

Strengthening the New Hampshire Economy: The Impact of Keeping State and Local Government Funds in Banks in New Hampshire

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Executive Summary

This report uses publicly available data and sophisticated economic models to assess the fiscal and economic impacts on New Hampshire and its communities of choosing to deposit public funds in out-of-state financial institutions compared to depositing funds in banks located in the state. The report calculates the impact that depositing public funds in banks located in New Hampshire will have on the state's economy, revenues, and how those impacts compare to the income gained by depositing and investing public funds in out-of-state institutions through the New Hampshire Public Deposit Investment Pool (NHPDIP). Public deposits consist largely of revenues generated from individuals and private organizations in the state. The revenue of New Hampshire state, municipal and county governments, as well as other public entities, that is deposited in financial institutions represents a large source of potential liquidity for banks in New Hampshire. By increasing liquidity at New Hampshire banks, public deposits can increase the ability of New Hampshire banks to reinvest in their communities by issuing more loans to businesses and individuals. To date, we are not aware of research that compares the benefits of keeping public deposits in banks located in New Hampshire with the benefits of derived from investing public funds in out-of-state investments, this research aims to fill that void.

The primary motivation for depositing public funds (in the form of tax revenues) in the NHPDIP appears to be an effort to increase the earnings on those funds. The primary argument for depositing public funds in local banks is New Hampshire and its communities can harness and circulate financial resources within the state to support economic and social benefits by supporting local businesses, individuals, and institutions. Depositing public funds in local banks can be a strategic move for state and local governments, playing an important role in promoting regional economic stability, growth, and development. This report analyzes the degree to which public funds are currently and historically deposited in New Hampshire banking institutions, the economic impacts from increasing public funds deposited in New Hampshire banks, and how those impacts compare with investing public funds with the NHPDIP.

Key Study Findings Include:

- Over \$1 billion in the public funds of state and local governments and agencies in New Hampshire are deposited in banks headquartered in New Hampshire, but an increasing percentage of public funds are being invested through the New Hampshire Public Deposit Investment Pool (NHPDIP) in national and international organizations and financial instruments that do not increase economic activity in the state.
- Over \$530 million of public funds were invested through the NHPDIP as of June 30, 2023.

- Depositing an additional \$530 million of public funds in New Hampshire banks that are currently invested through the NHPDIP would support a projected \$182 million in business lending and investment in the state, primarily to businesses with fewer than 50 employees.
- The impact from additional business lending and investment supported by increasing public deposits in banks in New Hampshire would increase the state's GDP by as much as \$200 million and state and local revenues by as much as \$23 million in 2023 and \$24 million by 2025.

Distribution of Estimated Revenue Resulting From Moving all Public Deposits in NHPDIP to Banks in New Hampshire						
State Revenue	2024	2025	2026	2027	2028	Totals
Business Taxes	\$4,615,266	\$4,699,103	\$4,578,374	\$4,377,370	\$4,165,117	\$22,435,229
Meals and Rentals Tax	\$1,168,023	\$1,189,240	\$1,158,686	\$1,107,816	\$1,054,100	\$5,677,865
Tobacco Tax	\$798,112	\$812,610	\$791,732	\$756,973	\$720,268	\$3,879,696
Liquor Commission	\$466,329	\$474,800	\$462,602	\$442,292	\$420,846	\$2,266,869
Insurance Tax	\$574,846	\$585,288	\$570,251	\$545,215	\$518,779	\$2,794,379
Communications Tax	\$102,651	\$104,516	\$101,831	\$97,360	\$92,639	\$498,996
Real Estate Transfer Tax	\$753,386	\$767,071	\$747,363	\$714,552	\$679,904	\$3,662,276
State Property Tax	\$964,553	\$982,075	\$956,843	\$914,835	\$870,476	\$4,688,783
All Other Revenue Sources	\$2,126,710	\$2,165,342	\$2,109,711	\$2,017,088	\$1,919,282	\$10,338,133
	\$11,569,876	\$11,780,044	\$11,477,393	\$10,973,502	\$10,441,410	\$56,242,226
Local Revenue	2024	2025	2026	2027	2028	Totals
Property Tax	\$10,536,083	\$10,727,473	\$10,451,864	\$9,992,997	\$9,508,448	\$51,216,866
Other Taxes	\$261,379	\$266,127	\$259,289	\$247,906	\$235,885	\$1,270,585
Charges and Fees	\$1,666,871	\$1,697,150	\$1,653,547	\$1,580,952	\$1,504,293	\$8,102,813
	\$12,464,333	\$12,690,750	\$12,364,700	\$11,821,854	\$11,248,627	\$60,590,263

- The combined fiscal benefits from increasing public deposits in New Hampshire banks, in the form of both increased tax revenue and interest on deposits, exceeds the yield from public investments made through the NHPDIP.
- Depositing \$530 million of New Hampshire public funds in banks located in New Hampshire, rather than in national and international organizations and financial instruments through the NHPDIP, would add as many as 2,028 jobs in the state and increase the labor force and personal income in the state.

Employment Impacts From Increased Public Deposits in NH Banks (Depending on % of NHPDIP Funds Deposited in Banks in New Hampshire)						
Year	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	1,102	1,323	1,544	1,765	1,986	2,208
2024	1,128	1,353	1,579	1,805	2,030	2,256
2025	1,098	1,318	1,537	1,757	1,977	2,196
2026	1,024	1,229	1,434	1,638	1,843	2,048
2027	935	1,122	1,309	1,496	1,684	1,871
2028	851	1,021	1,191	1,361	1,531	1,701
2029	778	934	1,090	1,245	1,401	1,556
2030	721	865	1,010	1,154	1,298	1,442

- The study concludes that the impact from public funds of state and local government in New Hampshire and their agencies, when deposited in banks in New Hampshire, produce aggregate fiscal and economic benefits that will exceed the benefits in terms of monetary yield, from investing public funds through the NHPDIP.

I. Introduction

The revenue of New Hampshire state and local governments, as well as government agencies, that is deposited in financial institutions represents a large source of potential liquidity for banks in New Hampshire. Increasing liquidity at banks in New Hampshire is important to the state's economy because it increases the ability of banks to invest in their communities by issuing more loans to businesses and individuals. The additional lending capacity supported by public deposits, in turn, generates economic activity that benefits the state and local economies and revenues.

Public deposits in New Hampshire consist of tax and other revenues generated from individuals and private organizations in the state. Thus, it is appropriate to expect those revenues, as much as is feasible, be utilized to benefit the state and local economies. As of June 30, 2023, over \$530 million of state and local government and agency deposits managed through the New Hampshire Public Deposit Investment Pool (NHPDIP) leave the state and are invested in a variety of debt and financial instruments issued by financial institutions and organizations around the world.

Government finance officers in New Hampshire can choose to deposit or invest public funds through the NHPDIP to maximize the yield they receive on public funds. Whether yields are, in fact, higher, or whether the benefits of potentially higher yields produce net fiscal, economic, and social benefits compared to the benefits resulting from retaining deposits in banks located in New Hampshire should, however, also be considered. To the extent that public deposits placed in banks located in New Hampshire produce greater fiscal and economic benefits than if they left the state, then the perceived benefits from higher yields from deposits leaving the state are illusory. Despite the importance of this calculation, we are not aware of any effort in New Hampshire to compare the impacts of placing deposits in banks located in the state or out-of-state through the NHPDIP.

