MUNICIPAL BANK FEASIBILITY TASK FORCE MEETING #7

November 1, 2018 from 3:00-5:00pm

What Questions Are We Answering?

- What did we learn from our last meeting?
- What will the three new municipal bank models include? What will they not include? Why?
- What do the new municipal bank financial models look like? What assumptions were used to develop the models?
- What's next?

TREASURER ★ CITY AND COUNTY OF SAN FRANCISCO ★

Feedback from Meeting 6

- Model a bank that performs the City's cash management
- Increase the size of bank models
- Clarify the start-up timeline and costs
- Clarify that interest rates may be well below market rate, and cost of funds may be too low
- Add 10% liquidity rather than lending out 100% of assets
- Remove small-dollar and student loans
- Offer projections for more years out
- Add participation loans

MODELS OVERVIEW

Introduction to New Models

Included in New Models

City's Cash Management

Hold City's Short-Term Cash

Wholesale Small Business Loans

Direct Small Business Loans

Affordable Housing

Participation Loans

Not Included in Models

Underwrite Bonds

Invest All of Pooled Fund Money

Serve as Investment Pool Custodian

Student Loans

Retail Banking

Green Energy Loans

Small-Dollar Consumer Loans

Non-Housing Infrastructure Loans

Introduction to New Models (cont’d)

Scenario 1: Divest

- City’s banking services
- Hold City’s short-term cash
- Participation business loans

Scenario 2: Re-Invest

- Hold City’s short-term cash
- Affordable housing loans
- Wholesale small business loans
- Direct small business loans
- Participation business loans

Scenario 3: Combination

- City’s banking services
- Hold City’s short-term cash
- Affordable housing loans
- Wholesale small business loans
- Direct small business loans
- Participation business loans

MODEL ONE: DIVEST

City’s Commercial Banking Activity

Disbursements
ACH, paper check, wire, prepaid debit for payroll, vendor payment, debt service

Deposits
Cash, electronic transfer, paper check in-person, by mail, online

Reporting & Technology
Account statements, check imaging, usage summaries

Cash Management
Liquidity, cash flow

Payment Processing
Credit card payments

Lockbox & Armored Truck
Receivables and transportation

Understanding City’s Banking Business

Internal Research

- Bank of America contract and account statements (fees etc.)
- Meetings with banking staff
- Los Angeles banking RFP
- Cost of other large gov’t technology projects

External Research

- Conversations with vendors (FIS, Fiserv, Jack Henry) and de novo banks
- Conversations with experts (Jennifer, Marc, Steve)
- Conversations with fintechs (SynapseFI)

How to Fulfill City's Commercial Banking

- License system from financial services company
- Only three main financial services companies (FIS, Fiserv, Jack Henry) have capacity, compliance, ACH network, interchange with Fed Reserve
- Cost for monthly license is $300 - $600k per year
- Requires integration with existing systems at significant cost: $75 - $150 million upfront and $40 - $60 million ongoing for technology and staffing
- City must continue contract with armored truck for approximately $300k per year
- Did not estimate cost to build system in-house – significantly more expensive and difficult to determine
- Costs higher than current fees paid to Bank of America (~$900k per year)

Scenario 1 Bank Activities

City's Banking Services

- Deposits, disbursements, payment processing
- Cash management
- Reporting
- <u>**No**</u> armored truck
- <u>**No**</u> bond underwriting
- <u>**No**</u> custodian for the pool

Participation Lending

- Accept deposits and use 90% for participation lending activity
- Estimate 4% yield

Direct Lending

- N/A

Participation Lending vs. Direct Lending

Participation Lending	Direct Lending
Purchase, collaborate on, or guarantee another bank's loans (BND Model) or offer low cost funds to banks	Underwrite, originate and service loan directly
• Scalable • Easier to diversify geographically • Less overhead • Less control over product/outcome	• Full control • Can fill gaps in current lending • More effort/due diligence • More overhead

