



# Memorandum

Date: May 8, 2018

To: Newark Community Foundation

From: Jason Horwitz  
Director of Public Policy and Economic Analysis, Anderson Economic Group

Re: HQ2 in Newark: Value of State and Local Incentives to Amazon

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In September 2017, Amazon announced its intention to establish a second corporate headquarters (known as “HQ2”) in North America, and issued a detailed request for proposals (RFP) from interested cities or regions. Amazon received 238 responses and, in January 2018, announced 20 finalists, including Newark, New Jersey.

Amazon’s HQ2 has the potential to be a catalytic development for the state and local economy in Newark. Amazon expects to invest up to \$5 billion to construct up to 8 million square feet of office space, and hire as many as 50,000 employees at the chosen site for HQ2. In an effort to attract Amazon to Newark, the City of Newark and State of New Jersey have assembled an incentive package that includes income tax credits, a payroll tax waiver, and a property tax abatement. The Newark Community Foundation (NCF), a division of the Community Foundation of New Jersey, retained Anderson Economic Group (AEG) to analyze the total savings to Amazon resulting from these incentives.

## Overview of Approach

We created tax impact models that simulate the gradual construction of and employment at Amazon’s HQ2 in Newark in order to estimate the total savings to Amazon from state and local tax incentives. Our models include Corporation Business Tax (CBT) credits offered by the State, along with a local payroll tax waiver and property tax abatement offered by the City.

In order to estimate these savings, we made several assumptions about the construction schedule of, and employment at, Amazon HQ2. Since no local incentive legislation has been passed, we also made assumptions about the structure of the local payroll tax waiver and property tax abatement incentives. For a full description of our methodology and assumptions, see “Methodology” on page 8.

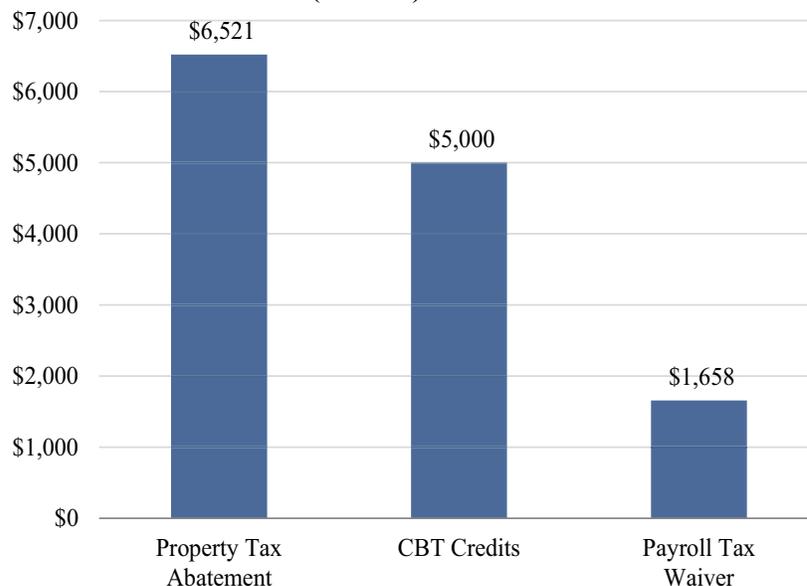
## Summary of Findings

1. The cumulative value of savings from state and local tax incentives for Amazon HQ2 in Newark would total \$13.2 billion over the lifetime of the incentives.

Newark's effort to attract Amazon HQ2 includes state CBT credits, as well as local property and payroll tax incentives. The largest incentive is a 100% property tax abatement with a payment in lieu of taxes (PILOT). The property tax abatement in our model lasts 42 years, and has an estimated value of \$6.5 billion over its lifetime. Amazon would also receive a waiver on Newark's employer payroll tax over 42 years, coinciding with the length of the property tax abatement, amounting to \$1.7 billion. Amazon could also claim up to \$5 billion in CBT credits from the Transformative Headquarters Economic Assistance Program (THEAP).

We show the cumulative savings to Amazon of each incentive over its lifetime in Figure 1 below, and the value of incentives each year in Figure 2 on page 3.