The regulations that influence the allocation of public funds among various banks and other types of financial institutions have an impact on the nation's and New Hampshire's banking industry, as well as the industry's ability to meet the credit needs of residents and businesses. There isn't a universal regulation in the United States or in New Hampshire that mandates government deposits be placed exclusively in local banks. However, various state and local governments do have rules, policies, or preferences concerning where funds may be deposited. In addition, the Federal Deposit Insurance Corporation's (FDIC) rules on insurance for government deposits (12 C.F.R. 300.15) implicitly encourages or provides a preference for depositing public funds in local banks by doubling the dollar value of insured deposits (from \$250,000 to \$500,000) when public funds are deposited in banks located in the same state as the government making the deposit. The rationale for such rules or preferences for depositing public funds in-state typically includes:

- **Supporting State and Local Economies:** Keeping tax revenue in local banks can stimulate the local economy by providing those institutions with more capital to lend to local businesses and residents.
- **Supporting Local Banking Institutions:** Keeping government funds in local banks can provide those banks with more liquidity, which might enable them to offer more loans and other financial products to local businesses and residents.
- **Community Development:** Local banks often have a deep understanding of their community's needs. They might be more likely than non-local banks to invest in community development projects, such as affordable housing, small business lending, and other local initiatives.
- **Economic Resilience:** By supporting local banks, a state and its communities can foster more resilient local economies that are less dependent on the health of out-of-state and international financial institutions.
- **Alignment of Interests:** Local banks are more inclined to make decisions that are in the best interest of the state and communities since their success is closely tied to the health and prosperity of the local area.
- **Local Investment:** Out-of-state financial institutions will not reinvest public funds in the state or community investments funds, while local banks are more likely to reinvest public funds locally.

Deposits of state and local governments are important items on the balance sheets of the banks in the state and thus play an important role in influencing the lending capacity and credit access of local businesses. Where New Hampshire's public funds are deposited is of increasing importance as more varied, non-local, options for individuals, businesses, and governments arise to compete for funds generated in New Hampshire, lowering the percentage of locally derived funds kept locally to support lending and investment in the state.

This report uses publicly available data and sophisticated economic models and econometric methods to compare the reported investment earnings of New Hampshire's state and local public funds invested through New Hampshire Public Deposit Investment Pool (NHPDIP) with the projected impacts of investing funds in banks located in New Hampshire. Our primary conclusion is that even if yields on out-of-state investments are larger than the yield received from deposits in banks located in New Hampshire, the yield on public funds deposited locally, along with state and local revenue increases resulting from the lending to and investment by business that local bank deposits support, exceed higher nominal yields on NHPDIP investments. In addition, substantial non-fiscal economic benefits, in the form of increased employment, labor force, and personal income in the state will accrue from depositing a larger share of public funds in banks located in New Hampshire.

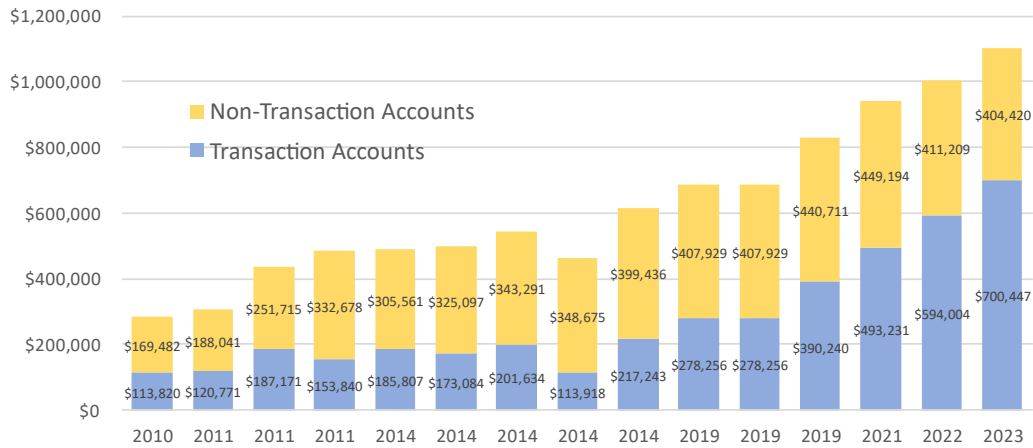
II. The Volume of Government Fund Deposited in New Hampshire Banks

As of June 30, of 2023, there were 43 banks with a combined 392 branch locations in New Hampshire. Of that number, 19 banks with 136 branch offices in the state are banks that are headquartered in New Hampshire. All banks with offices in New Hampshire, whether headquartered in the state or in another state, can hold New Hampshire state and local government and agency public funds as deposits, and most do. Regardless of whether a bank located in New Hampshire is headquartered in the state or in another state, and subject to requirements as laid out in statute, the deposits received by banks located in New Hampshire will primarily be used to make loans to businesses, individuals, and organizations in the New Hampshire.

Although we know the volume of New Hampshire's public funds invested through the NHPDIP, we do not know the volume of New Hampshire public funds deposited in all of the 43 banks and their 392 offices in the state. That is because required bank quarterly financial reports to the Federal Deposit Insurance Corporation (FDIC) aggregate the finances of all offices of each of those 43 banks, regardless of the location of the offices. Thus, public deposits of banks in New Hampshire that operate in many states would include public deposits from governments outside of New Hampshire. In contrast, approximately 90 percent of the office locations of banks headquartered in New Hampshire are located in the state. For these reasons, we examine trends in public deposits at banks in New Hampshire using data from New Hampshire headquartered banks. In our analysis of the economic impacts of increasing public deposits in banks in New Hampshire, however, it is important to recognize that if public deposits remain in any bank offices located in New Hampshire, the economic impacts will be the same regardless of whether the bank is headquartered in New Hampshire or in another state. Of primary concern to this analysis is the volume of public funds of New Hampshire state and local governments that are deposited or invested outside of the state.

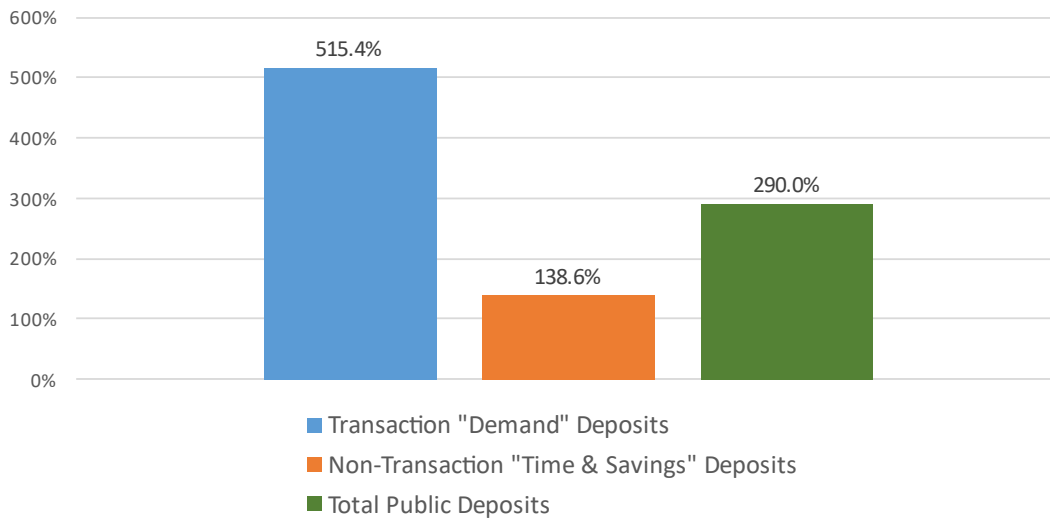
Banks headquartered in New Hampshire held over \$1.1 billion of deposits of state and local governments as of June 30, 2023, representing about eight percent of total deposits of the 19 banks headquartered in the state. Trends in state and local government and agency "public" deposits in New Hampshire headquartered banks, along with the type of deposit, are presented in Figure 1. Importantly, the chart shows how growth in "transaction deposits" which are deposits in accounts that can be withdrawn on demand, and "non-transaction deposits" which are interest bearing time and savings deposits with limitations on when the funds can be withdrawn, differ.