Scenario 1 Lines of Business - $1 Billion in Loans

Line of Business	Loan Assets at $1B ($MM)	Percent of Loans at $1B	Number of Loans at $1B	Average Size of Loan	Average Interest Rate	Estimated Loss Rate	Average Loan Term
Participation Lending	$1,000	100%	200	$5,000,000	4.0%	0.5%	17 years

Estimated Scenario 1 Bank Costs

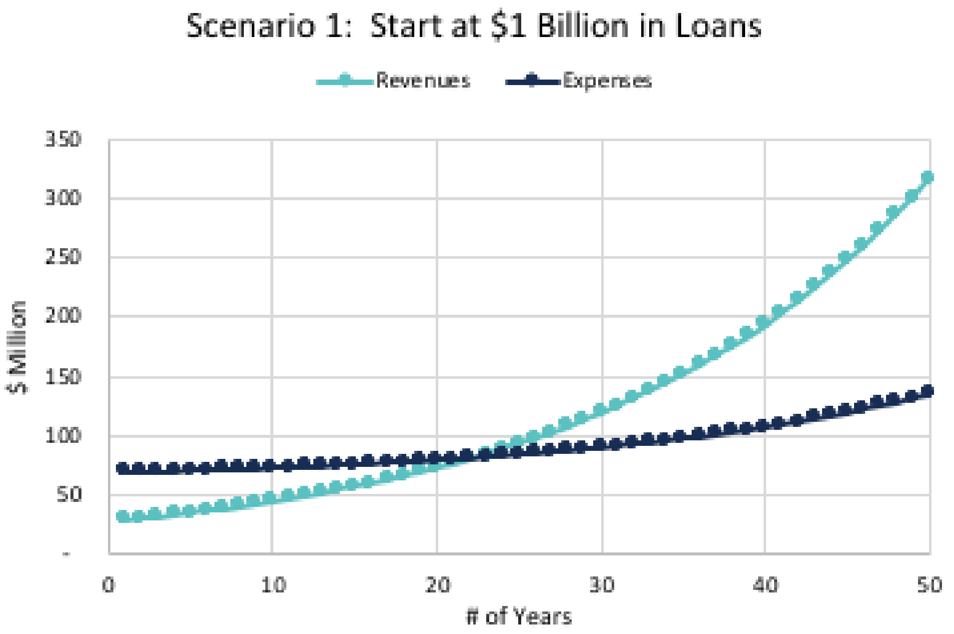
Item	Cost Range
General bank start-up costs	$20 - $30 million one-time cost
Internal technology development and data integration for cash management*	$75 - $150 million one-time cost
TOTAL START-UP COSTS	**$95 - $190 million one-time**
Annual bank operation costs	$10 - $15 million per year
Annual license for core banking system	$0.3 - $0.6 million per year
Annual technology maintenance and staffing for cash management*	$40 - $60 million per year
Annual participation lending costs	$5.6 - $7.7 million per year (at $1 billion in loans)
TOTAL ANNUAL COSTS	**$56 - 83 million per year** (at $1 billion in loans)

**Costs associated with City's banking services and present only in scenario 1 and 3*

Financials for First 10 Years ($1B) - Low & High Estimates

	Value of Net Outstanding Loans Per Year ($ million)	Total Assets Per Year ($ million)	Net Surplus (Deficit) Per Year - Low Range ($ million)	Net Surplus (Deficit) Per Year - High Range ($ million)
Start-Up Years	--	--	(95)	(190)
Year 1	50	55	(49)	(74)
Year 2	75	83	(48)	(73)
Year 3	125	138	(47)	(72)
Year 4	200	220	(45)	(71)
Year 5	300	330	(43)	(69)
Year 6	400	440	(40)	(67)
Year 7	500	550	(38)	(65)
Year 8	650	715	(34)	(62)
Year 9	800	880	(30)	(59)
Year 10	1000	1100	(25)	(55)
Total			(494)	(858)
Capital to Cover Net Losses			(494)	(858)
Capital for Balance Sheet			(165)	(165)
Total ($ million)			(659)	(1,023)