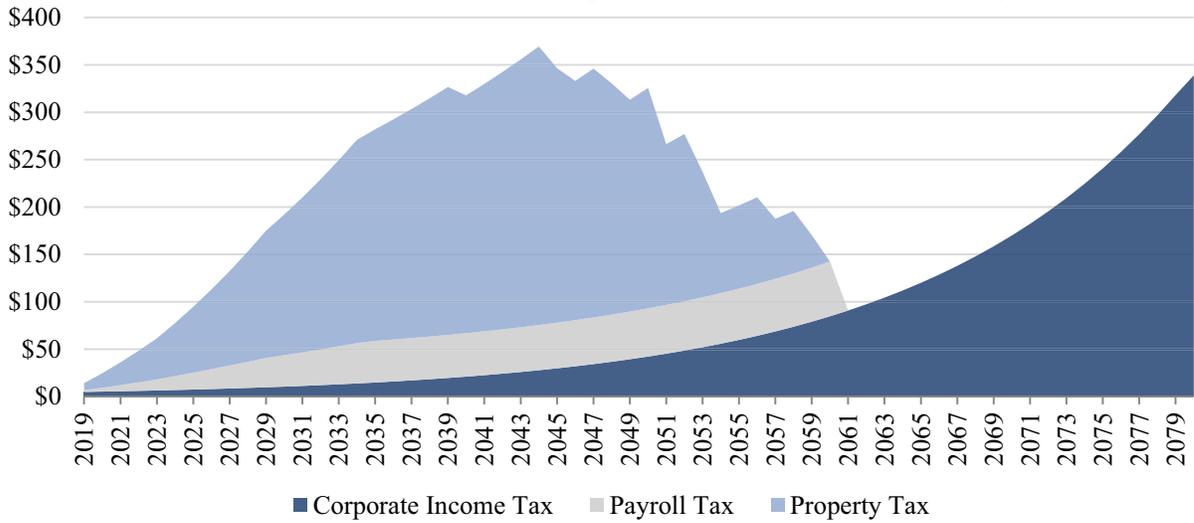
**FIGURE 1. Amazon Newark HQ2 Estimated Total Savings from State and Local Incentives (Millions)**



*Note: CBT credits savings assumes 7.2% or greater annual CBT liability growth in order for Amazon to claim all credits before expiration.*

*Sources: Anderson Economic Group analysis of base data from NCF, Amazon 10-K, 2017, Amazon HQ2 RFP.*

**FIGURE 2. Amazon Newark HQ2 Estimated Savings from State and Local Incentives by Year (Millions)**



Note: CBT credits savings assumes 7.2% annual Corporate Income Tax liability growth.

Sources: Anderson Economic Group analysis of base data from NCF, Amazon 10-K, 2017, Amazon HQ2 RFP.

See “Methodology” on page 8 for detailed information on our analysis.

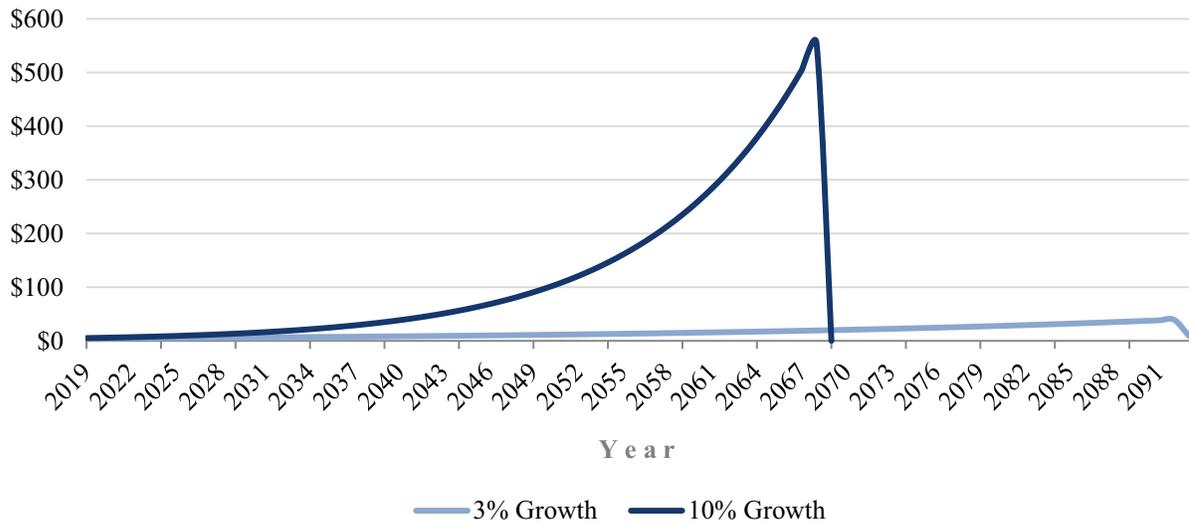
*2. Corporation Business Tax credits for Amazon HQ2 in Newark would likely eliminate Amazon’s New Jersey CBT liability for 45 years or longer.*

Under the Transformative Headquarters Economic Assistance Program (THEAP), Amazon would be eligible for CBT credits of \$10,000 per employee, per year, for 10 years. Amazon would also be able to apply any unused CBT credits for up to 50 years from the first year a credit can be used. If Amazon hires 50,000 employees at HQ2, the total value of credits awarded to Amazon in the next 25 years will total \$5 billion.

