# 2018 Annual Report <br> Connecticuť still revolutionary 

Department of Economic and Community Development

## DECD in Action

Through the hard work of its talented staff, the Department of Economic and Community Development continued to have many successes in brownfield remediation and redevelopment, tourism, the arts, historic preservation, and business development. These distinct areas of focus are interconnected in that they all help build stronger neighborhoods, positively impact the state's economy and improve the overall quality of life for Connecticut residents.


## $\mathrm{DECD}_{\text {by the Numbers }}$

As this annual report illustrates, DECD measures its influence and impact in many ways. The charts below highlight some of the department's key programs.

Thousands of jobs have been retained and created by mid-large businesses in targeted segments including manufacturing, bioscience, finance and technology


As bank credit becomes more readily available some changes to the program have been made. Funds have been targeted to areas such as minority businesses and foreign direct investment


In FY 2018, \$4.73 dollars was leveraged from private sources for every dollar of MAA/EXP funding

\$198 million in state brownfield funding has helped put 228 sites back into useful economic activity


Every year, small grants support hundreds of artists, public art installations and operations for cultural organizations throughout the state. Decline is due to budget reductions


# DECD Year in Review 

## Business Development

Connecticut's economic toolbox continued to prove versatile and effective, supporting a cross-section of large, small and midsize companies and bringing new capital investment and jobs to our state.

Overall, DECD's strategic investments to support business growth (through Small Business Express and Manufacturing Assistance Act funding) are paying off. Here's a snapshot of MAA and EXP in fiscal 2018:

- 178 companies were assisted, with 4,890 jobs to be created and 9,458 jobs retained;
- $\$ 776$ million of private sector funds were leveraged to grow jobs and expand the economy

Since January 2011 through fiscal 2018, from a broader portfolio perspective*, the numbers are even more impressive:

- 2,217 companies assisted, with 33,391 jobs to be created and 94,884 jobs retained
- $\$ 5.7$ billion has been leveraged from the private-sector
- $106 \%$ of expected jobs have been created and retained
*Portfolio data includes active and inactive MAA, EXP, other select business assistance projects, and three tax credit programs (URA, JET and the Aerospace Reinvestment Act).

Companies from all industries continued to see opportunity in Connecticut. Highlights from larger-scale projects include:

Infosys - A global leader in consulting, technology, and next-generation IT services announced the establishment of a technology and innovation hub in Hartford. The $\$ 20.6$ million investment will support the creation of 1,000 well-paying, high-tech jobs in the state's capital city by 2022.


Indeed - The internet company announced plans to significantly increase its presence in Connecticut by investing $\$ 26.5$ million to expand its Stamford offices and create as many as 500 new jobs, bringing the company's Connecticut job presence to over 1,200 employees by 2031.

ASML - One of the world's leading manufacturers of chip-making equipment, ASML is planning to substantially grow its operations in Wilton, Connecticut creating up to 524 new jobs by 2026 and retaining its current workforce of 1,222 employees.

Electric Boat - The state entered into an historic partnership with General Dynamics Electric Boat (EB) that will help the company grow their workforce by nearly 1,900 bringing it to more than 13,000 by 2034 ; allow for capital investments of greater than $\$ 800$ million in the state over the next 17 years; and more than double their spend with in-state suppliers. Connecticut's investment will allow EB to maintain its position as the highest-quality provider of submarines to the U.S. Navy, thus capturing additional overhaul and repair work while continuing the delivery of the Virginia Class Submarines.

ITV America- Award-winning entertainment production group ITV America - the largest independent producer of non-scripted entertainment content in the United States - and Wheelhouse Entertainment are establishing operations in Stamford. Combined, the two entertainment companies plan to create approximately 450 jobs by 2021 across areas of finance and operations, production, and post-production, and more.

PricewaterhouseCoopers - The company, one of the largest professional services firms in the world, is planning a major expansion through the creation of its Insourced Solutions for Tax (IST) division that will see the creation of up to 400 new jobs in the state over the next five years. The company plans to spend $\$ 20$ million on the expansion.

The state's primary financial assistance program for small businesses, the Small Business Express Program, continued to provide financial assistance to support growth at all types of companies, from "mom and pop" stores to high-tech firms. The results are impressive: through June 30, 2018 DECD has entered into 1,825 contracts that require the creation and retention of over 26,000 jobs (adjusted for duplication across programs and contracts).

DECD's Manufacturing Innovation Fund (MIF) continued to strengthen the competitiveness of supply chain companies throughout the state. The MIF is capitalized with $\$ 75$ million in funding offering manufacturing-focused programs and initiatives in the areas of workforce and training; innovation; operational improvements; and capital access. As of June 30 2018, the MIF had assisted approximately 1,200 companies and invested over $\$ 58.2$ million to help accelerate growth, cultivate talent, and boost investments in innovation.

DECD supports business growth in other ways as well. For example, the department invites smaller aerospace companies to exhibit with the state at international air shows. Most recently eight Connecticut aerospace manufacturers met with potential customers from around the world at the Farnborough Airshow - all as part of the State of Connecticut's tradeshow booth. Since Connecticut began organizing trips to the Farnborough and Paris air shows in 2006, exhibiting companies have generated more than $\$ 400$ million in sales from this exposure.

DECD also plays a key role in developing a pipeline of high tech talent in the state. The department, in consultation with Technology Talent
 Advisory Committee, administers the Tech Talent Fund, a resource for both workers and employers to ensure Connecticut has the workforce talent needed to fuel growth in its tech sectors. These programs will begin in 2019,.

## Brownfield Remediation and Redevelopment

DECD also plays a role in creating growth opportunities where they didn't exist before. The department's brownfield remediation and redevelopment investments, for example, are transforming contaminated properties into prime real estate for new housing, business expansion and recreation.

As the map illustrates, DECD's has made investments in 71 of Connecticut's cities and towns.

Number of Brownfield Projects by Municipality Projects Awarded July 1, 2008 - June 30, 2018


Since FY 2009, the Office of Brownfield Remediation and Development (OBRD) has invested over 198 million state dollars in 228 brownfield development projects in cities and towns all across the state. In FY 2018 alone OBRD invested over $\$ 37 \mathrm{M}$ in 33 projects.