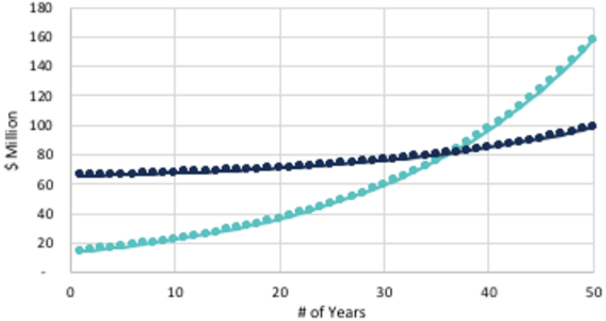
Growth & Financials Over Time - $1 Billion in Loans



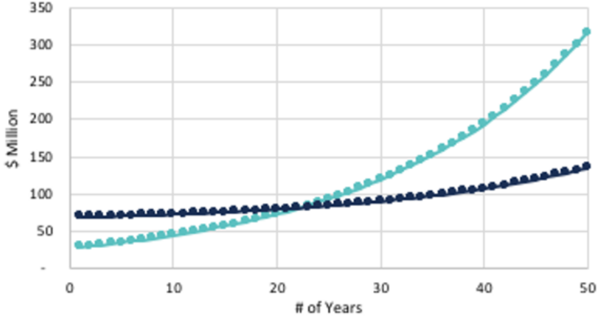
Assumptions: Average of low- and high-cost estimates. 5% growth in size per year.

Growth & Financials Over Time – 3 Starting Sizes

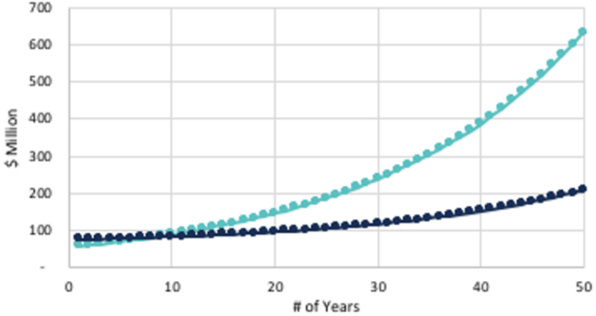
Start at $500M in Loans



Start at $1B in Loans



Start at $2B in Loans



Achieves Surplus:	Year 37 $2.8B in loans	Year 22 $2.8B in loans	Year 8 $2.8B in loans

Assumptions: Average of low- and high-cost estimates. 5% growth in size per year.

MODEL TWO: RE-INVEST

Scenario 2 Bank Activities

City's Banking Services

- N/A

Participation Lending

- Accept deposits and use 90% for lending activity
- Wholesale small business lending (12.5% of portfolio)
- Investments in participation loans as part of 10% liquidity

Direct Lending

- Accept deposits and use 90% for lending activity
- Affordable housing lending (85% of portfolio)
- Direct small business lending (2.5% of portfolio)

Scenario 2 Lines of Business - $1 Billion in Loans

Line of Business	Loan Assets at $1B ($MM)	Percent of Loans at $1B	Number of Loans at $1B	Average Size of Loan	Average Interest Rate	Estimated Loss Rate (Low-High)	Average Loan Term
Real Estate Lending	850	85%	170	$5,000,000	5.0%	1-2%	3-5 years
Wholesale Small Business Lending	125	12.5%	62	$2,000,000	2.5%	0.5-1%	5 years
Direct Small Business Lending	25	2.5%	714	$35,000	15%	15-30%	3-5 years