Figure 1
Growth in Public Deposits at New Hampshire Headquartered Banks



The chart shows that public deposits at New Hampshire banks have tripled since 2010, providing an important source of liquidity for banks that helps them meet the credit needs of businesses and individuals. The chart also shows that growth in public deposits has largely been attributable to increase in transaction deposits. Non-transaction deposits have grown much more slowly because those are what can be considered “excess” public funds that governments are unlikely to need immediate access to, and on which government financial officers are looking to earn a maximum yield. Obtaining higher yields is a primary motivation for the deposits of New Hampshire’s state and local governments investing outside of the state through the NHPDIP. Figure 2 shows that transaction deposits by state and local government increased by over 500 percent between 2010 and the second quarter of 2023, while non-transaction deposits in New Hampshire headquartered banks by state and local governments increased by just 138 percent over during the same time. Overall, public deposits in New Hampshire headquartered banks increased by 289 percent between 2010 and 2023.

Figure 2
**Growth in State and Local Government Deposits at New Hampshire
 Headquartered Banks by Type of Deposit (2010 to 2023)**



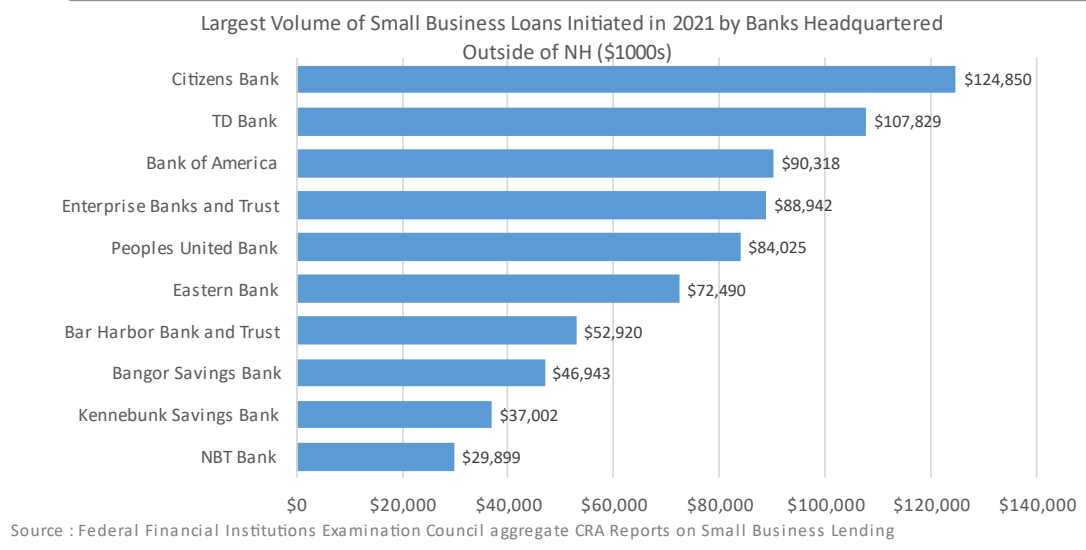
A. The Importance of Deposits in Any Banks Located in New Hampshire

Figure 1 presented trends in public deposits of banks headquartered in New Hampshire. However, regardless of where the bank is headquartered, public funds deposited in bank offices located in the state will have a positive impact on the New Hampshire economy by providing funds that banks can use to meet the credit needs of business and individuals in the state. Banks are obligated to serve the communities in which they are located by helping to meet the credit needs of residents and businesses in areas they are located. The Community Reinvestment Act (CRA) is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low- and moderate-income neighborhoods, and small businesses, consistent with safe and sound banking operations. It was enacted by the Congress in 1977 and is implemented by regulations.

The CRA requires that each insured bank’s record in helping meet the credit needs of its entire community be evaluated periodically. In addition, banks with assets over a certain dollar amount are required to report on their small businesses and home mortgage lending by geographic region. Examining the most recent CRA data on small business lending (2021), shows how important banks with offices in New Hampshire but that are headquartered in another state are to meeting the credit needs of New Hampshire’s small businesses. In 2021, banks headquartered in New Hampshire had over \$1.2 billion dollars in small business loans on their

books, including loans made in 2021 and loans with balances remaining from prior years.¹ In 2021, banks with over \$1.3 billion in assets were required to report their small business lending activity by geographic region. Figure 3 shows the volume of loans made just in 2021, by the 10 banks with the largest volume of small business loans made in that year, by banks with locations in New Hampshire but headquartered in another state. With over \$735 million in small business loans issued in 2021, by just these 10 banks, it is apparent that increasing public deposits in any banks located in New Hampshire will provide banks with funds needed to meet the credit needs of businesses and individuals in the state.

Figure 3
Banks With Offices in New Hampshire but Headquartered in Another State are an Important Source of Small Business Lending in the State



III. State and Local Government Funds Invested Outside of New Hampshire

As of June 30, 2023, over \$530 million in public funds in New Hampshire are invested through the New Hampshire Public Deposit Investment Pool. A review of public documents detailing the institutions and financial instruments where the \$530 million is invested shows a wide variety of national and international organizations benefiting from the use of public funds derived from New Hampshire businesses and individuals.

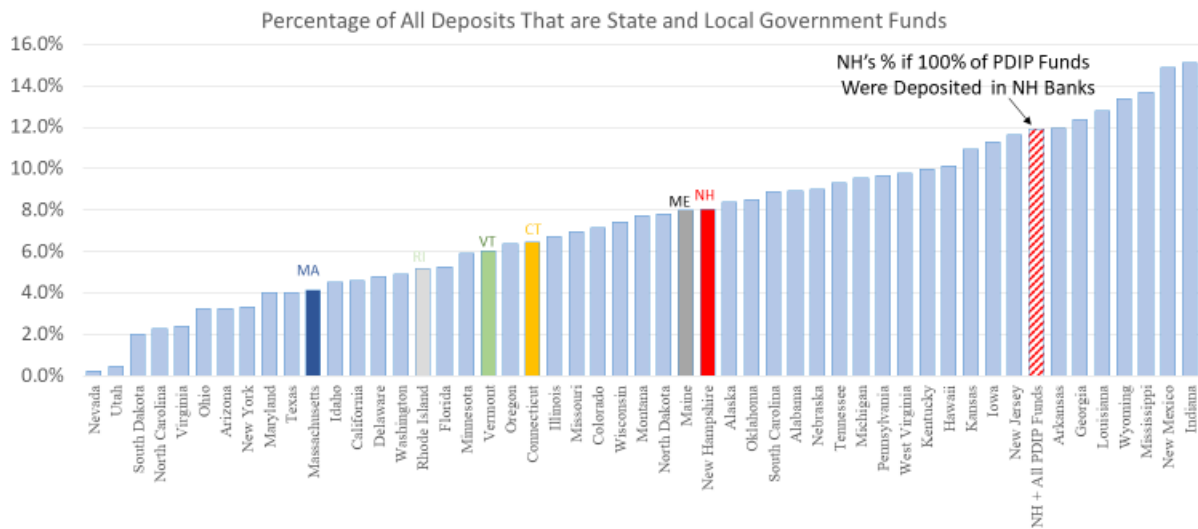
¹ Federal Financial Institutions Examination Council, CRA lending data, accessed online at <https://www.ffiec.gov/craadweb>

With \$1.1 billion in public deposits, at 8 percent, of all deposits, New Hampshire headquartered banks rank in the middle of all states in the percentage of their deposits that are the funds of state and local governments (Figure 4). Figure 4 also shows (in the red, dashed bar) where New Hampshire would rank if all of the \$530 million currently (as of June 30, 2023) deposited through the NHPDIP were deposited in New Hampshire banks.