DECD investment, in conjunction with other state, federal and private investment, are supporting major transit-oriented development projects throughout the state as well.

## Tourism

DECD, through its Connecticut Office of Tourism, continued to work to make tourism a leading economic contributor and to position the state as a prime destination for leisure and business travelers.

Tourism is a $\$ 14.7 \mathrm{~B}$ contributor to Connecticut's economy.



82,688
jobs directly supported by tourism ( 121,327 total direct and indirect jobs)

Source: Tourism Economics Study, Economic Impact of Travel in Connecticut, 2016

Here are some highlights from 2018:

- Through Connecticut's award-winning branding and marketing campaign, DECD continued to promote travel to the state. Given the reduced budget for paid media, there was a focus on digital tactics and Out of Home placements in key markets (New York and Boston).


Columbus Circle, New York City

The marketing messages used continue to reinforce overnight stays, our casinos as tourism destinations, and a showcase of big-draw attractions and hidden gems.

- Over 1,600 tourism industry partners were featured and/or supported through advertising, public relations and content marketing efforts.
- Visits to CTvisit.com increased $15 \%$ with nearly 5 million sessions, 1.9 million listing page views, with $23 \%$ of sessions including a listing page visit.
- The Connecticut Office of Tourism, through its Regional Marketing Program, continued to expand its partnerships with organizations from every region of the state and help tourism-related businesses capitalize on the state's existing broad array of marketing initiatives.


## Arts

DECD recognizes that the arts are essential to building vibrant communities and attracting and retaining talent. DECD, through its Office of the Arts, invests in Connecticut artists and arts organizations and encourages public participation in creative endeavors.

In addition to providing hundreds of grants to support the arts community in FY 2018, the office promotes the arts in other ways. Some examples include:

- Hosted a tour across Connecticut with a representative from Americans for the Arts providing the highlights of Connecticut's recent Arts and Economic Prosperity 5 results. The study examined the nonprofit arts and culture sector with Connecticut results showing that arts and culture generate $\$ 797.3$ million in economic activity, support more than 23,000 jobs annually, and return $\$ 72.3$ million in revenue to local and state coffers.
- Convened the 3rd annual Connecticut Arts Day with over 400 in attendance with speakers, performers, informative panel discussions, and networking opportunities designed specifically for the arts industry.


The Frank Loomis Palmer Amphitheater at Hygienic Art Park is New London's first amphitheater. It was expanded from a one season to a three season performance venue with support from DECD's Good to Great program. Vinnie Scarano, Executive Director, Hygienic Art, noted "the theater is visually stunning and a welcome addition to the further success of the arts in downtown New London."

## Historic Preservation

Through the State Historic Preservation Office (SHPO), DECD administers a broad range of federal and state programs that identify, register and protect the buildings, sites, structures, districts and objects that comprise Connecticut's cultural heritage.

Here are just a few of the office's many accomplishments in 2018:

- Reviewed or provided guidance on more than 3,000 projects throughout the state to avoid or reduce development impacts on our state's most important historic resources.
- Accepted 20 new projects into the State Historic Rehabilitation Tax Credit program and reserved $\$ 31.7$ million in tax credits for 19 projects. The total project costs for the 19 projects is over $\$ 129$ million, which leverages the state's investment by an over 4:1 ratio.
- Reserved over $\$ 1.9$ million in tax credits for 89 projects through the Historic Homes Rehabilitation Tax Credit program, generating over $\$ 7.2$ million in local rehabilitation expenditures. This direct assistance enhances stewardship of historic properties and pride in home ownership.
- Assisted with the listing of 13 properties to the National Register of Historic Places, including 6 districts of multiple properties, and 6 properties on the State Register of Historic Places.


The State Historic Preservation Office awarded $\$ 4.5$ million in tax credits for the first of a three phase rehabilitation of the Ponemah Mill industrial complex. One of the state's largest and most significant industrial properties, the plan to rehabilitate Ponemah Mill took over 10 years to come to fruition and created 116 housing units with more to come in
subsequent phases. The rehabilitation is so successful that the property owners are currently planning to rehabilitate a property across the street into retail use to help service the influx of residents to the neighborhood.

As you will read in the pages that follow, the investments and support the department provided its diverse customer base are putting Connecticut on a growth trajectory for years to come.

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## I. BUSINESS ASSISTANCE TAX CREDITS

## A. DECD Administered Business Assistance Tax Credits

For a detailed listing of DECD tax credit recipients, please visit:
https://data.ct.gov/Business/Department-of-Economic-and-Community-Development-T/ihragwrn/data

## 1. Connecticut Aerospace Reinvestment Act

## i) Program Description

Under the terms of this Act, United Technologies Corporation (UTC) was required to:

- Construct a new Pratt \& Whitney (P\&W) corporate headquarters, which it will keep in Connecticut for a minimum of 15 years
- Construct a new P\&W worldwide engineering center of excellence in Connecticut
- Keep Sikorsky corporate headquarters in Connecticut for a minimum of 5 years
- Create a customer training center at UTC Aerospace Systems (UTAS) in Windsor Locks
- Build new labs and infrastructure at United Technologies Research Center (UTRC)
- Invest in new research projects and capital investments at P\&W, Sikorsky, UTAS and UTRC.

In return for these investments, UTC is allowed to exchange approximately $\$ 20$ million per year of previously earned but unused tax credits to finance construction during the first five years. During these five years, the company also "earns" up to $\$ 300$ million in rights to monetize unused credits over the remaining 14 years of the term of the assistance agreement. The sum of those "earned credits" are then exchanged evenly over the remaining term. The exchanged credits will offset taxes during the final 14 years.