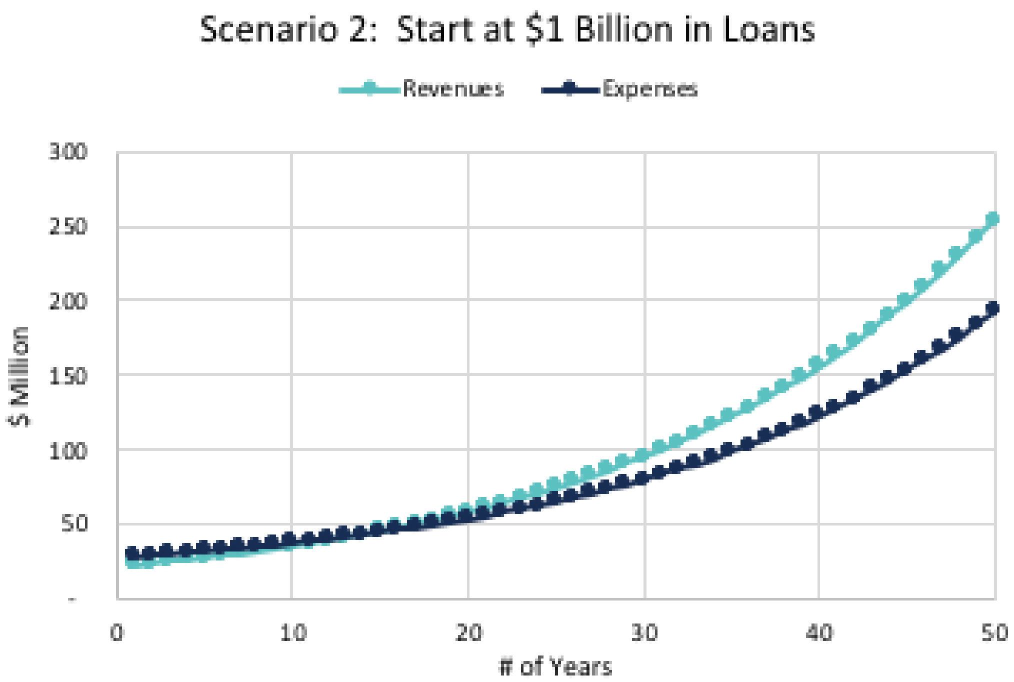
Estimated Scenario 2 Costs

Item	Cost Range
General bank start-up costs	$25 - $37.5 million one-time cost
TOTAL START-UP COTS	**$25 - $37.5 million one-time cost**
Annual bank operating costs	$10 - $15 million per year
Annual license for core banking system	$0.3 - $0.6 million per year
Annual lending costs	$16 - $17 million per year (at $1 billion in loans)
TOTAL ANNUAL COSTS	**$26 - $33 million per year** (at $1 billion in loans)

Financials for First 10 Years ($1B) - Low & High Estimates

	Value of Net Outstanding Loans Per Year ($ million)	Total Assets Per Year ($ million)	Net Surplus (Deficit) Per Year - Low Range ($ million)	Net Surplus (Deficit) Per Year - High Range ($ million)
Start-Up Years	--	--	(25)	(38)
Year 1	50	55	(9)	(15)
Year 2	75	83	(9)	(15)
Year 3	125	138	(8)	(15)
Year 4	200	220	(7)	(15)
Year 5	300	330	(6)	(15)
Year 6	400	440	(4)	(15)
Year 7	500	550	(3)	(15)
Year 8	650	715	(1)	(15)
Year 9	800	880	1	(15)
Year 10	1000	1100	4	(15)
Total			(68)	(189)
Capital to Cover Net Losses			(68)	(189)
Capital for Balance Sheet			(165)	(165)
Total ($ million)			(233)	(354)

Growth & Financials Over Time - $1 Billion in Loans



Assumptions: Average of low- and high-cost estimates. 5% growth in size per year.

Growth & Financials Over Time – 3 Starting Sizes

Achieves Surplus:	Year 28 $1.9B in loans	Year 14 $1.9B in loans	Year 1 $2B in loans

Assumptions: Average of low- and high-cost estimates. 5% growth in size per year.

