The New York State Environmental Bond Act, the largest environmental bond act in State history, would dedicate $4 billion to help restart the economy while protecting clean water, improving public health, and expanding access to nature. The Bond will address pressing infrastructure and environmental needs while providing much-needed stimulus.
Economic development depends upon infrastructure investments that meet the needs of the present and the future. In the past ten years, every county in New York State suffered severe storms and flooding that caused economic and other hardships for its residents and businesses. A comprehensive approach to help communities prepare their infrastructure and natural systems before suffering additional damage is critical to supporting New York’s economy and enhancing quality of life. Smart investments can convert a challenge into an opportunity for New York workers and businesses to lead the green economy.

AECOM, working in collaboration with Rebuild by Design, estimated the short-term economic impacts of the New York State Environmental Bond Act and evaluated the long-term benefits of the associated investments. The Bond Act can address pressing infrastructure and environmental needs while providing much-needed stimulus. The Bond Act’s enabling legislation allocates spending to four key categories of investment: water quality improvement; climate change mitigation; open space land conservation; and flood risk reduction. Accounting for leveraged funding, once approved by voters, the Bond Act is estimated to support $8.71 billion in project spending and 84,000 jobs (Table 1). Importantly, the legislation requires that the State makes every effort practicable to ensure that 35% of bond funds be targeted to benefit environmental justice communities. In addition, given New York State’s goal of engaging Minority- and Women-Owned Business Enterprises (MWBEs) in 30% of all state contracts, it is assumed that the New York State Environmental Bond Act will create more opportunities for MWBEs.

Overall, the long-term benefits to be gained by these investments are likely to outweigh the costs of investment. In order to understand the potential long-term benefits of the Environmental Bond Act, AECOM researched benefit-cost analyses for past or planned projects that are comparable to the various types of investments in New York State that would be funded by the Bond Act. From improving resilience and avoiding future costs from severe storms, to creating social and public health benefits for New York residents, applicable research has found that projects associated with the four key categories of spending are shown to be fiscally smart and effective investments.

The Environmental Bond Act gives New York an opportunity to address the current economic crisis and mitigate the future challenges posed by climate change, while providing a boost to the State’s economy, creating jobs, protecting the State’s drinking water and other essential natural resources, and improving the lives of New York residents.

<table>
<thead>
<tr>
<th>Table 1: Economic Impacts of $4B Bond</th>
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<tbody>
<tr>
<td><strong>Authorized Bond Funds</strong></td>
</tr>
<tr>
<td>Direct Spending $4,000,000,000</td>
</tr>
<tr>
<td>Direct Jobs 21,000</td>
</tr>
<tr>
<td>Indirect Jobs 5,000</td>
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<tr>
<td>Induced Jobs 12,000</td>
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<tr>
<td>Total Jobs 38,000</td>
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<tr>
<td>Jobs per $1B in Direct Spending 9,400</td>
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<tr>
<td><strong>With Leveraged Funds</strong></td>
</tr>
<tr>
<td>Direct Spending $8,710,000,000</td>
</tr>
<tr>
<td>Direct Jobs 47,000</td>
</tr>
<tr>
<td>Indirect Jobs 10,000</td>
</tr>
<tr>
<td>Induced Jobs 26,000</td>
</tr>
<tr>
<td>Total Jobs 84,000</td>
</tr>
<tr>
<td>Jobs per $1B in Direct Spending 9,600</td>
</tr>
</tbody>
</table>

Notes: Job counts include straight full time and part time counts. Job estimates are for jobs supported within New York State. Estimates are derived from Emsi multipliers for New York State from quarter 2 of 2019. Figures may not sum due to rounding. This analysis is based on the proposed New York State Environmental Bond Act of 2022. The legislation is expected to be passed in the future and may be subject to language and requirement alterations.
Economic Impact

Economic impact analysis evaluates how an investment spurs economic activity and job creation in a specific region. As investments are made, their spending ripples through the economy and contributes to value and employment. This ripple effect, also referred to as a multiplier effect, can be quantified in three main categories: direct, indirect, and induced.

- **Direct impacts** result from spending on the initial project. For example, direct job impacts from a waterfront revitalization project might include designers, engineers, and onsite construction workers.
- **Indirect impacts** result from funds going to the suppliers providing materials and equipment for the project, who in turn can grow and hire more workers.
- **Induced impacts** result from direct and indirect workers spending their earnings on goods and services.

To conduct the economic impact analysis, AECOM used the Emsi New York State multipliers to estimate the total economic value created by the different types of projects specified in the Bond Act legislation. Multipliers can be used to understand how a dollar spent in one industry creates value throughout the economy. While value can be measured by various metrics (jobs, earnings, output, value added), the primary metric of interest for this analysis is the number of total jobs (direct, indirect, and induced) created in New York State.

The industry multipliers were based on 2019 quarter 2 data. In order to use these multipliers to determine the total job impacts of the NYS Environmental Bond Act, AECOM made assumptions related to: 1) the dollar figure of investment by program and the amount of funding that could be leveraged; and 2) the anticipated industries directly executing the program spending. Details on these assumptions and the methodology used can be found in the December 2020 version of this report.
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ECONOMIC IMPACTS OF THE NEW YORK STATE ENVIRONMENTAL BOND ACT

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