.5)
Year 6	225	59	1.9	0	58	40	180	(4.5)
Year 7	275	72	2.4	0	60	40	220	(5.5)
Year 8	350	91	3.4	0	62	71	291	(7.0)
Year 9	425	111	4.2	0	66	62	353	(8.5)
Year 10	500	130	5.1	0	70	72	425	(10.0)
Total			17.2	58		425		(44.7)

Capital to Cover Net Losses	17.2
Capital for Balance Sheet	(75.0)
Total	(57.8)

MODEL FOUR

Commercial Lender – Year 10 Results

Lines of Business	Loan Assets in Year 10 ($MM)	Percent of Loans in Year 10 ($)	Number of Loans in Year 10	Average Size of Loan	Interest Rate	Loss Rate	Average Loan Term
Wholesale Real Estate Lending	400	80%	80	$5,000,000	5.0%	1.0%	3-5 years
Wholesale Small Business Lending	50	10%	25	$2,000,000	2.5%	0.5%	5 years
Direct Student Lending	50	10%	5,000	$10,000	4.5%	2.0%	10 years

Year-by-Year Profitability, Capital and Deposits

	Value of Outstanding Loans Per Year ($ million)	Number of Outstanding Loans Per Year	Net Profit (Loss) Per Year ($ million)	Capital Added Per Year ($ million)	Capital Remaining Per Year ($ million)	Funds Added Per Year ($ miliion)	Funds Per Year ($ million)	Interest Expense Paid Out Per Year ($ million)
Start-Up Year	--	--	--	88	--	--	--	--
Year 1	25	7	(1.7)	0	88	20	20	(0.5)
Year 2	50	13	(0.2)	0	86	20	40	(1.0)
Year 3	85	22	0.2	0	86	28	68	(1.7)
Year 4	125	33	0.7	0	86	32	100	(2.5)
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Year 8	350	3,574	(2.8)	0	78	71	291	(3.5)
Year 9	425	4,340	(1.2)	0	76	62	353	(4.3)
Year 10	500	5,105	0.3	0	74	72	425	(5.0)
Total			(13.3)	88		425		(27.0)

Capital to Cover Net Losses	(13.3)
Capital for Balance Sheet	(75.0)
Total	(88.3)

REPORT TIMELINE

Timeline for Report

October 15: Circulate draft to Task Force, experts and public and receive feedback

November 4: Present final report at Task Force meeting

November/December: Publish final report and present it to Board of Supervisors

Thank you very much for your time and attention

Molly Cohen
Senior Policy Analyst