The total savings to Amazon will depend on how quickly Amazon’s net income and CBT liability grows. We estimate that, under a 10% net income growth rate, Amazon would use all \$5 billion in tax credits by 2067. Under a lower 3% net income growth scenario, Amazon would have enough tax credits to eliminate its tax liability until 2093.

We estimate that Amazon’s net income would have to grow by 7.2% annually in order for Amazon to use all of the credits against its CBT liability prior to the credits expiring. We show the range of estimated savings to Amazon each year from CBT credits under a 3% and 10% tax liability growth scenario in Figure 3.

**FIGURE 3. Amazon Newark HQ2 Estimated CBT Savings from THEAP Program, by Tax Liability Growth Rate and Year (Millions)**



Note: Savings shown do not include potential sale of credits.

Sources: Anderson Economic Group analysis of base data from NCF, Amazon 10-K, 2017.

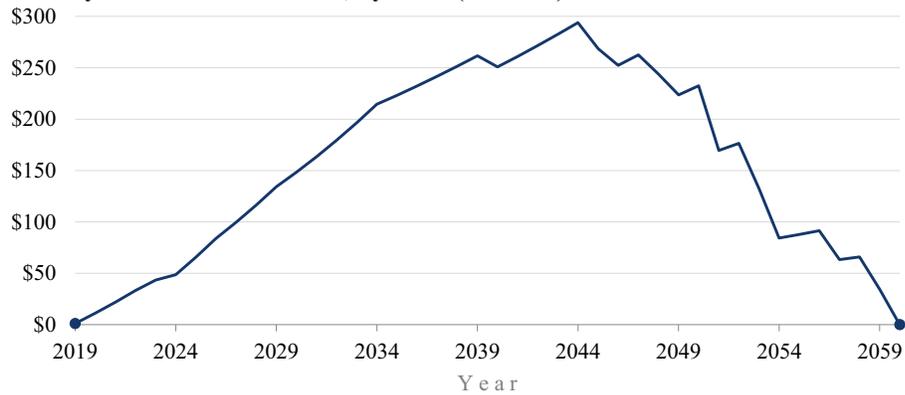
See “THEAP CBT Credits Savings” on page 8 for a description of our THEAP analysis methodology.

3. *The proposed HQ2 property tax abatement and payroll tax waiver would lead to cumulative savings of \$8.6 billion over the 42-year lifespan of the incentives.*

Amazon HQ2 in Newark would receive a 100% property tax abatement and would be subject to payments in lieu of taxes (PILOT). We estimate that a 42-year property tax abatement, less any PILOT, would result in \$6.5 billion in cumulative savings. We show the value of savings to Amazon each year in Figure 4.

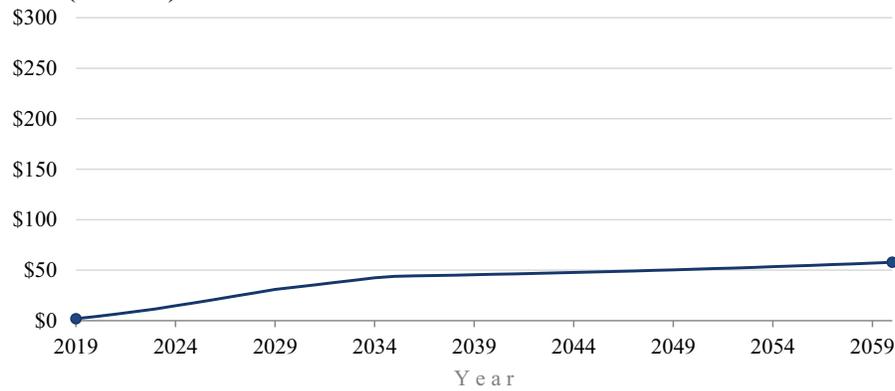
A payroll tax waiver from the City of Newark, which would occur during the same time frame as the property tax abatement, would result in cumulative savings of \$1.7 billion. We show the annual savings from a payroll tax waiver in Figure 5.

**FIGURE 4. Amazon Newark HQ2 Net Savings from Property Tax Abatement and Payment in Lieu of Taxes, by Year (Millions)**



Sources: Anderson Economic Group analysis of base data from NCF, Amazon HQ2 RFP.

**FIGURE 5. Amazon Newark HQ2 Savings from Payroll Tax Waiver, by Year (Millions)**



Sources: Anderson Economic Group analysis of base data from NCF, Amazon HQ2 RFP.

Our model assumes a 42-year tax abatement and payroll tax waiver. The length of both incentives may vary depending on the final details of each incentive. See “Property Tax Abatement and Payment in Lieu of Taxes,” and “Payroll Tax Waiver” on page 10 for details on our model assumptions.