## ii) Program Activity

UTC has to "earn" the use of the tax credits by achieving levels in four key areas: employment, payroll, engineering staff and capital expenditures (as indicated below). Through June, 2018, the Company has earned a total of $\$ 319$ million of the $\$ 400$ million of authorized credits for exchange. One year remains for them to earn the balance.

| Table 1: UTC Exchange Activity |  |  |  |
| ---: | ---: | ---: | ---: |
| Fiscal <br> Year | Amount Earned | Amount <br> Awarded | Bankable Balance to <br> be used by 6/30/2028 |
| 2015 | $\$ 73,843,630$ | $\$ 20,000,000$ | $\$ 53,843,630$ |
| 2016 | $\$ 49,725,651$ | $\$ 20,000,000$ | $\$ 29,725,651$ |
| 2017 | $\$ 121,636,463$ | $\$ 20,000,000$ | $\$ 101,636,463$ |
| 2018 | $\$ 73,669,482$ | $\$ 20,000,000$ | $\$ 53,669,482$ |
| TOTAL | $\$ 318,875,226$ | $\$ 80,000,000$ | $\$ 238,875,226$ |

Source: DECD
Note: In 2015 UTC sold Sikorsky to Lockheed Martin. This did not impact UTC's ability to deliver on it obligations under this Act.

| Table 2: UTC Employment Levels as of 12/31/2018 |  |  |  |
| :--- | ---: | ---: | ---: |
|  | P\&W | UTAS | UTRC |
| Engineers | 4,182 | 1,070 | 310 |
| Total Employment | 11,478 | 4,497 | 479 |
| Total CT Payroll |  |  | $\$ 1,704,981$ |

Source: UTC
Table 3: UTC Expenditures as of 12/31/2018

|  | P\&W | UTAS | UTRC |
| :--- | ---: | :---: | ---: |
| Capital Expenditures | $\$ 184,577,506$ | $\$ 23,036,594$ | $\$ 26,635,529$ |
| R\&D Expenditures | $\$ 541,149,538$ | $\$ 92,051,497$ | $\$ 47,837,304$ |
| Qualified Project Capital Expenditures | $\$ 45,409,029$ | $\$ 28,348,963$ | $\$ 3,373,270$ |

Source: UTC
Note: Qualified Project Capital Expenditures are for the time period 7/1/2017-6/30/2018. Qualified projects are defined in UTC's contractual documents.

## Methodological Note: Estimated Economic Impacts of Tax Credit Programs

The estimated economic impact analyses of the tax credits below consist of an estimated direct impact analysis and an estimated total impact analysis. The direct impact is the tax revenue generated by the activity for which the tax credit is awarded: these are the estimated tax revenues generated by the newly created jobs and the construction and investment activity in the budget. New jobs generate new income taxes and the construction and investment generates new sales taxes. The direct net economic impact is the sum of the estimated income taxes and estimated sales taxes minus the lost tax revenues to the state due to the tax credit. Direct corporate taxes are not reported as we do not have a reliable method of estimating it. The estimated net direct impact analysis does not include any potential downstream impacts in the economy from the additional spending or jobs created.

The estimated total impact is the sum of the direct, indirect and induced impact of the tax credit program. The total estimated fiscal revenues reported therefore incorporate the 'direct' additions to state net revenues (the "direct impact" explained above), the 'indirect impacts" (for example, the income taxes from the construction jobs needed to build a new building) and the 'induced impact' (for example, revenues generated when new employees at the company and those filling indirectly created jobs spend their income on food, clothing and other items which would generate sales tax revenue to the State). Estimated state expenditures incorporate the direct cost to the state of the tax credits, plus additional indirect and induced government spending due to the additional economic activity. We estimate the total economic impact using the REMI Tax-PI model.

The modeling methodology for tax credits has been modified from the 2017 Annual Report in that we now use total tax credits issued to represent the cost to the state instead of tax credits claimed. This aligns the tax credit with the activity it was issued for and avoids the time inconsistency in the analysis that is a result of a two-year lag in the availability of claim data from DRS.

## 2. Stranded Tax Credits

## i) Program Description

The Stranded Tax Credit program was established in June 2017 by Public Act 17-2. An accumulated credit is defined as nonincremental research and development credits (CGS Sec. $12-217 \mathrm{n}$ ) that have not been taken through the business's last complete income year prior to its program application date (therefore, the credits are "stranded"). The program is designed to allow businesses to exchange credits for a project that is planned or currently underway that meets one of the following objectives:

- Expands the business's scale or scope
- Increases employment at the business
- Generates a substantial return to the state's economy

Per statute, the program is capped at $\$ 50,000,000$.

## ii) Activity of the Stranded Tax Credit Program

In FY 2018 DECD received and approved 1 application for the utilization of Stranded Tax Credits.

|  | Table 4: Stranded Tax Credit Activity |  |  |  |
| :---: | :---: | ---: | ---: | ---: |
| Company | Contract <br> Date | Credits <br> Allocated | Credits <br> Issued | Status of Capital Project as of 6/30/2018 |
| ASML US LLC | $6 / 27 / 2018$ | $\$ 6,000,000$ | $\$ 0$ | Due to the timing of this contract, the <br> status will be updated in the FY 2019 <br> annual report. |
| Program Balance |  | $\$ 44,000,000$ |  |  |

Source: DECD

## iii) Estimated Net Economic Impact of the Stranded Tax Credit

No state revenue was reported by the program in FY 2018. The first "to-date" results will be reported in FY 2019.

## Amount and type of state revenue projected for 5 years after the project's completion.

The table below shows the estimated revenues from the ASML project. The project has a sixyear budget, the projections are shown for ten years. The company is expected to create 524 jobs and spend over $\$ 82.91$ million on construction and equipment in six years. The direct
impact is the tax revenue generated only by these newly created jobs at ASML and the sales taxes generated by the construction and investment activity in the budget. The estimated total impact is the sum of the direct, indirect and induced impact of the ASML project.

| Table 5: Stranded Tax Credit Projections for ASML |  |  |
| :--- | ---: | ---: |
|  | 5-Year Totals (Nominal $\$$ ) | 10-Year Totals (Nominal $\$$ ) |
|  | $\$ 5,808,000$ |  |
| Amount of Tax Credit |  | $\$ 6,000,000$ |
|  | $\$ 9,768,702$ |  |
| Income Taxes - Direct | $\$ 1,783,703$ | $\$ 24,864,829$ |
| Sales Taxes - Direct | $\$ 11,552,405$ | $\$ 2,105,942$ |
| Total State Revenue - <br> Direct* |  | $\$ 26,970,771$ |
|  | $\$ 19,776,230$ |  |
| Income Taxes - Total | $\$ 7,777,490$ | $\$ 53,416,040$ |
| Sales Taxes - Total | $\$ 5,538,260$ | $\$ 20,617,040$ |
| Corporate Business Taxes - <br> Total | $\$ 1,701,420$ | $\$ 15,239,910$ |
| Other Taxes - Total | $\$ 34,793,400$ | $\$ 12,139,160$ |
| New State Revenue - Total |  | $\$ 101,412,150$ |

Source: DECD Analysis
*Direct State Revenue does not include estimates of corporate business taxes or other direct taxes.