MODEL THREE: COMBINATION

Scenario 3 Bank Activities

City’s Banking Services

- Deposits, disbursements, payment processing
- Cash management
- Reporting
- <u>**No**</u> armored truck
- <u>**No**</u> bond underwriting
- <u>**No**</u> custodian for the pool

Participation Lending

- Accept deposits and use 90% for lending activity
- Wholesale small business lending (12.5% of portfolio)
- Investments in participation loans as part of 10% liquidity

Direct Lending

- Accept deposits and use 90% for lending activity
- Affordable housing lending (85% of portfolio)
- Direct small business lending (2.5% of portfolio)

Scenario 3 Lines of Business - $1 Billion in Loans

Line of Business	Loan Assets at $1B ($MM)	Percent of Loans at $1B	Number of Loans at $1B	Average Size of Loan	Average Interest Rate	Estimated Loss Rate (Low-High)	Average Loan Term
Real Estate Lending	850	85%	170	$5,000,000	5.0%	1-2%	3-5 years
Wholesale Small Business Lending	125	12.5%	62	$2,000,000	2.5%	0.5-1%	5 years
Direct Small Business Lending	25	2.5%	714	$35,000	15%	15-30%	3-5 years

Estimated Scenario 3 Bank Costs

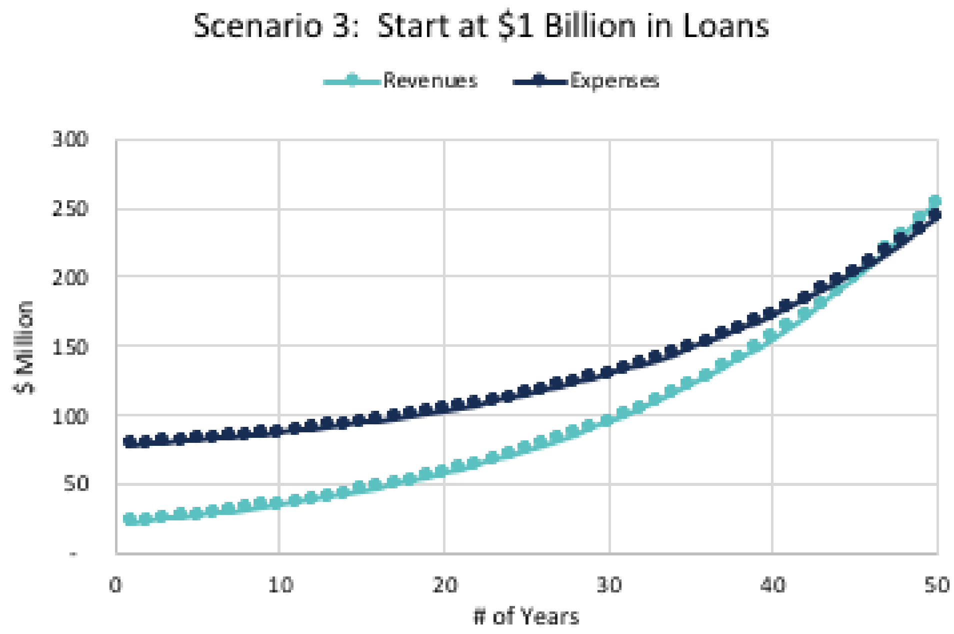
Item	Cost Range
General bank start-up costs	$20 - $30 million one-time cost
Internal technology development and data integration for cash management*	$75 - $150 million one-time cost
TOTAL START-UP COSTS	**$95 - $190 million one-time**
Annual bank operation costs	$10 - $15 million per year
Annual license for core banking system	$0.3 - $0.6 million per year
Annual technology maintenance and staffing for cash management*	$40 - $60 million per year
Annual lending Costs	$16 - $17 million per year (at $1 billion in loans)
TOTAL ANNUAL COSTS	**$66 - $93 million per year** (at $1 billion in loans)

**Costs associated with City's banking services and present only in scenario 1 and 3*

Financials for First 10 Years ($1B) - Low & High Estimates

	Value of Net Outstanding Loans Per Year ($ million)	Total Assets Per Year ($ million)	Net Surplus (Deficit) Per Year - Low Range ($ million)	Net Surplus (Deficit) Per Year - High Range ($ million)
Start-Up Years	--	--	(95)	(190)
Year 1	50	55	(49)	(75)
Year 2	75	82.5	(49)	(75)
Year 3	125	137.5	(48)	(75)
Year 4	200	220	(47)	(75)
Year 5	300	330	(46)	(75)
Year 6	400	440	(44)	(75)
Year 7	500	550	(43)	(75)
Year 8	650	715	(41)	(75)
Year 9	800	880	(39)	(75)
Year 10	1000	1100	(36)	(75)
Total			(538)	(941)
Capital to Cover Net Losses			(538)	(941)
Capital for Balance Sheet			(165)	(165)
Total ($ million)			(703)	(1,106)