### Additional Economic Development Incentives

The State of New Jersey provides a number of other incentives that Amazon could also pursue, the impact of which are more difficult to estimate without specific details about Amazon’s operations. We show these incentives and provide brief descriptions of each in

Table 1 below.

**TABLE 1. New Jersey Economic Development Incentive Programs**

<b>Program Name</b>	<b>Description</b>
SmartStart Buildings Program	Financial incentives that offset added cost to purchase energy efficient building equipment.
Brownfield Contaminated Site Remediation Program	Reimbursements to developers of up to 75% of brown-field site remediation costs.
Workforce Training Grant	Reimbursements of \$1,500 to \$10,000 for costs of upgrading the skills of workers or training new workers who are unemployed or underemployed.
Skills Partnership Grant	Training grants that cover up to 50% of training costs for incumbent workers, up to \$1,500 per worker.
Large Energy User Program	Grants of up to \$4 million for investments in Combined Heat and Power projects at facilities with high energy usage.
Customer Tailored Energy Efficiency Program	Reimbursements of up to 50% of energy efficiency project costs to customers that consume large amounts of energy.
Pay for Performance Program	Grants of up to \$2 million for implementing energy efficiency measures.
Combined Heat and Power / Waste Heat to Power Program	Reimbursements of up to \$3 million to customers that implement Combined Heat and Power systems.

In addition to these programs, New Jersey provides other incentives that can be claimed against CBT liabilities, such as the Research and Development Credit; however, since Amazon’s CBT liability would be eliminated by THEAP, we do not include those programs in the table above.

### *Opportunity Zones*

As part of the Tax Cuts and Jobs Act of 2017 (the federal tax reform package passed in December, 2017), states can now establish Opportunity Zones in low-income Census tracts. The Governor of New Jersey has submitted a list of proposed Opportunity Zones to the U.S. Treasury, and that list includes the proposed site for HQ2 in Newark.

The Opportunity Zones program allows for qualified Opportunity Funds to make capital investments in low-income communities. Investors in those Opportunity Funds receive tax incentives to make and maintain their investment in the fund. Those incentives are as follows:

- If capital gains from a separate investment are invested into the Opportunity Fund, the investor may defer inclusion of those capital gains in federal taxable income until December 31, 2026.
- If the capital gains remain invested in the Opportunity Fund, the portion of those funds that will eventually be subject to taxation will reduce by 10% after five years, and an additional 5% after seven years. Put another way, only 85% of those capital gains will be subject to

federal income tax in 2026 if the investment in the Opportunity Fund has been maintained for at least seven years, and the remainder will be forever exempt.

- All capital gains from the investment in the Opportunity Fund itself will be permanently excluded from federal taxable income if the investment is held for at least 10 years.

Statute does not specify who may sponsor or manage an Opportunity Fund. At this point, it seems likely that Amazon could establish an Opportunity Fund to hold the capital investments it would make in a Newark HQ2. However, it is difficult to predict whether the certifying agency will enact restrictions that could prevent such an arrangement.

## Methodology

We outline our methodology and assumptions below.

### *THEAP CBT Credits Savings*

To estimate savings to Amazon from THEAP, we first estimated Amazon’s CBT liability in New Jersey for current and future years, and then compared this to the total credits available each year.

THEAP grants Amazon a \$10,000 CBT credit per job, per year, over a period of 10 years, if Amazon meets certain hiring and capital investment criteria in target years.<sup>1</sup> The credits can be carried forward for up to 50 years from the first year in which Amazon is eligible to use them. Additionally, up to \$25 million in tax credits can be sold each year in order to fund public infrastructure.

The State of New Jersey levies a 9% corporate income tax on the portion of net corporate income allocable to New Jersey. We do not believe that Amazon locating HQ2 in New Jersey will impact Amazon’s New Jersey CBT liability, since the CBT is tied to sales in the state, and there is no reason to believe that locating HQ2 in New Jersey would significantly affect Amazon’s sales in New Jersey.

Amazon’s 10k states that 60% of its net sales occur in North America, while 33% occur internationally, and 7% come from Amazon Web Service (AWS), which is not classified geographically. We estimate that 85% of North America net sales are generated in the United States. We also estimate that, based on population proportions, approximately 3% of Amazon’s U.S. net sales occur in New Jersey.

Multiplying these proportions by Amazon’s total net income in 2017 leads to an estimated non-AWS taxable net income of \$42.7 million in 2017, as shown in Table 2. We estimate that 85% of all AWS sales occur in the United States, and that 3% of those sales occur in New Jersey, for a New Jersey AWS taxable net income of \$5.0 million. We estimate that Amazon’s total taxable net income in New Jersey was \$47.7 million in 2017, resulting in a CBT liability of \$4.3 million.