A. Benefits of Investing Public Funds Out-of-State

The most recent quarterly financial report of the New Hampshire Public Deposit Investment Pool shows that deposits in the pool earned approximately \$6.7 million in the second quarter of 2023, implying a yield of between 1.2% and 1.3% for the quarter. While yields will vary over time, this implies an annualized yield of approximately five percent and estimated earnings of \$26.8 million on \$530 million of New Hampshire state and local government funds invested through the NHPDIP. For purposes of this study, these figures will be compared to yields from investing public funds in banks located in the State of New Hampshire in 2023 and beyond.

Figure 4
A Comparatively High Percentage of Deposits in New Hampshire Headquartered Banks are State and Local Government Deposits But Would be Much Higher if NHPDIP Funds Were Included



Source: FDIC, PolEcon calculations

IV. Impacts of Investing Public Funds in New Hampshire Banks

A simple comparison of yields from public funds invested through the NHPDIP and deposits in New Hampshire banks is not possible because rates at New Hampshire banks vary and can be negotiated by state and local governments. In addition, comparing nominal yields on investments through the NHDIP with yields on bank deposits in New Hampshire does not account for the economic benefits, including revenue, jobs, and income increases, that accrue in New Hampshire from reinvesting local public funds in the New Hampshire economy through their impact on bank lending.

This study projects the additional government revenue that would result from the economic activity produced by retaining public funds in banks located in New Hampshire. Those funds will support increased lending to businesses by banks in the state. In addition, public funds deposited in banks in New Hampshire will earn interest income. Combined, the tax revenue impacts along with the interest earned on public deposits kept in state are the returns or yield on public deposits retained in banks in New Hampshire. Calculated yields on deposits in banks located in the state (state and local revenue impacts plus interest income) can be compared to the yield on public funds invested out-of-state through the NHPDIP. That analysis can help inform government officials and policymakers where the best returns on public funds can be realized.

Our estimate of the total return or yield on public funds invested in New Hampshire banks uses the following methodology:

- Increasing deposits at New Hampshire banks makes funds available for increased lending to local business and individuals.
- We examine the asset mix of New Hampshire banks to determine the portion of deposits that are allocated to lending to businesses and estimate the increase in business lending that would result if public funds invested through the NHPDIP are, instead, deposited in banks located in New Hampshire.
- We use an econometric model of the State of New Hampshire to determine the economic impacts that increased business lending would have on key economic variables – the state’s gross domestic product, jobs in the state, personal income, and the state’s labor force.
- We econometrically determine the relationship between both state and local government revenues and changes in the state’s gross domestic product.
- Using impacts on gross state product from increased lending and business investment, we calculate the impact of increased public deposits in banks in New Hampshire will have on state and local government revenues.
- The increase in government revenue resulting from additional lending to businesses is a type of “yield” on public deposits in New Hampshire banks.
- We show the total effective yield on public deposits by adding the yield on public deposits in the form of tax revenues to different interest rates on public deposits in

- banks located in New Hampshire.
- The total yield (from state and local revenue and earned interest at banks) on public deposits in banks in New Hampshire is then compared to the yield on investments made through the NHPDIP. This calculation provides an estimate of the interest rate on public deposits in banks in New Hampshire, added to the yield from state and local revenue gains, required to equal or exceed the yield on NHPDIP investments.

V. Impact on Business Lending and Investment

The primary mechanism by which retaining public funds in deposits in banks located in New Hampshire can impact the state and its local economies is by increasing bank liquidity and providing funds for lending. We consider only the impacts from increases in business lending in calculating the impacts from increasing public deposits in New Hampshire banks. Individuals will also benefit from the increased supply of loanable funds that additional public deposits will support, but the primary economic impacts will be realized by increased business lending and resulting business investment. We model impacts of additional lending as increases in business investment, although not all business lending will increase business investment (which has the largest economic benefits), this is offset by not including impacts from lending to individuals in our calculations. Overall, increases in lending to individuals will be larger than increases in business lending resulting from the public funds retained in New Hampshire.

It is important to note that the impacts of increased lending to business supported by depositing public funds in banks located in New Hampshire will primarily accrue to small businesses. Small firms, especially those with 20 or fewer employees, are most dependent on local banks for funding, while large businesses have access to an array of national funding sources. With greater competition for deposits of all types from non-bank financial service providers, small businesses (who rely most on local banks for credit) are most at risk of having difficulty in obtaining needed credit.

Approximately 90 percent of the volume of deposits at banks in New Hampshire is used by banks to make loans. Those loans are for home mortgages, automobiles, consumer loans, as well a variety of types of business loans. Since 2010, the median percentage of deposits at New Hampshire banks that have funded business lending in three categories: construction and development loans, commercial real estate loans, and commercial and industrial loans has been 5.8, 21.1, and 7.3 percent respectively. Using these percentages, we can estimate the additional business lending that will result from an increase in public deposits at banks located in New Hampshire. Table 1 estimates the increase in business lending that will result from a portion of \$530 million of public funds deposited in banks in New Hampshire rather than invested out-of-state through the NHPDIP.

Table 1					
Increase in Business Lending From a % of Public Funds Moving From NHPDIP to New Hampshire Banks					
		Percent of Deposits That Fund Business Loans			
		Construction & Development	Commercial Real Estate	Commercial & Industrial	Total
% of NHPDIP Investments	Increase in Deposits				
		5.8%	21.1%	7.3%	34.3%
50%	\$265,000,000	\$15,413,028	\$56,009,226	\$19,441,771	\$90,864,024
60%	\$318,000,000	\$18,495,633	\$67,211,071	\$23,330,125	\$109,036,829
70%	\$371,000,000	\$21,578,239	\$78,412,916	\$27,218,479	\$127,209,634
80%	\$424,000,000	\$24,660,844	\$89,614,761	\$31,106,834	\$145,382,439
90%	\$477,000,000	\$27,743,450	\$100,816,606	\$34,995,188	\$163,555,244
100%	\$530,000,000	\$30,826,056	\$112,018,451	\$38,883,542	\$181,728,049

Source: FDIC bank quarterly financial reports, PolEcon calculations

VI. Business Lending and Investment Impacts on Gross State Product

If instead of public funds being invested in out-of-state and international organizations and financial instruments through the NHPDIP, funds were deposited in banks located in New Hampshire, the resulting increase in business lending will produce additional economic activity in the state and increase the state’s gross domestic product (GDP). The increase in GDP will depend on the percentage of public funds that are deposited in banks in New Hampshire rather than with the NHPDIP. Taking the current (as of June 30, 2023) \$530 million in public funds invested through the NHPDIP as a starting point, along with the impact on business lending that will result from increased deposits in banks in New Hampshire from Table 1, we use a sophisticated model of the New Hampshire economy to project the change in the state’s GDP from 2023 through 2030 that will result from increases in business lending depending on the percentage invested through the NHPDIP that would instead, be deposited in banks located in New Hampshire. For this analysis we assume, conservatively, that public funds will increase by three percent annually through 2030, well below recent trends.

