

The Federal THRIVE Act for Massachusetts' 1st Congressional District: How THRIVE Strengthens the Economy, Protects the Environment, and Creates Jobs

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This report describes the economic impacts that would result in Massachusetts' 1st congressional district if the U.S. Congress were to pass the national THRIVE Act. The 1st district includes the western portion of the state and the Springfield metropolitan area.

The THRIVE Act was introduced in Congress in April 2021, aiming to "Transform, Heal and Renew by Investing in a Vibrant Economy"—i.e. THRIVE—through a range of investments to rebuild the U.S. economy. For the U.S. economy overall, the THRIVE Act would finance over \$1 trillion in investments per year for 10 years in four major areas: clean renewable energy and energy efficiency; infrastructure; agriculture and land restoration; and the care economy, public health and the postal system.

We estimate that Massachusetts' 1st district would receive about \$2.2 billion per year in THRIVE Act support in these four investment areas. This level of investment will generate roughly 15,000 jobs within the district itself, equal to about 4 percent of the district's current workforce. The newly created jobs will be in a wide range of occupations, including electricians, roofers, bus drivers, environmental engineers, home-care nurses, landscapers, accountants, bookkeepers, and lawyers. This higher level of employment in the 1st district would be sustained throughout the 10 years of the investment program (assuming no other major changes in the district's economy were to occur). These 1st district THRIVE investments will also generate about 460 additional jobs throughout the rest of Massachusetts, and 2,700 jobs in other U.S. states, for an overall increase of about 18,000 jobs. The table on page 3 provides details on the breakdown in job

creation within the district, within Massachusetts, and for the overall U.S. economy.

Some of the major projects that the THRIVE Act could support in the district would include:

Solar installations. Installing solar panels on rooftops and other artificial surfaces, such as parking lots, will provide affordable clean energy to 1st district residents and businesses. The 1st district, as elsewhere, will also need to build large-scale solar and wind farms to deliver sufficient clean energy supplies throughout the district while also dramatically reducing CO₂ emissions in the area. The small-scale installations and large utility-scale projects can effectively complement each other. Among other factors, installing large numbers of solar panels on artificial surfaces will mean that less land needs to be devoted to utility-scale solar and wind farms in the area. Investing, for example, \$250 million to help finance small-scale solar installations throughout the 1st district could create enough electricity to meet roughly 27 percent of the district's overall electricity demand. This district-wide installation project will also generate over 1,200 jobs within the district itself and 1,500 jobs overall.

Energy efficiency building retrofits. In December 2020, Governor Baker released a Decarbonization Roadmap, outlining policies and strategies to reduce emissions and combat climate change, including a new interim 2030 statewide emissions limit, defined as a 45 percent reduction relative to the 1990 level. The Roadmap outlined the need to enhance energy efficiency measures and

decarbonize existing buildings, which would include most municipal and town buildings like schools, police departments, and water facilities. Within the 1st district, following through on the policies in this energy efficiency roadmap will cut energy costs for the state and municipalities while also driving down CO2 emissions. Retrofitting all of the low-efficiency buildings in the district-including the Roderick Ireland Courthouse in Springfield, which was recently closed due to excessive mold and other environmental problems—will entail replacing aging furnaces and air conditioners with electric heat pumps, tightening building shells through improving insulation and replacing leaky windows, and installing LED lighting fixtures throughout every building. Investing \$100 million per year in these projects will also generate about 600 jobs within the district and 900 jobs overall.

Expanding paid client-employed home-based care for elderly. There are approximately 11,000 residents of Massachusetts' 1st district age 65 and over who require personal care. The State of Massachusetts presently operates a Personal Care Attendant Program through which elderly people in need of care hire the provider of their choice. Adult children, other family members, neighbors, and friends are all eligible to be hired under this program, although the program excludes spouses and legal guardians, and presently pays far below standard home care wages. At the same time, most hours of elder care support are still provided by family and friends on a voluntary basis. Expanding financial support for the Personal Care Attendant Program through the THRIVE Act would enable these providers to be paid for at least some of the hours of work they now provide voluntarily. These family members and friends would then be better able to concentrate their paid working hours on care provision, rather than having to also be employed at separate paid jobs in order to earn sufficient income. For example, \$160 million per year in support through THRIVE would enable all 11,000 elderly residents of the 1st district requiring care to pay family members or friends \$20 dollars per hour for an average of an additional two hours per day.

Repairing or removing dams. There are over 327 state-regulated dams in the 1st district. Of these, 51 dams have been rated as having "high-hazard potential" by the U.S. Army Corp of Engineers. These are dams in which failure or mis-operation is expected to result in loss of life and cause significant economic damage. At least 7

of these high-hazard dams have been rated as in poor condition, though only a fraction of dams are evaluated and rated according to the Association of State Dam Safety Officials' rating system. Investments to evaluate the district's high-hazard dams would therefore represent an important contribution to the region's economy. Dams that are in poor condition could then either be repaired or removed with the THRIVE Act funding support. The Massachusetts Division of Ecological Restoration's Dam Removal and Ecological Benefit Estimation Tool designates more than 70 dams in the 1st district for which removal would yield significant ecological benefits. A 2019 project documenting the removal of 7 Massachusetts dams found that removing these dams enabled the rivers to return quickly to conditions close to their natural states, both biologically and physically. Investing \$30 million per year in the district to repair or remove high-hazard dams would generate about 180 jobs within the district and 260 jobs overall.

Raising air quality levels in Springfield. Springfield has consistently been rated as having some of the worst living conditions in the U.S. for people suffering from asthma. Significantly raising air quality standards in the city will enable people with asthma and related conditions to live healthier lives. Air quality in Springfield could be substantially improved within a short time period through strengthening two existing projects within the city: to repair the more than 500 leaky gas pipes within the city, as identified by Columbia Gas of Massachusetts; and to accelerate the citywide tree-planting program through the Greening the Gateway Cities and Regreen Springfield programs. Financing from the THRIVE Act at \$10 million per year, divided equally for repairing gas leaks and planting trees within Springfield, would enable these projects to be scaled up and completed within 2-3 years. In combination, they would also generate about 150 jobs within the 1st district.

THRIVE ACT Investments in MASSACHUSETTS' 1ST DISTRICT: Annual Investment Spending and Job Creation through U.S. THRIVE Act

	THRIVE Investments in Massachusetts' 1st District	Job Creation through THRIVE Investments			
		Jobs in 1 st District	Jobs in Rest of Massachusetts	Jobs in Rest of U.S.	Overall Job Creation
Clean Renewable Energy and Energy Efficiency	\$825 million	3,785	170	898	4,852
Infrastructure	\$725 million	4,824	151	971	5,946
Agriculture and Land Restoration	\$450 million	3,007	60	403	3,470
Care Economy, Public Health, and Postal Service	\$225 million	3,123	76	423	3,622
TOTALS	\$2.2 billion	14,739	457	2,695	17,891

Sources: See: https://peri.umass.edu/component/k2/item/1397-employment-impacts-of-proposed-u-s-economic-stimulus-programs; and https://peri.umass.edu/component/k2/item/1474-methodology-and-calculations-for-clean-energy-cost-estimates-in-proposed-u-s-thrive-agenda-and-related-policy-proposals.

Further References

PERI THRIVE Report for U.S. Economy:

https://peri.umass.edu/component/k2/item/1397-employment-impacts-of-proposed-u-s-economic-stimulus-programs

PERI THRIVE Reports for individual U.S. States:

https://peri.umass.edu/component/k2/item/1415-state-level-employment-impacts-of-proposed-national-thrive-agenda