**TABLE 2. Amazon Inc. Estimated Net Income in New Jersey, 2017 (Millions)**

Geography/Business Component	Estimated Net Income	Percent in United States	Percent in New Jersey	Estimated Taxable Net Income
North America	\$1,820	85%	3%	\$42.7
AWS	\$212	85%	3%	\$5.0
International	\$1,001	0%	0%	\$0.0
<b>New Jersey Taxable Net Income:</b>				<b>\$47.7</b>

*Source: Anderson Economic Group estimates based on Amazon 10-K, 2017..*

1. For more information, see: *N.J.S.A.* 34:1B-256.

We estimated Amazon’s future net income and CBT liability in New Jersey under two growth scenarios—moderate and high. We estimate that Amazon’s net income and CBT liability would grow at a rate of 3% per year in our moderate scenario, and 10% per year in our high scenario. In order for Amazon to claim all credits against its CBT liability, its net income would need to grow by 7.2% per year through 2081.

We show our full estimates of Amazon’s CBT tax liability each year in Table 5 on page 13.

#### *Property Tax Abatement and Payment in Lieu of Taxes*

We built a property tax assessment model to estimate the total savings to Amazon from a property tax abatement paired with payments in lieu of taxes. We used a development schedule and tax abatement assumptions provided by NCF, along with construction cost estimates from Amazon’s HQ2 RFP. We show the HQ2 construction and employment schedule in Table 4 on page 12.

We first estimated the assessed value and associated property taxes of a Newark HQ2 if there was no tax abatement offered. We estimated the assessed value of each property built by Amazon based on construction costs. Amazon’s HQ2 RFP suggests construction costs of \$600 per square foot. Since New Jersey does not tax personal property, we estimated that construction costs would be \$520 per square foot after subtracting out factors such as furniture and IT costs. We based this estimate on previous analysis conducted by JLL research.<sup>2</sup>

We assumed that the cost of construction would increase by 2% each year. After determining the construction costs for buildings in each year, we applied the appropriate property tax rate to all property. We assumed that property tax rates would increase by 2% each year—the maximum allowed by the State—and that property would appreciate in value by 2% annually.

We then simulated a hypothetical scenario in which the City of Newark issues Redevelopment Area Bonds (RABs), and Amazon is subject to a PILOT. RABs are not always issued in property tax abatements; however, we believe it is safe to assume that, given the size of the HQ2 project, the city would issue RABs.

Since there is no official PILOT agreement, we made several assumptions about what such an agreement would look like, based on data provided by NCF. New Jersey statute requires that all PILOTs be comprised of five stages of varying lengths of time.<sup>3</sup> In stages two through five, the PILOT amount is a statutorily-defined percentage of a property’s tax bill that would be paid in the absence of an abatement. We assumed that the PILOT would be 20% in stage one; however, this amount could be lower or higher depending on terms of the final agreement. For other stages, we assumed that Amazon would pay the statutorily required minimum payment for the longest possible period of time. We show our presumed

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2.JLL Research, “U.S. Fit Out Guide: The Real Costs of Building Out,” 2017.

3.N.J.S.A. 40A:20-12.

PILOT schedule in Table 3 below.

**TABLE 3. Amazon Newark HQ2 PILOT payments by Year, as a percentage of Total Property Tax Payments**

Stage	Duration (Years)	PILOT Payment
1	15	20%
2	6	20%
3	6	40%
4	2	60%
5	1	80%

*Sources: Anderson Economic Group analysis of base data from NCF, NJSA 40A:20-12.*

We assumed that there would be three PILOT agreements, starting in years 1, 6, and 12, respectively, and covering the three separate phases of HQ2 development. In our model, the final PILOT will end in year 42. Based on our conversation with CFNJ, we anticipate that the PILOT will have a total value of \$500 million and will be used to pay for public infrastructure that Amazon would otherwise have paid for. If this is the case, then the \$500 million constitutes additional savings to Amazon not quantified in our PILOT analysis.

The PILOT schedule outlined above covers the debt service of a \$500 million RAB issue in nearly every year. In the handful of years that the PILOT falls short of the debt service payment, we assumed that the PILOT would be equal to the debt service payment.

After determining the value of PILOTs each year, we subtracted the estimated PILOT from the value of the property tax abatement in order to calculate total savings to Amazon. We show the total tax abatement savings to Amazon by year in Table 6 on page 14.