## 3. Urban and Industrial Site Reinvestment Tax Credit

## i) Program Description

URA credits are designed to incent development of new jobs and economic activity by companies or developers across the state. The full tax credit is allowable over ten years as follows:

- The income year in which the investment was made and the two succeeding income years, $0 \%$;
- The third full income year following the year in which the investment was made and the three succeeding income years, $10 \%$; and,
- The seventh full income year following the year in which the investment occurred and the two succeeding income years, $20 \%$.

The Urban and Industrial Site Reinvestment Tax Credit program is capped at $\$ 950$ million in awardable credits and individual projects may not exceed $\$ 100$ million in awardable credits.

If a project exceeds $\$ 20$ million in awardable tax credits, it must be approved by the legislature. These credits may be assigned once by the holder.

## ii) Activity of the Urban and Industrial Site Reinvestment Tax Credit

The table below shows the recipients of Urban and Industrial Site Reinvestment tax credits over the last ten years, along with the total project costs, total tax credits awarded and earned (the state's tax cost). This list contains companies that signed contracts within this time frame. The total credits awarded as presented below represent the potential credits the company may claim. Credits for which certificates were issued to companies by DECD from FY 2009 through FY 2018 are listed under "credits earned." The total project costs listed in the table are the basis for the tax credit award.

| Table 6: Urban and Industrial Site Reinvestment Tax Credits, FY 2009-FY 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Applicant | Town | Contract Calendar Year | Total Tax Credits Awarded | Total Project Cost | Total Credits Earned |
| Prudential Retirement Insurance \& Annuity Co. | Hartford | 2009 | \$8,000,000 | \$12,600,000 | \$8,000,000 |
| Comcast of Connecticut, Inc. | Enfield | 2009 | \$5,000,000 | \$7,572,643 | \$5,000,000 |
| Aldi, Inc. (Connecticut) | South Windsor | 2009 | \$1,900,000 | \$52,400,000 | \$1,900,000 |
| Burris Logistics, Inc. | Rocky Hill | 2009 | \$2,000,000 | \$56,819,000 | \$1,800,000 |
| Engineered Electric Company d/b/a DRS Fermont | Bridgeport | 2009 | \$10,000,000 | \$15,115,000 | \$4,000,000 |
| CF Foods, LLC | New Britain | 2009 | \$2,000,000 | \$22,008,000 | \$200,000 |
| Gen Re Corporation | Stamford | 2010 | \$19,500,000 | \$130,000,000 | \$19,500,000 |
| Starwood Hotel \& Resorts | Stamford | 2010 | \$75,000,000 | \$75,000,000 | \$60,000,000 |
| Gartner, Inc. | Stamford | 2010 | \$20,000,000 | \$27,000,000 | \$20,000,000 |
| Nestle Waters North America | Stamford | 2010 | \$5,000,000 | \$27,800,000 | \$5,000,000 |
| Higher One, Inc. | New Haven | 2011 | \$18,500,000 | \$45,916,463 |  |
| Eppendorf Manufacturing Corporation - Phase 2 | Enfield | 2011 | \$10,000,000 | \$17,610,300 | \$8,000,000 |
| Design Within Reach, Inc. | Stamford | 2011 | \$1,500,000 | \$5,000,000 | \$600,000 |
| Chemtura Corporation | Middlebury | 2011 | \$8,000,000 | \$11,734,000 | \$4,800,000 |
| CIGNA Health and Life Insurance Company | Bloomfield | 2011 | \$30,000,000 | \$154,995,080 | \$12,000,000 |
| FactSet Research Systems, Inc. (Project 2) | Norwalk | 2012 | \$8,000,000 | \$10,000,000 | \$3,200,000 |
| Dollar Tree Distribution, Inc. | Windsor | 2012 | \$20,000,000 | \$104,300,000 | \$6,000,000 |
| Alexion Pharmaceuticals, Inc. | New Haven | 2012 | \$5,000,000 | \$103,000,000 | \$5,000,000 |
| Plainfield Renewable Energy, LLC | Plainfield | 2013 | \$10,000,000 | \$230,418,975 | \$4,000,000 |


| Table 6: Urban and Industrial Site Reinvestment Tax Credits, FY 2009-FY 2018 |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | :---: |
| Applicant |  | $\begin{array}{c}\text { Contract } \\ \text { Calendar } \\ \text { Year }\end{array}$ | $\begin{array}{c}\text { Total Tax } \\ \text { Credits } \\ \text { Awarded }\end{array}$ | $\begin{array}{c}\text { Total Project } \\ \text { Cost }\end{array}$ | $\begin{array}{c}\text { Total Credits } \\ \text { Earned }\end{array}$ |  |
| $\begin{array}{l}\text { Massachusetts Mutual Life } \\ \text { Insurance Company }\end{array}$ | Town | Enfield | 2013 | $\$ 13,000,000$ | $\$ 30,000,000$ |  |$]$

Source: DECD
Note: Although Alexion was originally awarded $\$ 25,000,000$ in tax credits the company has since left the program. In this table the tax credit award was adjusted to $\$ 5,000,000$ which is the amount they earned while they were in the URA program and reflects the fact that the unused $\$ 20$ million is available for other transactions.
iii) Estimated Net Economic Impact of the Urban and Industrial Site Reinvestment Tax Credit All data used to evaluate the URA program is supplied by the companies during their annual certification process. This includes data on their capital expenses and job creation.