Growth & Financials Over Time - $1 Billion in Loans

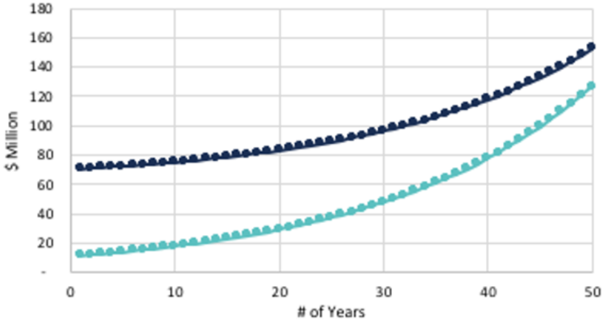


Assumptions: Average of low- and high-cost operational estimates. 5% growth in size per year.

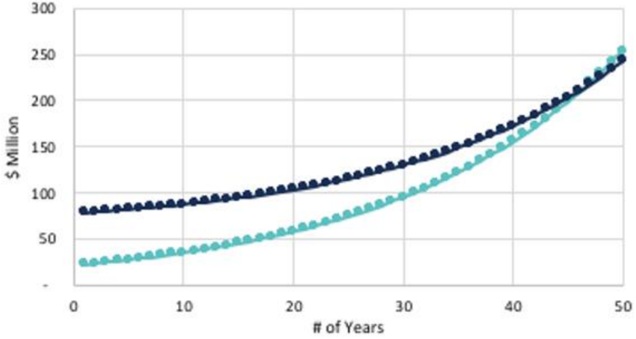
Growth & Financials Over Time – 3 Starting Sizes

Revenues Expenses

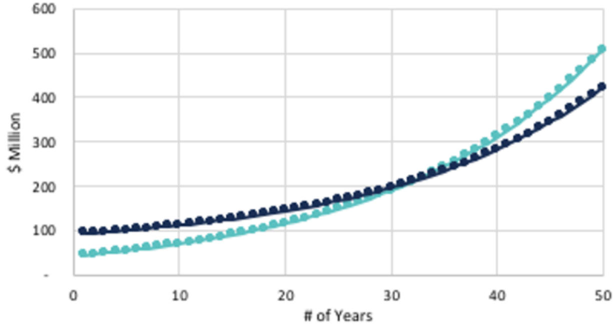
Start at $500M in Loans



Start at $1B in Loans



Start at $2B in Loans



Achieves Surplus:	>Year 50	Year 47 $9.4B in assets	Year 33 $9.4B in assets

Assumptions: Average of low- and high-cost operational estimates. 5% growth in size per year.

ASSUMPTIONS, CHALLENGES AND OPPORTUNITIES

Assumptions Used in New Models

1. Cost of funds is modeled at slightly above 1%
2. Models 1 and 3 envision a bank that performs the City's banking services (depository/disbursement/payments)
3. No models envision the bank serving as a bond underwriter or custodian of the investment pool
4. No models include personal banking services
5. Models include only income from interest (as opposed to fees)

Assumptions Used in New Models (cont'd)

6. Interest rates for direct loans are modeled at below market rate
7. Loss rates are modeled based on industry comparisons but may be higher than estimated given a riskier loan portfolio
8. The City would need to invest time and money for start-up efforts for up to 5 years before the bank receives a charter
9. Source of capital is not defined
10. Source of deposits is not defined