#### *Payroll Tax Waiver*

The City of Newark imposes a 1% payroll tax on employers. Employers incur no payroll tax on the incremental portion of Newark resident workers beyond 50%, if more than 50% are Newark residents. Based on analysis of Census commuter data, we estimate that no more than 18% of Amazon HQ2 employees would live in Newark, meaning that Amazon would pay a 1% payroll tax on its entire payroll if there is no waiver.<sup>4</sup>

According to information provided by NCF, the payroll tax waiver would begin immediately and conclude with the termination of the final PILOT. Amazon’s HQ2 RFP states that employees will have an average compensation of \$100,000 per worker. We estimate that the average salary per worker subject to payroll tax will be \$76,737 after accounting for FICA taxes, health insurance, and retirement contributions. In order to estimate the value of the payroll tax waiver in future years, we used employment estimates

4.U.S. Census Bureau, “OnTheMap LEHD Origin-Destination Employment Statistics,” 2015.

provided by NCF, and a salary inflation rate of 3.3%, which is consistent with the long-term average national wage increase in the Management of Companies and Enterprises industry. We show the total savings to Amazon from the waiver, by year, in Table 7 on page 15.

**Detailed Tables**

**TABLE 4. Amazon Newark HQ2 Estimated Construction Schedule and Employment, by Year**

Year	New Square Footage	Total Square Footage	New jobs	Total jobs
2019	500,000	500,000	2,500	2,500
2020	500,000	1,000,000	2,500	5,000
2021	500,000	1,500,000	3,125	8,125
2022	500,000	2,000,000	3,125	11,250
2023	500,000	2,500,000	3,125	14,375
2024	600,000	3,100,000	3,750	18,125
2025	600,000	3,700,000	3,750	21,875
2026	600,000	4,300,000	3,750	25,625
2027	600,000	4,900,000	3,750	29,375
2028	600,000	5,500,000	3,750	33,125
2029	600,000	6,100,000	3,750	36,875
2030	380,000	6,480,000	2,375	39,250
2031	380,000	6,860,000	2,375	41,625
2032	380,000	7,240,000	2,375	44,000
2033	380,000	7,620,000	2,375	46,375
2034	380,000	8,000,000	2,375	48,750
2035	-	8,000,000	1,250	50,000
2036+	-	8,000,000		50,000

Source: Base data from NCF.

**TABLE 5. Amazon Newark HQ2 Estimated CBT Credits Awarded, by Year and Tax Liability Growth Rate (Thousands)**

Year	3% Growth	10% Growth	Year	3% Growth	10% Growth
2019	\$ 4,557.3	\$ 5,197.8	2057	\$ 14,012.7	\$ 194,419.9
2020	\$ 4,694.0	\$ 5,717.6	2058	\$ 14,433.1	\$ 213,861.9
2021	\$ 4,834.8	\$ 6,289.3	2059	\$ 14,866.1	\$ 235,248.1
2022	\$ 4,979.9	\$ 6,918.3	2060	\$ 15,312.1	\$ 258,772.9
2023	\$ 5,129.3	\$ 7,610.1	2061	\$ 15,771.4	\$ 284,650.2
2024	\$ 5,283.2	\$ 8,371.1	2062	\$ 16,244.6	\$ 313,115.3
2025	\$ 5,441.7	\$ 9,208.2	2063	\$ 16,731.9	\$ 344,426.8
2026	\$ 5,604.9	\$ 10,129.0	2064	\$ 17,233.9	\$ 378,869.5
2027	\$ 5,773.1	\$ 11,141.9	2065	\$ 17,750.9	\$ 416,756.4
2028	\$ 5,946.2	\$ 12,256.1	2066	\$ 18,283.4	\$ 458,432.0
2029	\$ 6,124.6	\$ 13,481.7	2067	\$ 18,831.9	\$ 9,225.4
2030	\$ 6,308.4	\$ 14,829.9	2068	\$ 19,396.9	\$ -
2031	\$ 6,497.6	\$ 16,312.9	2069	\$ 19,978.8	\$ -
2032	\$ 6,692.6	\$ 17,944.2	2070	\$ 20,578.1	\$ -
2033	\$ 6,893.3	\$ 19,738.6	2071	\$ 21,195.5	\$ -
2034	\$ 7,100.1	\$ 21,712.5	2072	\$ 21,831.4	\$ -
2035	\$ 7,313.1	\$ 23,883.7	2073	\$ 22,486.3	\$ -
2036	\$ 7,532.5	\$ 26,272.1	2074	\$ 23,160.9	\$ -
2037	\$ 7,758.5	\$ 28,899.3	2075	\$ 23,855.7	\$ -
2038	\$ 7,991.3	\$ 31,789.2	2076	\$ 24,571.4	\$ -
2039	\$ 8,231.0	\$ 34,968.1	2077	\$ 25,308.5	\$ -
2040	\$ 8,477.9	\$ 38,464.9	2078	\$ 26,067.8	\$ -
2041	\$ 8,732.3	\$ 42,311.4	2079	\$ 26,849.8	\$ -
2042	\$ 8,994.2	\$ 46,542.6	2080	\$ 27,655.3	\$ -
2043	\$ 9,264.1	\$ 51,196.8	2081	\$ 28,485.0	\$ -
2044	\$ 9,542.0	\$ 56,316.5	2082	\$ 29,339.5	\$ -
2045	\$ 9,828.2	\$ 61,948.2	2083	\$ 30,219.7	\$ -
2046	\$ 10,123.1	\$ 68,143.0	2084	\$ 31,126.3	\$ -
2047	\$ 10,426.8	\$ 74,957.3	2085	\$ 32,060.1	\$ -
2048	\$ 10,739.6	\$ 82,453.0	2086	\$ 33,021.9	\$ -
2049	\$ 11,061.8	\$ 90,698.3	2087	\$ 34,012.5	\$ -
2050	\$ 11,393.6	\$ 99,768.2	2088	\$ 35,032.9	\$ -
2051	\$ 11,735.4	\$ 109,745.0	2089	\$ 36,083.9	\$ -
2052	\$ 12,087.5	\$ 120,719.5	2090	\$ 37,166.4	\$ -
2053	\$ 12,450.1	\$ 132,791.4	2091	\$ 38,281.4	\$ -
2054	\$ 12,823.6	\$ 146,070.6	2092	\$ 39,429.9	\$ -
2055	\$ 13,208.3	\$ 160,677.6	2093	\$ 9,320.1	\$ -
2056	\$ 13,604.6	\$ 176,745.4	2094	\$ -	\$ -
			<b>Total:</b>	<b>\$ 1,211,168.6</b>	<b>\$ 5,000,000.0</b>