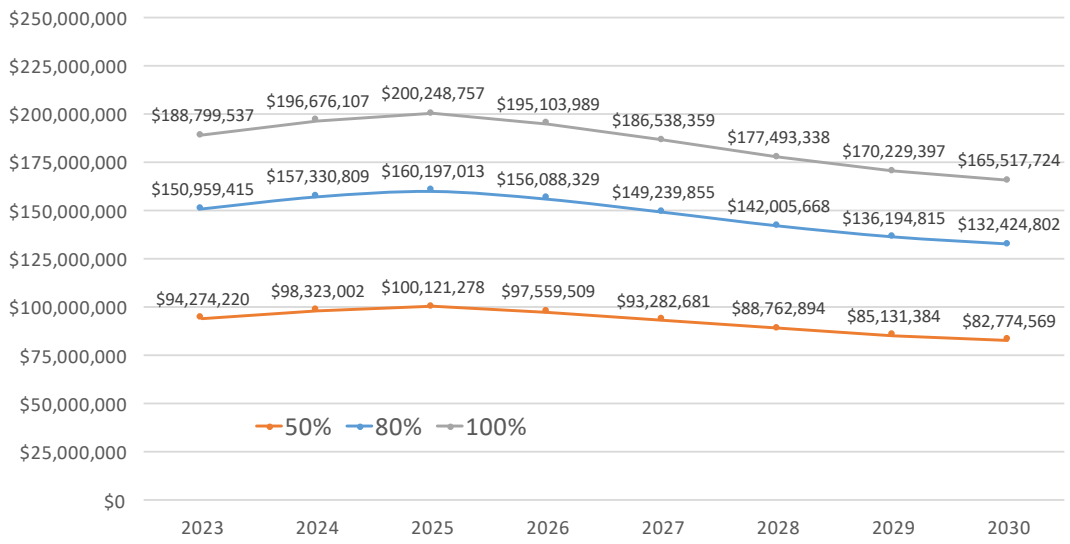
Table 2 presents estimated impact on New Hampshire’s GDP for the years 2023 to 2030 and depending on the percentage of investments made through the NHPDIP that will instead be deposited in banks in New Hampshire.

If 50 percent of the funds invested in the NHPDIP were, instead, deposited in New Hampshire banks, according to the calculations in Table 1, business lending would have increased by \$90.9 million dollars in 2023. Table 2 shows that with that increase in business lending, the state’s GDP would increase by \$94.3 million in response to the increase in business lending and resulting business investment. If all NHPDIP funds were deposited in banks in New Hampshire, state GDP would have increased by an additional \$188.8 million in 2023.

Table 2 Impact on NH GDP From Increased Business Lending and Investment (Depending % of NH PDIP Funds Deposited in Banks in NH)						
Year	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	\$94,274,220	\$113,130,070	\$132,039,648	\$150,959,415	\$169,879,378	\$188,799,537
2024	\$98,323,002	\$117,987,788	\$137,658,427	\$157,330,809	\$177,003,369	\$196,676,107
2025	\$100,121,278	\$120,146,367	\$140,171,698	\$160,197,013	\$180,222,670	\$200,248,757
2026	\$97,559,509	\$117,072,740	\$136,581,241	\$156,088,329	\$175,595,888	\$195,103,989
2027	\$93,282,681	\$111,940,834	\$130,591,447	\$149,239,855	\$167,888,806	\$186,538,359
2028	\$88,762,894	\$106,517,148	\$124,262,681	\$142,005,668	\$159,749,202	\$177,493,338
2029	\$85,131,384	\$102,159,234	\$119,178,308	\$136,194,815	\$153,211,829	\$170,229,397
2030	\$82,774,569	\$99,330,837	\$115,879,012	\$132,424,802	\$148,971,025	\$165,517,724

Figure 5 shows how the relationship between increased deposits at banks in New Hampshire and state GDP for three levels of deposits moving from the NHPDIP to banks in the state, for the years 2023 through 2030.

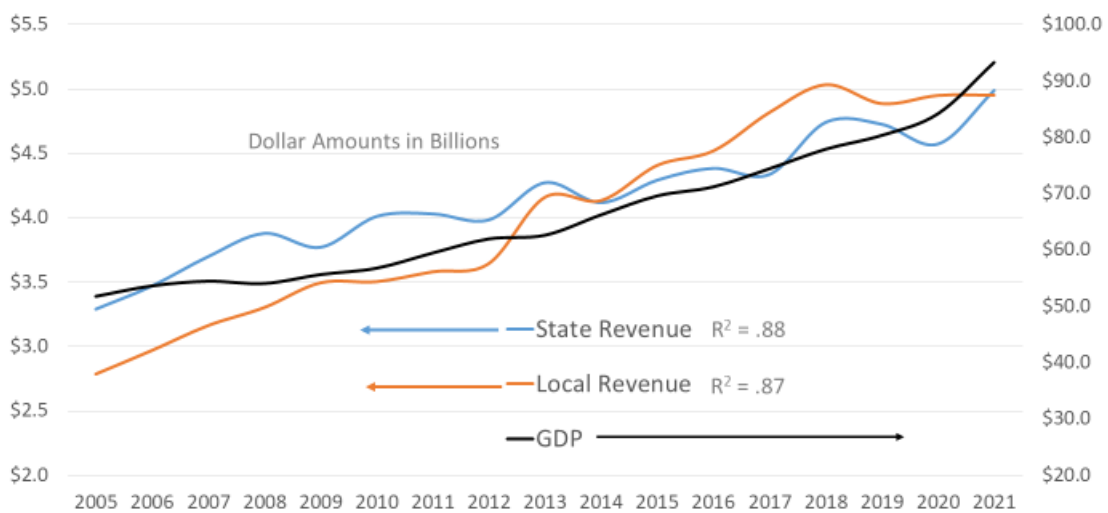
Figure 5
If all Public Funds in the NHPDIP Moved to Banks Located in New Hampshire, Increased Business Lending and Investment Would Increase State GDP by as Much as \$200 Million



VII. State and Local Government Revenue Impacts

For any level of change in the gross state product in New Hampshire's economy there will be a change in the revenue generated for state and local governments. Figure 6 presents the relationship between New Hampshire GDP and state and local own source revenue (revenue not received from another level of government) between 2005 and 2021.

Figure 6
The Relationship Between Changes in New Hampshire Gross Domestic Product and State and Local "Own Source" Revenue (2005 to 2021)



The figure shows a strong relationship between state GDP and both state and local own source revenues. An econometric (regression) analysis confirms a strong and highly statistically significant relationship between changes in state GDP and state and local revenues, indicating that changes in GDP account for between 88 and 87 percent of the change in state and local government own source revenues. Since 2005, for every one dollar change in New Hampshire's GDP, on average, there has been a \$0.059 change in state government revenues, and a \$0.063 change in local government revenues. Figure 7 shows projected changes in state and local government revenue in 2023, if public funds had been deposited in banks located in New Hampshire rather than in non-local investments through the NHPDIP and depending on the percentage of public funds in the NHPDIP shifted to banks in New Hampshire.