The table below presents the estimated direct impact of the URA program over the last ten years.

| Table 7: Net Direct Fiscal Impact of URA Program in Nominal Dollars <br> FY 2009-FY 2018 |  |
| :--- | ---: |
|  | URA Direct Impact |
| Cumulative Direct State Revenue | $\$ 495,160,700$ |
| Cumulative Direct State Costs (Tax Credits) | $\$ 186,300,000$ |
| Cumulative Net Direct Revenue | $308,860,700$ |

Source: DECD
Note: New analysis for 2018 Annual Report.
The table below shows the estimated total economic impact of the URA tax credit, using the REMI Tax PI model. Due to differences in modeling methodology these results are not directly comparable to that reported for the URA program in the 2017 annual report. For more detail on the modeling methodology, refer to page 101 and 105 of the Appendix.

The table below shows the estimated cumulative changes of to state GDP and state revenues and expenses based on the URA tax credit portfolio. The eligible projects for this program are estimated to have produced more state revenue than they cost (which includes the amounts of credits claimed). Over the period during which this program has been in effect, the REMI Tax PI model estimates that the state has earned fiscal revenues totaling over $\$ 1$ billion, which more than offsets the total $\$ 186.3$ million credits that have been earned so far. The state earns an estimated $\$ 5.39$ of gross revenue for each dollar of tax credit certificates issued.

| Table 8: Estimated Economic Impact of Earned URA Tax Credits, FY 2009-2018 |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Annual <br> Average <br> FY 2009-2018 | Cumulative Total <br> FY 2009-2018 | Revenue earned <br> per $\$ 1$ of credit |
| Total Credits Earned | $\$ 15,525,000$ | $\$ 186,300,000$ |  |
| Total Employment | 11,735 |  |  |
| Total Private Non-Farm | 10,934 |  |  |
| Employment | $\$ 1,636,131,327$ | $\$ 19,633,575,930$ |  |
| Gross Domestic Product (GDP) | $\$ 83,660,440$ | $\$ 1,003,925,274$ |  |
| State Revenues | $\$ 37,767,274$ | $\$ 453,207,293$ |  |
| State Expenditures | $\$ 45,893,165$ | $\$ 550,717,981$ |  |
| Net State Revenue |  |  |  |

Source: DECD

| Table 9: URA Tax Credits Allocated per Job to be Created or <br> Retained Based on Maximum Contractual Job Obligations |  |
| :--- | ---: |
| Tax Credits Allocated | $\$ 506,500,000$ |
| Jobs to be Retained | 25,767 |
| Jobs to be Created | 9,744 |
| Tax Credit allocated per job | $\$ 14,263$ |

Source: DECD
Note: The number of jobs retained and created have been adjusted to account for duplication for companies that have received assistance from more than one program. If a company has an MAA/URA contract the jobs are included above, unless the company has left the URA program without receiving a tax credit.

## iv) Recommendation:

We recommend maintaining the URA tax credit program as is because it has generated sizable net benefits. Moreover, qualifying firms are reviewed each year and may incur penalties and/or reduced tax credits if they do not meet job or net benefit requirements. This allows DECD to closely monitor the program, track the economic activities and benefits associated with the program, and only provide tax benefits for value created.

## 4. Film, Television and Digital Media Tax Credits

The Office of Film, Television \& Digital Media assists film, television and digital media companies with three tax incentive programs based on qualified in-state expenditures.

During FY 2018, almost $\$ 129$ million in tax credits were issued for an estimated $\$ 433.5$ million spent in Connecticut by qualified productions (the productions mostly occurred prior to FY 2018).

## Table 10: DECD FY 2018 Film Tax Credit Activity

| Tax Credit Program | Company Spend | Tax Credits Issued | Number of <br> Credits |
| :--- | ---: | ---: | ---: |
| Film, Television \& Digital Media | $\$ 423,967,894$ | $\$ 126,897,296$ | 33 |
| Digital Animation Production Co. | $\$ 0$ | $\$ 0$ | 0 |
| Film Infrastructure | $\$ 9,587,517$ | $\$ 1,917,503$ | 1 |
| TOTAL | $\$ 433,555,411$ | $\$ 128,814,799$ | 34 |

Source: DECD

## i) Estimated Economic and Fiscal Impacts of the Film Tax Gredits

The following section evaluates the estimated total economic impact of the three film tax credits separately, using the REMI Tax PI model. The estimated total economic impact
includes the estimated direct, indirect and induced effects of each tax credit. The modeling methodology has been modified from the 2017 Annual Report. By using actual tax credits issued, the analysis provides a more current perspective on the economic value created. These results are therefore not comparable to those in the 2017 report. For more detail on the modeling methodology, refer to page 101 of the Appendix.

## (1) Film \& Digital Media Production Tax Credit

An eligible production company that produces a qualified production and incurs qualified production expenses or costs in excess of $\$ 100,000$ may apply for a tax credit equal to $10 \%$ to $30 \%$ of production expenses and costs incurred in Connecticut. Expenses claimed for the film and digital media production tax credit may not be used in claiming either the digital animation tax credit or the infrastructure tax credit (see below). This tax credit intends to attract more film, television, and digital media productions to the state than if the credit did not exist.

As of July 1, 2013, motion pictures are no longer a "qualified production" with the exception of any motion picture for which twenty-five per cent or more of the principal photography shooting days are at a facility that receives not less than twenty-five million dollars in private investment and opens for business on or after July 1, 2013.
(a) Estimated Economic and Fiscal Impact Results for the Film \& Digital Media Production Tax Credit
The annual average total credits issued over the 2009-2017 calendar year period was $\$ 68,494,650$ suggesting that the average 'qualifying' value of film, television and digital media production in the state was $\$ 228,315,500$ per year, or over $\$ 2$ billion in total for the period for such productions applying to DECD for the $30 \%$ credit. The microsimulation results for the estimated total economic impact of the film production tax credit are shown in the table below.