Note: Savings shown do not include potential sale of credits.

Sources: Anderson Economic Group analysis of base data from Amazon 10k, Grow New Jersey Act.

**TABLE 6. Amazon Newark HQ2 Estimated Net Savings from Property Tax Abatement, by Year (Millions)**

Year	Assessed Value	Property Tax Rate	Regular Tax Payment	Minimum PILOT Payment	Abatement Savings
2019	\$ 260.0	3.560%	\$ 9.3	\$ 8.1	\$ 1.1
2020	\$ 530.4	3.631%	\$ 19.3	\$ 8.1	\$ 11.1
2021	\$ 811.5	3.704%	\$ 30.1	\$ 8.1	\$ 21.9
2022	\$ 1,103.7	3.778%	\$ 41.7	\$ 8.3	\$ 33.4
2023	\$ 1,407.2	3.853%	\$ 54.2	\$ 10.8	\$ 43.4
2024	\$ 1,779.8	3.931%	\$ 70.0	\$ 21.2	\$ 48.7
2025	\$ 2,166.7	4.009%	\$ 86.9	\$ 21.2	\$ 65.6
2026	\$ 2,568.5	4.089%	\$ 105.0	\$ 21.2	\$ 83.8
2027	\$ 2,985.4	4.171%	\$ 124.5	\$ 24.9	\$ 99.6
2028	\$ 3,418.0	4.255%	\$ 145.4	\$ 29.1	\$ 116.3
2029	\$ 3,866.7	4.340%	\$ 167.8	\$ 33.6	\$ 134.2
2030	\$ 4,189.7	4.426%	\$ 185.5	\$ 37.1	\$ 148.4
2031	\$ 4,524.1	4.515%	\$ 204.3	\$ 40.9	\$ 163.4
2032	\$ 4,870.2	4.605%	\$ 224.3	\$ 44.9	\$ 179.4
2033	\$ 5,228.3	4.697%	\$ 245.6	\$ 49.1	\$ 196.5
2034	\$ 5,598.8	4.791%	\$ 268.3	\$ 53.7	\$ 214.6
2035	\$ 5,710.8	4.887%	\$ 279.1	\$ 55.8	\$ 223.3
2036	\$ 5,825.0	4.985%	\$ 290.4	\$ 58.1	\$ 232.3
2037	\$ 5,941.5	5.085%	\$ 302.1	\$ 60.4	\$ 241.7
2038	\$ 6,060.3	5.186%	\$ 314.3	\$ 62.9	\$ 251.4
2039	\$ 6,181.5	5.290%	\$ 327.0	\$ 65.4	\$ 261.6
2040	\$ 6,305.2	5.396%	\$ 340.2	\$ 89.3	\$ 250.9
2041	\$ 6,431.3	5.504%	\$ 354.0	\$ 92.9	\$ 261.0
2042	\$ 6,559.9	5.614%	\$ 368.3	\$ 96.7	\$ 271.6
2043	\$ 6,691.1	5.726%	\$ 383.1	\$ 100.6	\$ 282.6
2044	\$ 6,824.9	5.841%	\$ 398.6	\$ 104.6	\$ 294.0
2045	\$ 6,961.4	5.957%	\$ 414.7	\$ 146.2	\$ 268.5
2046	\$ 7,100.6	6.077%	\$ 431.5	\$ 179.1	\$ 252.4
2047	\$ 7,242.7	6.198%	\$ 448.9	\$ 186.3	\$ 262.6
2048	\$ 7,387.5	6.322%	\$ 467.0	\$ 223.0	\$ 244.0
2049	\$ 7,535.3	6.448%	\$ 485.9	\$ 262.4	\$ 223.5
2050	\$ 7,686.0	6.577%	\$ 505.5	\$ 273.0	\$ 232.5
2051	\$ 7,839.7	6.709%	\$ 526.0	\$ 356.3	\$ 169.6
2052	\$ 7,996.5	6.843%	\$ 547.2	\$ 370.7	\$ 176.5
2053	\$ 8,156.4	6.980%	\$ 569.3	\$ 437.0	\$ 132.4
2054	\$ 8,319.5	7.120%	\$ 592.3	\$ 507.9	\$ 84.4
2055	\$ 8,485.9	7.262%	\$ 616.2	\$ 528.4	\$ 87.8
2056	\$ 8,655.6	7.407%	\$ 641.1	\$ 549.8	\$ 91.4
2057	\$ 8,828.8	7.555%	\$ 667.0	\$ 603.7	\$ 63.4
2058	\$ 9,005.3	7.706%	\$ 694.0	\$ 628.1	\$ 65.9
2059	\$ 9,185.4	7.861%	\$ 722.0	\$ 687.7	\$ 34.3
2060	\$ 9,369.2	8.018%	\$ 751.2	\$ 751.2	\$ -
<b>Total:</b>					<b>\$ 6,521.2</b>