Challenges with Underwriting Bonds

- City uses bonds (a form of debt) to fund long-term projects when it doesn't have cash on-hand
- Bond underwriters help the City sell its bonds to investors
- Bank would need to be a registered broker-dealer with additional regulatory requirements
- Bank would need expertise in capital markets (separate skill set from traditional commercial and community banking)
- Bank may take years to develop a sales channel and investor pool to sell bonds

Challenges with Serving as Custodian Bank

- City uses a custodian bank to hold securities and investments made by the Treasurer's Pooled Investment Fund
- Not possible to lease a platform for custodian work
- Would need to develop technology in-house
- Municipal bank would not receive interest-income from investments only fee income
- Cost for technology development and staff would outweigh limited fee income (currently ~$200k/year)

Opportunities for Allocating General Funds

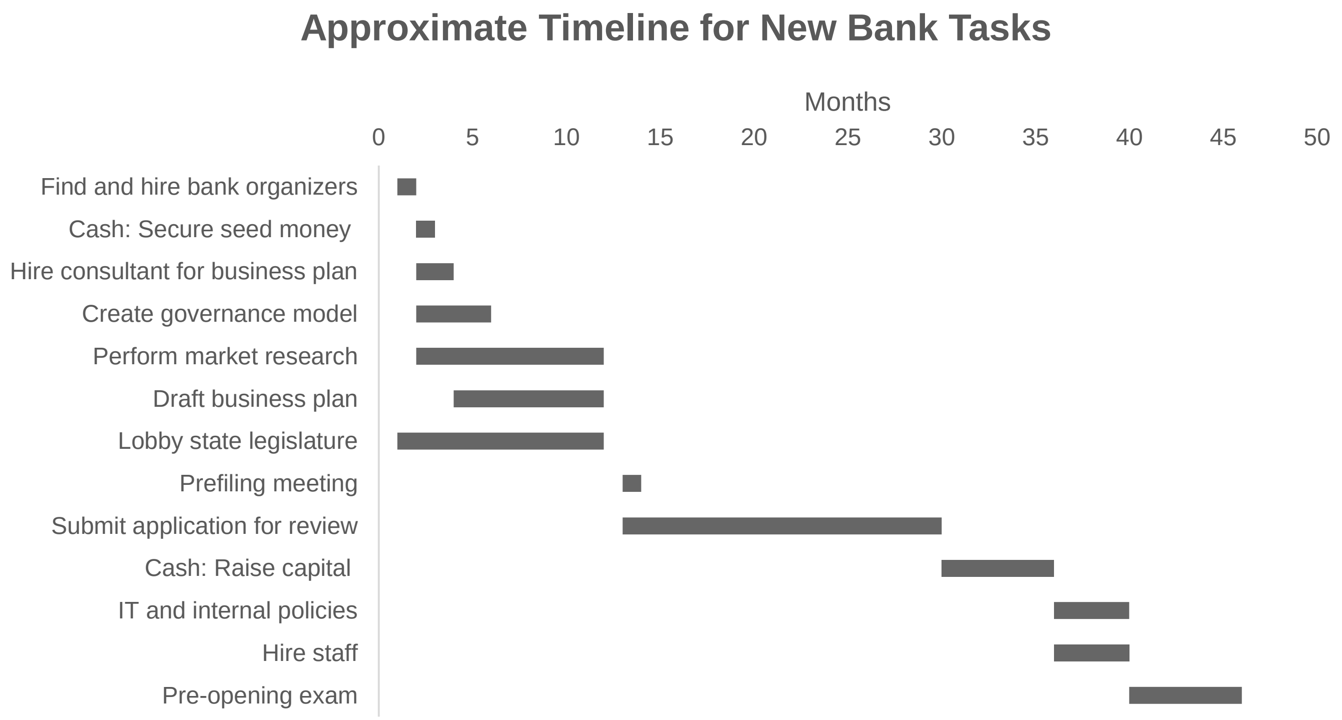
- Board of Supervisors and Mayor can allocate funds for start-up and operational costs for bank
- Board of Supervisors and Mayor can allocate funds for bank capital
- The pool can invest in certificates of deposit from municipal bank (with limitations on amount and requirements related to collateralization, CRA rating)
- The pool can invest in the municipal bank's medium term notes (if it is <5 years and has highest rating and fits with portfolio's needs/strategy)