Figure 7
Change in State and Local Government Revenue in 2023 Resulting From Increased Public Funds Deposited in New Hampshire Banks and Depending on the Percentage of 2023 NHPDIP Investments Moved to New Hampshire Banks

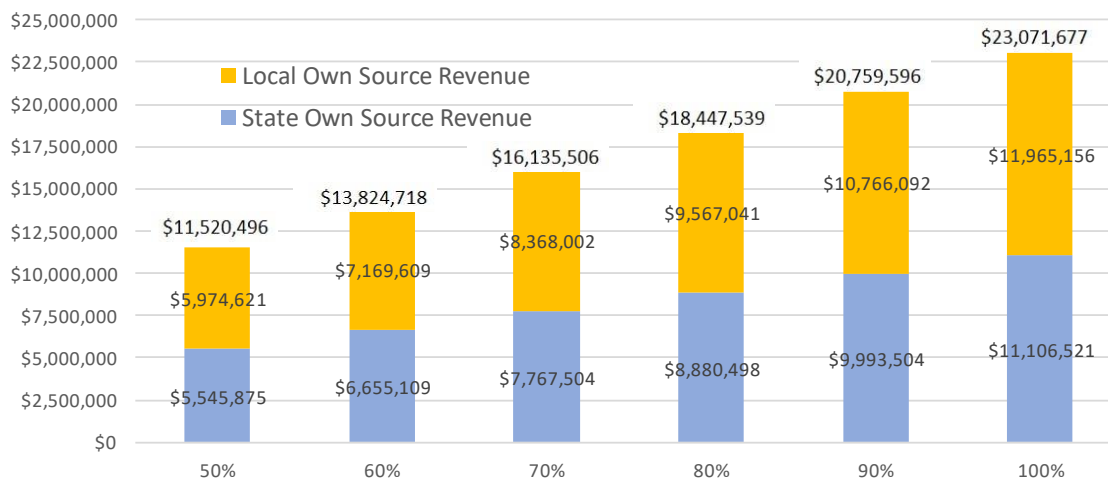


Table 3 shows the projected increase in state and local government revenue that would result from shifting public funds invested in out-of-state institutions and instruments through the NHPDIP to New Hampshire banks for the years 2023 to 2030, and according to the percentage of funds in the NHPDIP shifted to banks in New Hampshire.

Year	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	\$11,520,496	\$13,824,718	\$16,135,506	\$18,447,539	\$20,759,596	\$23,071,677
2024	\$12,015,265	\$14,418,341	\$16,822,132	\$19,226,136	\$21,630,162	\$24,034,209
2025	\$12,235,018	\$14,682,123	\$17,129,259	\$19,576,392	\$22,023,566	\$24,470,794
2026	\$11,921,965	\$14,306,520	\$16,690,498	\$19,074,302	\$21,458,165	\$23,842,093
2027	\$11,399,328	\$13,679,391	\$15,958,533	\$18,237,405	\$20,516,344	\$22,795,356
2028	\$10,847,001	\$13,016,606	\$15,185,145	\$17,353,373	\$19,521,668	\$21,690,037
2029	\$10,403,223	\$12,484,060	\$14,563,825	\$16,643,276	\$18,722,788	\$20,802,369
2030	\$10,115,216	\$12,138,425	\$14,160,644	\$16,182,573	\$18,204,554	\$20,226,593

Table 3 shows that public funds deposited in banks located in New Hampshire produce income for state and local governments in the form of increased revenues, and in addition to the direct yield (interest income) associated with having interest bearing deposits in local banks.

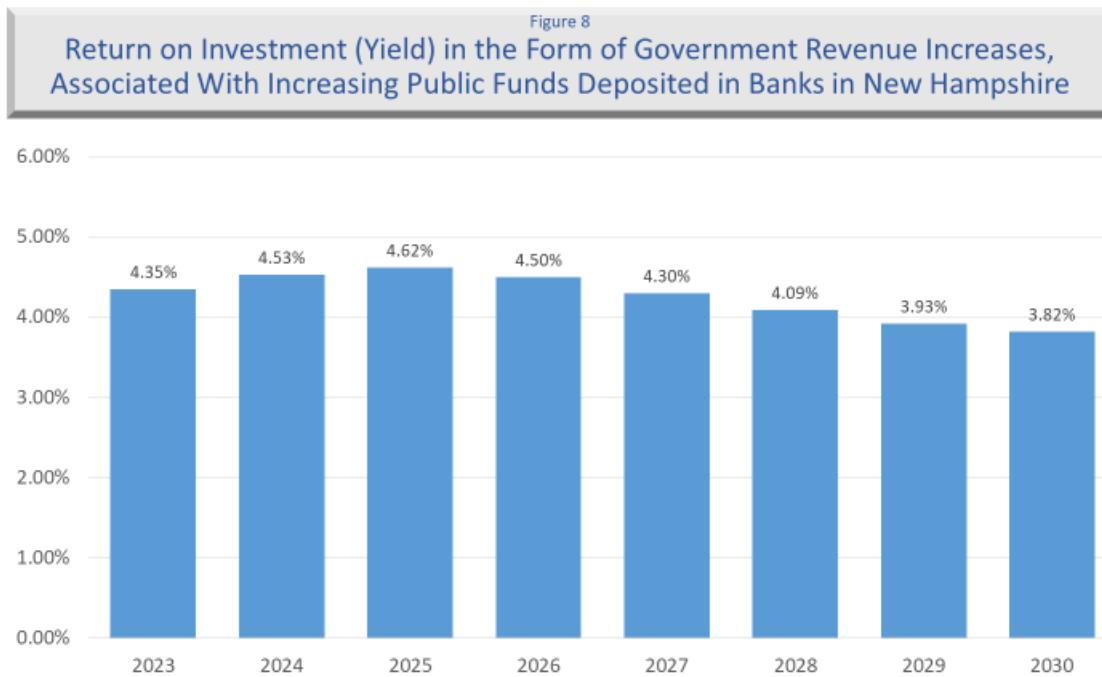
Table 3 indicates that if all public funds invested in the NHPDIP had instead been deposited in banks in the state, then the income generated - in the form of increased revenues, would nearly equal the reported in NHPDIP financial reports, even before including any interest earned on the funds deposited in banks located in New Hampshire.

Tax laws and rates will change, as will sources of state and local revenue, and it is not possible to say with certainty how the projected revenues resulting from depositing public funds in banks located in New Hampshire will be distributed over time. However, we can be certain the increased business lending and investment will produce substantial additional revenue. Table 4 uses the current distribution of state and local own source revenue to allocate the projected revenue increases in Table 3 among different revenue sources for the years 2024 through 2028. The table shows that if all funds currently invested out-of-state through the NHPDIP were deposited in banks in New Hampshire, and using 2023 revenue sources, then over \$56.2 million of state revenue and \$60.6 million of local revenue would be generated between 2024 and 2028.

Table 4						
Distribution of Estimated Revenue Resulting From Moving all Public Deposits in NHPDIP to Banks Located in New Hampshire						
State Revenue	2024	2025	2026	2027	2028	Totals
Business Taxes	\$4,615,266	\$4,699,103	\$4,578,374	\$4,377,370	\$4,165,117	\$22,435,229
Meals and Rentals Tax	\$1,168,023	\$1,189,240	\$1,158,686	\$1,107,816	\$1,054,100	\$5,677,865
Tobacco Tax	\$798,112	\$812,610	\$791,732	\$756,973	\$720,268	\$3,879,696
Liquor Commission	\$466,329	\$474,800	\$462,602	\$442,292	\$420,846	\$2,266,869
Insurance Tax	\$574,846	\$585,288	\$570,251	\$545,215	\$518,779	\$2,794,379
Communications Tax	\$102,651	\$104,516	\$101,831	\$97,360	\$92,639	\$498,996
Real Estate Transfer Tax	\$753,386	\$767,071	\$747,363	\$714,552	\$679,904	\$3,662,276
State Property Tax	\$964,553	\$982,075	\$956,843	\$914,835	\$870,476	\$4,688,783
All Other Revenue Sources	\$2,126,710	\$2,165,342	\$2,109,711	\$2,017,088	\$1,919,282	\$10,338,133
	\$11,569,876	\$11,780,044	\$11,477,393	\$10,973,502	\$10,441,410	\$56,242,226
Local Revenue	2024	2025	2026	2027	2028	Totals
Property Tax	\$10,536,083	\$10,727,473	\$10,451,864	\$9,992,997	\$9,508,448	\$51,216,866
Other Taxes	\$261,379	\$266,127	\$259,289	\$247,906	\$235,885	\$1,270,585
Charges and Fees	\$1,666,871	\$1,697,150	\$1,653,547	\$1,580,952	\$1,504,293	\$8,102,813
	\$12,464,333	\$12,690,750	\$12,364,700	\$11,821,854	\$11,248,627	\$60,590,263