Sources: Anderson Economic Group analysis of base data from NCF, Amazon HQ2 RFP.

**TABLE 7. Amazon Newark HQ2 Estimated Savings from Payroll Tax Waiver, by Year (Millions)**

Year	Total jobs	Total Payroll	Total Payroll Tax Waived
2019	2,500	\$ 191.8	\$ 1.9
2020	5,000	\$ 396.2	\$ 4.0
2021	8,125	\$ 647.5	\$ 6.5
2022	11,250	\$ 901.9	\$ 9.0
2023	14,375	\$ 1,159.3	\$ 11.6
2024	18,125	\$ 1,470.8	\$ 14.7
2025	21,875	\$ 1,786.4	\$ 17.9
2026	25,625	\$ 2,106.3	\$ 21.1
2027	29,375	\$ 2,430.7	\$ 24.3
2028	33,125	\$ 2,759.8	\$ 27.6
2029	36,875	\$ 3,093.9	\$ 30.9
2030	39,250	\$ 3,317.0	\$ 33.2
2031	41,625	\$ 3,543.7	\$ 35.4
2032	44,000	\$ 3,774.3	\$ 37.7
2033	46,375	\$ 4,009.0	\$ 40.1
2034	48,750	\$ 4,247.9	\$ 42.5
2035	50,000	\$ 4,392.4	\$ 43.9
2036	50,000	\$ 4,429.1	\$ 44.3
2037	50,000	\$ 4,467.1	\$ 44.7
2038	50,000	\$ 4,506.2	\$ 45.1
2039	50,000	\$ 4,546.7	\$ 45.5
2040	50,000	\$ 4,588.5	\$ 45.9
2041	50,000	\$ 4,631.6	\$ 46.3
2042	50,000	\$ 4,676.1	\$ 46.8
2043	50,000	\$ 4,722.1	\$ 47.2
2044	50,000	\$ 4,769.6	\$ 47.7
2045	50,000	\$ 4,818.7	\$ 48.2
2046	50,000	\$ 4,869.4	\$ 48.7
2047	50,000	\$ 4,921.7	\$ 49.2
2048	50,000	\$ 4,975.7	\$ 49.8
2049	50,000	\$ 5,031.5	\$ 50.3
2050	50,000	\$ 5,089.1	\$ 50.9
2051	50,000	\$ 5,148.6	\$ 51.5
2052	50,000	\$ 5,210.0	\$ 52.1
2053	50,000	\$ 5,273.4	\$ 52.7
2054	50,000	\$ 5,338.9	\$ 53.4
2055	50,000	\$ 5,406.6	\$ 54.1
2056	50,000	\$ 5,476.4	\$ 54.8
2057	50,000	\$ 5,548.6	\$ 55.5
2058	50,000	\$ 5,623.0	\$ 56.2
2059	50,000	\$ 5,700.0	\$ 57.0
2060	50,000	\$ 5,779.4	\$ 57.8
<b>Total:</b>			<b>\$ 1,657.8</b>

Sources: Anderson Economic Group analysis of base data from NCF, Amazon HQ2 RFP, U.S. Bureau of Labor Statistics.