Challenges to Using Pool Money

- Money already allocated, dedicated and spent through the budgetary process and voter-initiated bond approvals and capital plan
- Funds belong to numerous entities and not just City and County
- State law and investment policy governs use of funds – priority of safety, liquidity and yield
- Limitations on type (most secure) and duration of investments (short-term)
- Loss of funds threatens City’s ability to meet commitments and pay its bills

TIMELINE

Approximate Timeline



NEXT STEPS


EUR/USD - 1,35379 - 00:00:00 14 giu (EEST)
EUR/USD (Bid), Ticks, # 300 / 300
23:35
23:40
23:46
Quote List [2]
World Markets

Meeting 8 (of 6)

Mark your calendars:

JANUARY 31, 2019 from 3-5pm
in Room 305

Timeline for Report

November/December: Draft report based on feedback from Task Force

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

January 31: Meet with Task Force to finalize report

Thank you very much for your time and attention

Molly Cohen
Senior Policy Analyst

PROPOSED LINES OF BUSINESS

1. REAL ESTATE LENDING

- ☐ **Mezzanine Debt Financing** – Given high costs, City officials, advocates and developers all agree that cheaper financing could spur more affordable housing development. Currently, developers often utilize more high-cost equity financing because they cannot secure sufficient debt due to loan-to-value ratios. To fill this gap, a municipal bank could provide lower-cost mezzanine debt financing (capital that falls between equity and senior debt) for the development and preservation of affordable housing.

- ☐ **Small Sites Acquisition Mortgages** – The Mayor's Office of Housing and Community Development runs the small sites acquisition program which helps non-profits acquire, rehabilitate and manage rent-controlled buildings at risk of conversion. To purchase these units, non-profits receive a City subsidy of $175,000 to $350,000 per unit and must also find traditional mortgage financing that is repaid over time via tenant rents. The public bank could provide these traditional mortgages at lower-rates and potentially longer-terms to support small sites acquisition.

- ☐ **Accessory Dwelling Unit (ADU) Lending** – An ADU is a unit added to an existing residential property, and ADUs offer opportunities for small-scale urban infill, adding needed units of housing to San Francisco. Though ADU construction is on the rise in San Francisco, individual homeowners without savings or sufficient equity in their home may not be able to get financing to build an ADU. The public bank can fill this gap by offering ADU financing to cover the cost of ADU construction with a float period during construction.

2. SMALL BUSINESS LENDING

- ☐ **Direct Small Business Lending –** San Francisco has a robust ecosystem of small business support, including Community Development Financial Institutions (CDFIs), non-profits and City programs. Nevertheless, experts all noted that Local Business Enterprise (LBE) contractors (which are small- and micro- businesses that contract with the City) and other general contractors have difficulty accessing loans, and all small businesses struggle to get lines and letters of credit. The municipal bank could support small businesses by lending to LBE contractors as well as other general contractors and offering lines and letters of credit to small businesses.

- ☐ **Wholesale Small Business Lending –** Additionally, to support existing small business lending efforts, a public bank could offer wholesale loans to CDFIs. Currently, CDFIs cobble together their funding – the money that they lend out – from a variety of sources, including the CDFI Fund, the U.S. Small Business Administration, and private sources, such as banks. Like banks, CDFIs make a profit on the spread or difference between the rate at which they borrow their capital and the rate they lend out their money. A municipal bank could offer lower costs funds to CDFIs to allow them to lend money out at lower rate.

3. PARTICIPATION LENDING

- ☐ **Participation Lending –** Participation lending occurs when banks collaborate on loans, by providing capital contributions, guaranteeing loans, buying down interest rates or purchasing loans outright. A municipal bank could support local banks and credit unions by performing participation lending. A municipal bank could begin by buying other banks' SBA loans like California's investment program. As the municipal bank evolves, it could expand its participation lending practice to include additional forms of participation and more diverse loan-types.