Because the 2018 data is partial we have conducted the estimated total economic impact below through calendar year 2017. The activity and credits issued in 2018 will be included in the FY 2019 annual report. Because of differences in the modeling methodology, these results are not comparable to those in the 2017 report.

| Table 11: Estimated Economic Impact of the Film \& Digital Media Production Tax Credit 2009-2017 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Annual Average | Cumulative Total | Revenue earned per $\$ 1$ of credit |
| Total New Employment Change | 2,348 |  |  |
| Total Credits Issued | \$63,825,705 | \$574,431,349 |  |
|  |  |  |  |
| GDP | \$421,061,144 | \$3,789,550,296 |  |
| State Revenues | -\$46,241,432 | -\$416,172,892 | -\$0.72 |
| State Expenditures | \$8,115,444 | \$73,038,999 |  |
| Net State Revenue | -\$54,356,877 | -\$489,211,891 |  |

Source: DECD

Interpreting the results in the table above suggests that while there are gains in jobs, the additional revenues gained by the state do not compensate for the loss in state tax revenue due to the credits.

## (b) Recommendation

Because we have omitted certain spending and full-time permanent employment as described in the Appendix (page 113), the reported results are conservative. Other benefits to the state are not captured in the results. For example, the three film tax credit programs stimulated investment in educational programs at both the state's community and private colleges to build the workforce required to support the film, television and digital animation industries. In particular the production tax credit has encouraged the relocation of major networks, digital media companies and production operations. The state's strengthened production infrastructure supported and continues to support a range of projects, further encouraging companies to carry out long-term productions in Connecticut.

The combination of the three film tax credit programs, the successful recruitment of various digital media companies, and the related investment in building a workforce lead us to recommend maintaining this program. We further recommend that we continue to collect job creation and capital expenditure data to better understand the impact of these programs on the state's economy and their efficiency in building this important industry. However, should negative results persist over the long run, it would be prudent to consider changing the level of tax credit to make the program
deliver a better return for the state. Any adjustments should be done in the context of the competitive marketplace; several states also offer film tax credits so modifications to our credits might have adverse competitive implications to the Connecticut economy.

We intend to commission a supplemental Economic Impact Study to methodically evaluate the impact to date of the film tax incentive programs on the Connecticut economy and their relative effectiveness in catalyzing the development and growth of Connecticut's film, television and digital media industry. Ideally the study should be a comprehensive analysis conducted by an entity with expertise in the measuring of these impacts specifically for this unique industry.

## (2) Film Production Infrastructure Tax Credit

This tax credit is available to a taxpayer that invests in a state-certified entertainment infrastructure project. The credit intends to help establish a film and digital animation industry presence in Connecticut by incentivizing capital investment in plant and equipment for pre- and post-production facilities and investment in educational programs that produce the workforce needed by the film and digital animation industry.

## (a) Activity of the Film Production Infrastructure Tax Credit

The table below shows the amounts issued to firms for the film production infrastructure tax credit.

| $\begin{array}{c}\text { Table 12: Film Production Infrastructure Tax Credit } \\ \text { Eligible Expenditures and Credits Issued through FY } 2018\end{array}$ |  |  |  |
| :--- | ---: | ---: | ---: |
| Applicant |  | $\begin{array}{c}\text { CT } \\ \text { Expenditures }\end{array}$ | Date Issued | \(\left.\begin{array}{c}Amount of Tax <br>


Credit\end{array}\right]\)| Blue Sky Studios | $\$ 17,940,989$ | $6 / 8 / 2009$ |
| :--- | ---: | ---: |
| World Wrestling Entertainment | $\$ 25,313,556$ | $2 / 1 / 2010$ |

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| Table 12: Film Production Infrastructure Tax Credit <br> Eligible Expenditures and Credits Issued through FY 2018 |  |  |  |
| :--- | ---: | ---: | ---: |
| CFC Exit 9,LLC | $\$ 14,287,426$ | $12 / 27 / 2013$ | $\$ 2,857,485$ |
| NBC Universal Media, LLC | $\$ 117,727,906$ | $12 / 27 / 2013$ | $\$ 23,545,581$ |
| World Wrestling Entertainment, Inc. | $\$ 5,043,689$ | $2 / 7 / 2014$ | $\$ 1,008,738$ |
| World Wrestling Entertainment, Inc. | $\$ 12,865,135$ | $2 / 7 / 2014$ | $\$ 2,573,027$ |
| Back9Network, Inc. | $\$ 6,127,395$ | $5 / 5 / 2014$ | $\$ 1,225,479$ |
| ESPN, Inc. DC-2 Phase 2 | $\$ 60,693,387$ | $10 / 7 / 2014$ | $\$ 12,138,677$ |
| Blue Sky Studios | $\$ 11,194,497$ | $12 / 22 / 2014$ | $\$ 2,238,899$ |
| CFC Stillwater, LLC | $\$ 3,973,709$ | $2 / 17 / 2015$ | $\$ 794,742$ |
| CT Public Broadcasting, Inc. | $\$ 4,708,965$ | $3 / 17 / 2015$ | $\$ 941,793$ |
| ESPN, Inc. DC-2 Phase 3 | $\$ 69,690,312$ | $12 / 18 / 2015$ | $\$ 13,938,062$ |
| NBCUniversal Media, LLC | $\$ 32,822,618$ | $2 / 11 / 2016$ | $\$ 6,564,524$ |
| ESPN, Inc. | $\$ 4,004,808$ | $5 / 4 / 2016$ | $\$ 800,962$ |
| The Wall Street Theater Company | $\$ 9,587,517$ | $7 / 7 / 2017$ | $\$ 1,917,503$ |
|  | $\$ 531,203,241$ |  | $\$ \mathbf{1 0 6}, 240,968$ |

The total amount of credits issued through FY 2018 exceeds $\$ 106$ million. Construction and related spending began in 2007 and totaled over $\$ 531$ million through FY 2018.

## (b) Estimated Economic and Fiscal Impact Results for the Film Production <br> Infrastructure Tax Credit

The table below shows the microsimulation results for the film production infrastructure tax credit. Differences in the modeling methodology means that these results are not comparable to those in the 2017 report. For more detail on the modeling methodology, refer to page 101 and 117 of the Appendix.