The state and local government revenue from increasing deposits in New Hampshire banks, and the associated increases in business lending, investment, and state GDP, can be considered another form of yield on public funds. Figure 8 shows the implied yield (increase in revenues) on public funds deposited in New Hampshire banks, again for each year between 2023 and 2030 and according to the percentage of funds deposited in banks in New Hampshire rather than in out-of-state organizations and instruments through the NHPDIP. As the chart shows, the implied yield on deposits in New Hampshire banks from state and local government revenues is

nearly equal to the yield on investments reported by the NHPDIP.



In addition to the yield from state and local revenue gains associated with deposits in New Hampshire banks, funds deposited in interest bearing accounts in banks located in New Hampshire will also generate interest income for New Hampshire state and local governments. Deposit yields vary by New Hampshire bank and government financial officers can negotiate yields on their deposits, but a review of rates on time deposits offered by New Hampshire banks as of this report showed an average yield of 3.5 percent, while discussions with government finance officials indicates that yields at banks can approach those reported by the NHDIP. Even if the yield on deposits in New Hampshire banks is below the yield reported by the NHPDIP, however, the combined income generated from the increase in revenues and the direct yield on bank deposits will equal or exceed the yield from investments made through the NHPDIP. Table 5 shows the interest income on public funds deposited in New Hampshire banks that would be earned according to yield and percentage of public funds moved from out-of-state investments to New Hampshire banks.

Yield	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
3.0%	\$7,950,000	\$9,540,000	\$11,130,000	\$12,720,000	\$14,310,000	\$15,900,000
3.5%	\$9,275,000	\$11,130,000	\$12,985,000	\$14,840,000	\$16,695,000	\$18,550,000
4.0%	\$10,600,000	\$12,720,000	\$14,840,000	\$16,960,000	\$19,080,000	\$21,200,000
4.5%	\$11,925,000	\$14,310,000	\$16,695,000	\$19,080,000	\$21,465,000	\$23,850,000
5.0%	\$13,250,000	\$15,900,000	\$18,550,000	\$21,200,000	\$23,850,000	\$26,500,000
5.5%	\$14,575,000	\$17,490,000	\$20,405,000	\$23,320,000	\$26,235,000	\$29,150,000

Table 6 combines both the direct yield (interest income) on public funds deposited in banks in New Hampshire with the projected yield (tax revenues) resulting from increased business lending and economic activity, to produce total projected monetary returns on public funds deposited in New Hampshire banks.

Yield	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
3.00%	\$19,470,496	\$23,364,718	\$27,265,506	\$31,167,539	\$35,069,596	\$38,971,677
3.50%	\$20,795,496	\$24,954,718	\$29,120,506	\$33,287,539	\$37,454,596	\$41,621,677
4.00%	\$22,120,496	\$26,544,718	\$30,975,506	\$35,407,539	\$39,839,596	\$44,271,677
4.50%	\$23,445,496	\$28,134,718	\$32,830,506	\$37,527,539	\$42,224,596	\$46,921,677
5.00%	\$24,770,496	\$29,724,718	\$34,685,506	\$39,647,539	\$44,609,596	\$49,571,677
5.50%	\$26,095,496	\$31,314,718	\$36,540,506	\$41,767,539	\$46,994,596	\$52,221,677

Table 6 shows that the combined returns from interest earned on deposits in New Hampshire banks along with the increases in tax revenues generated by the additional lending to businesses and increases in state GDP that the deposits would support. It shows that the combined returns (interest income and tax revenue) from public funds deposited in New Hampshire banks exceeds the yield on public funds invested through the NHPDIP in out-of-state organizations and financial instruments. Using the combined returns on deposits in Table 6, an implied total annual yield on public funds deposited in banks in New Hampshire can be calculated. Those yields are presented in Table 7.

Table 7
Combined Annual Yield on Public Funds (Revenue From Lending and Investment Plus Yield on Deposits) Deposited in Banks in New Hampshire By Yield on Deposits and Percentage of Public Funds Moved From NHPDIP to Banks in New Hampshire

Yield	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
3.0%	7.35%	7.35%	7.35%	7.35%	7.35%	7.35%
3.5%	7.85%	7.85%	7.85%	7.85%	7.85%	7.85%
4.0%	8.35%	8.35%	8.35%	8.35%	8.35%	8.35%
4.5%	8.85%	8.85%	8.85%	8.85%	8.85%	8.85%
5.0%	9.35%	9.35%	9.35%	9.35%	9.35%	9.35%
5.5%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%

The results presented in Table 7 suggest that the yield, in terms of total state and local tax revenue, on funds deposited in New Hampshire banks is approximately 4.35 percent (total annual yield minus yield on interest bearing accounts equals 4.35 percent). In addition, these results suggest that even if the annual percentage yield on public funds deposited in banks in New Hampshire is just 2.0 percent, the total return on public funds deposited in New Hampshire banks will remain greater than the current reported yield on funds placed in out-of-state organizations and investments through the NHPDIP.

Caveats

Although the total return on public funds is estimated to exceed the return on funds placed outside of the state through the NHPDIP, individual communities, the state, or governmental agencies, cannot be certain of the total yield on their deposits. Rather, the yields presented in Table 7 represent the aggregate yield that will accrue to the State of New Hampshire, its communities, and agencies, from depositing public funds in banks in New Hampshire. In addition, the results in the tables above apply to funds deposited in non-transaction accounts (time and savings accounts) that have higher annual yields. These would likely be “excess” funds not needed on short notice and typically are the funds most likely to be invested through the NHPDIP. Finally, the return on deposits in the form of state and local revenue generated from additional business lending and investment will vary according to economic conditions. Still, because they support business lending and investment, and growing business in the state, public funds deposited in banks in New Hampshire will continue to produce revenue in the future, and for years beyond years in which the initial deposits and lending occurred.

VIII. Impact on Labor Force, Jobs, and Personal Income

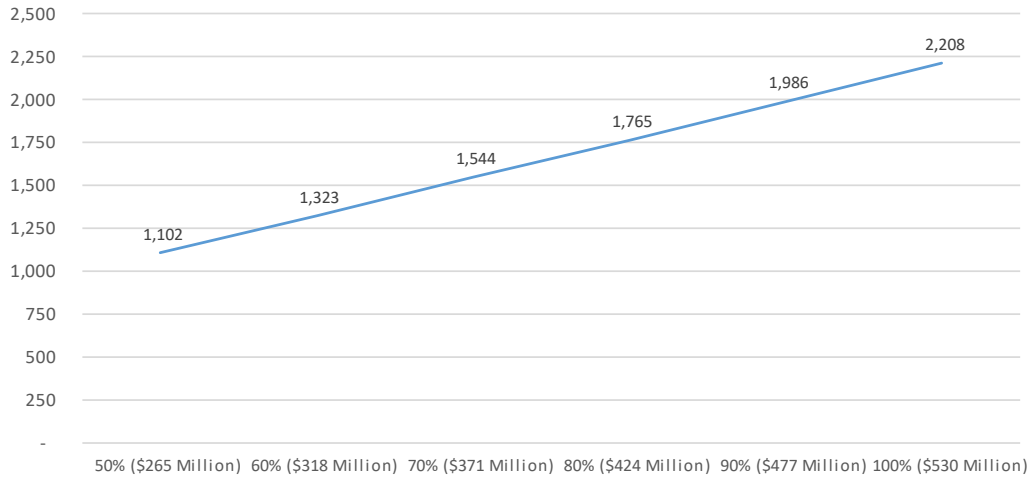
Depositing the public funds of New Hampshire governments and agencies in banks located in New Hampshire assures that the funds will support the credit needs of New Hampshire businesses and households. In addition to the direct monetary returns on deposits in New Hampshire banks (interest earned on deposits) and the indirect returns (government revenues), public funds deposited in New Hampshire banks will support increased economic activity and growth in the state.