Interpreting the results suggests that while there are gains in jobs, the additional revenues gained by the state do not compensate for the loss in state tax revenue due to the credits. The jobs created as a results of the activity incented by this tax credit are in the construction sector and are not permanent full-time positions. However, infrastructure investments are often followed by permanent job creation by the company earning the tax credits, which can benefit the state in the longer term, but are not captured by this analysis.

| Table 13: Estimated Economic Impact of the Film Production Infrastructure Tax |  |  |  |
| :--- | ---: | ---: | ---: |
| Credit from 2007-2018 |  |  |  |$|$| Revenue |
| :---: |

Source: DECD

Because credit applicants provided no information on employment or procurement in the new facilities (because they are not required to), for this analysis we model no net new permanent employment associated with the infrastructure projects. This is clearly a conservative assumption. The economic and fiscal impacts of construction and related activities dissipate quickly upon completion. Therefore, the analysis presented here represents a partial picture of the benefit of the infrastructure projects undertaken by the recipient firms. Because we have no knowledge of the totality of net new economic activity the infrastructure projects facilitate, we cannot determine the entire net benefit of the infrastructure tax credit program; here we analyze it in isolation.

## (c) Recommendation

Given that the program is relatively new and we do not know what other benefits (such as net new jobs and procurement) accrue to the state, we recommend that this program continue and that we collect related job creation and operational data that the infrastructure tax credit program facilitates to better assess future credit usage. However, should negative results persist over the long run, it would be prudent to consider changing the level of tax credit to make the program generate a better return to the state. Any adjustments should be done in the context of the competitive marketplace; several states also offer film tax credits so modifications to our credits might have adverse competitive implications to the Connecticut economy.

We intend to commission a supplemental Economic Impact Study to methodically evaluate the impact to date of the film tax incentive programs on the Connecticut economy and their relative effectiveness in catalyzing the development and growth of Connecticut's film, television and digital media industry. Ideally the study should be a comprehensive analysis conducted by an entity with expertise in the measuring of these impacts specifically for this unique industry.

## (3) Digital Animation Tax Credit

A Digital Animation Tax Credit is available to state-certified digital animation production companies that engage in digital animation production activities on an ongoing basis. The credit intends to help establish a digital animation industry presence in Connecticut by incentivizing increased employment and capital investment in plant and equipment for digital animation facilities.

## (a) Methodology and Modeling Strategy for the Digital Animation Tax Credit

Blue Sky Studios, the sole credit recipient, would not have relocated to the state but for the digital animation tax credit and the package of other incentives presented to the company.

The digital animation tax credits issued averaged $\$ 15.4$ million per year from 20082016. Blue Sky spent $\$ 11.12$ million for leasehold improvements to an existing building, $\$ 0.7$ million in architectural and engineering fees, and $\$ 6.1$ million for furniture, fixtures and equipment (FF\&E), all in 2008. The company had an annual average of 482 jobs through 2016.

No new Digital Animation credits were issued in FY 2018. However we re-ran the estimation because of the changes in our modeling methodology. These results are therefore not comparable to those in the 2017 report. For more detail on the modeling methodology, refer to page 101 and 122 of the Appendix.

The table below shows the microsimulation results for the digital animation tax credit offset with the private benefit of net new jobs, construction and investment in plant and equipment. The industry that has claimed most of the digital animation tax
credits so far is the insurance industry, which has claimed $\$ 74$ million credits through 2015 (claims data by industry for subsequent years were not available at the time of the study).

| Table 14: Economic Impact of the Digital Animation Tax Credit Program 2008-2018 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Annual Average | Cumulative Total | Revenue earned per $\$ 1$ of credit issued |
| Total New Employment Change | 872 |  |  |
| Total Credits Issued | \$13,678,618 | \$123,107,562 |  |
|  |  |  |  |
| GDP | \$180,751,146 | \$1,626,760,313 |  |
| State Revenues | -\$8,167,747 | -\$73,509,719 | -\$0.60 |
| State Expenditures | \$2,150,319 | \$19,352,868 |  |
| Net State Revenue | -\$10,318,065 | -\$92,862,586 |  |

Source: DECD

While the project has created a significant number of high-paying jobs the induced effects from these incomes are tamped down because approximately $70 \%$ of its employees live out-of-state. Although they pay income tax in Connecticut, the model assumes that their day-to-day expenditures happen outside of Connecticut and therefore do not generate revenues to the state. This assumption may be conservative, given the location of the facility (right on the CT/NY border).

## (b) Recommendation

Blue Sky Studios has nearly tripled their headcount to over 500 jobs since their arrival in 2008. The company also recently extended their lease ten more years through 2028. Based on the totality of economic activity associated with Blue Sky's presence in Connecticut, as well as significant recent developments with potential impact to the structure of the digital animation sector itself, we recommend that the digital animation production company tax credit be maintained.

As this analysis will be repeated annually, we can track the costs and benefits of the program as the industry responds to the film and digital animation incentives offered in Connecticut. However, should negative results persist over the long run, it would be prudent to consider changing the level of tax credit to make the program deliver a
better return to the state. Any adjustments should be done in the context of the competitive marketplace; several states also offer film tax credits so modifications to our credits might have adverse competitive implications to the Connecticut economy.

We intend to commission a supplemental Economic Impact Study to methodically evaluate the impact to date of the film tax incentive programs on the Connecticut economy and their relative effectiveness in catalyzing the development and growth of Connecticut's film, television and digital media industry. Ideally the study should be a comprehensive analysis conducted by an entity with expertise in the measuring of these impacts specifically for this unique industry.

## 5. Insurance Reinvestment Fund Tax Credits

The Insurance Reinvestment Fund (IRF) tax credit was designed to stimulate investments in Connecticut's insurance businesses and businesses providing services to insurance companies to help them grow. The original program was modified by the legislature in the 2010 legislative session and now the two programs (the original version and the modified version) are known as the First and Second Insurance Reinvestment Fund tax credit programs. This section details the common aspects of the two programs, and the following sections evaluates the performance of the two tax credit programs separately.