To project various economic impacts resulting from increasing public deposits in New Hampshire banks, we use the estimated increase in business lending and investment presented in Table 1. The dollar amounts of business lending supported by increased public deposits in banks in the state were run through an econometric model of the New Hampshire economy to project the economic impacts presented in the following sections. Again, although they have positive impacts on the New Hampshire economy, increases in economic activity resulting from additional lending to households and individuals is not considered in the projections of economic impacts presented here.

A. Job Impacts

Additional business lending supported by public deposits in banks in the state will increase business investment in New Hampshire and increase employment. Increases in New Hampshire employment are an important but non-monetary return on public funds deposited in banks in the state. Figure 9 shows the projected job impacts that would occur if the current level (\$530 million) of public funds invested in out-of-state organizations and financial instruments through the NHPDIP were, instead, deposited in banks located in New Hampshire. The figure shows that if all public funds were deposited in New Hampshire banks, employment in New Hampshire in 2023 is projected to be 2,208 jobs above the number of jobs without the addition of the \$530 million public deposits in New Hampshire banks.

Figure 9
2023 Job Impacts in New Hampshire From Increases in Public Funds Deposited in New Hampshire Banks



We do not know the level of public funds that will be invested in the NHPDIP in future years. Using current year volume as a base, Table 8 presents projected job impacts from increased public funds deposited in banks in New Hampshire for each year between 2023 and

Table 8 Employment Impacts From Increased Public Deposits in NH Banks (Depending on % of NHPDIP Funds Deposited in Banks in New Hampshire)						
	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	1,102	1,323	1,544	1,765	1,986	2,208
2024	1,128	1,353	1,579	1,805	2,030	2,256
2025	1,098	1,318	1,537	1,757	1,977	2,196
2026	1,024	1,229	1,434	1,638	1,843	2,048
2027	935	1,122	1,309	1,496	1,684	1,871
2028	851	1,021	1,191	1,361	1,531	1,701
2029	778	934	1,090	1,245	1,401	1,556
2030	721	865	1,010	1,154	1,298	1,442

2030 and according to the increase in the percentage and volume of deposits placed in banks in the state rather than invested out-of-state through the NHPDIP. While all public funds may not be deposited in banks located in New Hampshire, it is reasonable to expect that the benefits associated with deposits remaining in the state could result in a substantial percentage of the

public funds in the NHPDIP to be deposited in banks in New Hampshire. Thus, the employment impacts resulting from adding 70 to 90 percent of the public funds leaving the state through the NHPDIP are highlighted by shading table cells in that range.

B. Labor Force Impacts

Increases in job opportunities and employment associated with increased deposits and business lending by banks in New Hampshire will increase the state’s labor force, either via increased labor force participation by current residents or by the migration of individuals into the state. Table 9 shows that in 2023, labor force increases are projected to range from an increase of between 228 and 444 depending on the percentage of funds invested through the NHPDIP were, instead, deposited in New Hampshire banks. Labor force impacts increase as the annual job growth increases in response to increased business investment make employment opportunities in the state more plentiful and apparent.

Table 9 Labor Force Impacts From Increased Public Deposits in Banks in New Hampshire (Depending on % of NHPDIP Funds Deposited in Banks in New Hampshire)						
Year	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	228	274	317	359	401	444
2024	384	461	538	615	691	768
2025	490	588	686	784	882	980
2026	555	666	777	888	999	1,110
2027	589	707	824	942	1,060	1,178
2028	602	722	843	963	1,084	1,204
2029	596	715	834	953	1,073	1,192
2030	583	699	816	932	1,049	1,165

C. Impacts on Personal Income

Employment increases in New Hampshire resulting from additional bank business lending and investment supported by retaining public deposits in banks in the state will increase total wages and salaries in New Hampshire. Increases in total wages and salaries will be circulated throughout the state’s economy via personal consumption expenditures. In 2023, if all public funds invested in the NHPDIP had been deposited in New Hampshire banks, personal income in the state is projected to be \$171 million higher. Table 10 shows the projected increase in personal income in New Hampshire each year from 2023 to 2030 resulting from increased public funds deposited in banks in the state.

Table 10						
Personal Income Impacts From Increased Public Deposits in NH Banks						
(Depending on % of NH PDIP Funds Deposited in NH Banks)						
Year	50% (\$265 Million)	60% (\$318 Million)	70% (\$371 Million)	80% (\$424 Million)	90% (\$477 Million)	100% (\$530 Million)
2023	\$85,283,997	\$102,342,849	\$119,508,547	\$136,705,513	\$153,903,098	\$171,101,301
2024	\$95,353,552	\$114,426,936	\$133,519,093	\$152,617,018	\$171,715,856	\$190,815,605
2025	\$101,505,559	\$121,810,334	\$142,127,678	\$162,449,031	\$182,771,595	\$203,095,504
2026	\$102,760,710	\$123,316,894	\$143,879,345	\$164,443,982	\$185,009,925	\$205,577,270
2027	\$101,153,986	\$121,388,751	\$141,625,328	\$161,862,705	\$182,101,341	\$202,341,313
2028	\$98,394,140	\$118,076,565	\$137,757,894	\$157,439,037	\$177,121,300	\$196,804,748
2029	\$95,805,344	\$114,969,527	\$134,130,972	\$153,291,611	\$172,453,202	\$191,615,800
2030	\$93,830,744	\$112,599,474	\$131,364,795	\$150,128,977	\$168,893,929	\$187,659,701

IX. Conclusions

This primary conclusion of this report is that the impact from public funds of state and local government in New Hampshire and their agencies, when deposited in banks in New Hampshire, produce aggregate fiscal and economic benefits that will exceed the monetary benefits (yield), from investing public funds in out-of-state and international organization and financial instruments through the New Hampshire Public Deposit Investment Pool. We find that if all the current public funds invested through the NHPDIP were deposited in banks in New Hampshire, bank lending to households and businesses in New Hampshire would increase, increasing business investment and raising the state's gross domestic product. The increased economic activity resulting from an increase in public funds deposited in Banks in New Hampshire would increase state and local tax revenue by as much as \$117 million between 2024 and 2028. Along with between \$16 and \$29 million annual interest earned on deposits in New Hampshire banks, the combined yield from increases in tax and fee revenue and interest on bank deposits significantly exceeds the yield on funds invested in the New Hampshire Public Deposit Investment Pool. In addition to the monetary benefits from depositing public funds in banks in New Hampshire, the state would realize employment gains of as much as 2,256 annually by depositing all funds currently in the NHPDIP in banks in the state. The findings from this analysis should encourage policymakers and government finance officers to look beyond simple comparisons of yields when deciding on where to place public funds and consider the larger impacts that keeping public funds in local depository institutions will have on businesses, individuals, and the economy of the state and communities.