Tax credits are available to taxpayers making investments in an Insurance Reinvestment Fund that then reinvests in Connecticut companies in targeted industries. Investors could make debt or equity investments and receive a dollar for dollar tax credit equivalent to their investment prorated over ten years such that $10 \%$ of the credit could be claimed in years four through seven and $20 \%$ of the credit could be claimed in years eight through ten.

To obtain the credit, the insurance business in which the investment was made had to annually submit a request for eligibility with DECD to determine whether the requirements of the program were met. We do know the number of jobs created as a result of the investment in each company by comparing the number of jobs at application with the number of jobs reported during the annual eligibility process. The difference is assumed to be a result of the investment.

## a. First Insurance Reinvestment Fund Tax Credit

No new investments are eligible under the First Insurance Reinvestment Program; final year of eligibility was 2015 . There was no new credits issued under the First IRF program in FY 2018.

## b. Second Insurance Reinvestment Fund Tax Credit

In 2010, the legislature amended the Insurance Reinvestment Fund tax credit to provide a new tax credit which can only be applied against the taxes imposed under Chapters 207 (insurance, hospital and medical services corp. tax), and CGS §38a-743 (insurance premiums tax). This tax credit also has different investment criteria than the first Insurance Reinvestment Fund tax credit.

Fund investments under the Second IRF (shown below) are now spread across a variety of industries, as are the new jobs created as a result of the tax credit. The jobs numbers reported below are less than those reported for the Second IRF in the 2017 Annual Report because we have removed the jobs of companies that had other loan programs with DECD to avoid double counting. Credits issued for the Second IRF tax credit are shown in the table below. Only the insurance industry can claim these tax credits as the Second IRF limits the type of taxes imposed that the credits can be applied against. For a more detailed depiction of the data in these tables, see page 125 in the Appendix.

| Table 15: Second Insurance Reinvestment Fund Tax Credit Fund Managers' <br> Investments and Job Creation |  |
| :--- | ---: |
| Investments by Industry | Total <br> 2011-2018 |
| Construction | $\$ 8,850,000$ |
| Food Manufacturing | $\$ 500,000$ |
| Beverage and Tobacco Product Manufacturing | $\$ 2,310,000$ |
| Paper Manufacturing | $\$ 4,288,696$ |
| Petroleum and Coal Products Manufacturing | $\$ 2,400,000$ |
| Chemical Manufacturing | $\$ 9,000,000$ |
| Fabricated Metal Product Manufacturing | $\$ 25,465,000$ |
| Computer and Electronic Product Manufacturing | $\$ 13,250,000$ |
| Electrical Equipment and Appliance Manufacturing | $\$ 10,200,000$ |
| Other Transportation Equipment Manufacturing | $\$ 11,655,000$ |
| Furniture and Related Product Manufacturing | $\$ 3,500,000$ |


| Table 15: Second Insurance Reinvestment Fund Tax Credit Fund Managers' <br> Investments and Job Creation |  |
| :--- | ---: |
| Investments by Industry | Total <br> $\mathbf{2 0 1 1 - 2 0 1 8}$ |
| Miscellaneous Manufacturing | $\$ 3,666,994$ |
| Merchant Wholesalers, Durable Goods | $\$ 4,250,000$ |
| Merchant Wholesalers, Nondurable Goods | $\$ 600,000$ |
| Publishing Industries Except Internet | $\$ 9,389,280$ |
| Telecommunications | $\$ 4,025,000$ |
| Data Processing, Hosting and Related Services | $\$ 271,141$ |
| Other Information Services | $\$ 1,790,000$ |
| Securities, Commodity Contracts and Other Financial | $\$ 345,000$ |
| Professional and Technical Services | $\$ 35,436,263$ |
| Administrative and Support Services | $\$ 3,450,000$ |
| Waste Management and Remediation Services | $\$ 16,276,830$ |
| Ambulatory Health Care Services | $\$ 339,999$ |
| Social Assistance | $\$ 150,000$ |
| Performing Arts, Spectator Sports | $\$ 1,500,000$ |
| Repair and Maintenance Services | $\$ 2,000,000$ |
| Personal Services | $\$ 9,893,000$ |
| Total Investments | $\$ \mathbf{1 8 4 , 0 0 2 , 2 0 3}$ |
| Job Greation* (across all industries) | $\mathbf{2 , 2 6 2}$ |
| Tax Credits Issued by DECD | $\$ \mathbf{1 3 0 , 4 2 0 , 0 0 0}$ |

Source: DECD

* Does not include jobs that were counted towards other DECD assistance.


## i. Estimated Net Economic Impact of the Second Insurance Reinvestment Fund Tax

 CreditThe total economic impact of the Second IRF program was estimated using the REMI Tax-PI model. We used tax credits issued by DECD to represent the cost to the state of the program in the modeling process as opposed to the tax credits claimed, which is the method we have used in years past. Because of these and other modeling changes, these results are not directly comparable with those published in the 2017 Annual Report. For more details on the modeling methodology, refer to page 127 of the Appendix.

The table below reports the results of the economic simulation. These numbers represent the estimated net new economic activity in the Connecticut economy generated by the Second Insurance Reinvestment Tax Credit. The total impact includes estimated direct, indirect and induced economic activity. The net state revenue estimates suggest that the program is a net positive to the state.

| Table 16: Estimated Economic Impact of the <br> Second Insurance Reinvestment Fund Tax Credit from 2011-2018 |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Annual <br> Average | Cumulative <br> Total | Revenue <br> earned per <br> \$1 of credit |
| Total New Employment Change | 4,094 |  |  |
| Total Credits Issued | $\$ 16,302,500$ | $\$ 130,420,000$ |  |
|  |  |  |  |
| GDP | $\$ 557,410,011$ | $\$ 4,459,280,090$ |  |
| State Revenues | $\$ 20,072,240$ | $\$ 160,577,923$ | $\$ 1.23$ |
| State Expenditures | $\$ 15,686,332$ | $\$ 125,490,653$ |  |
| Net State Revenue | $\$ 4,385,909$ | $\$ 35,087,270$ |  |

Source: DECD

## ii. Recommendation:

This credit program requires close monitoring and penalties for not achieving a positive return to the state, and the program has generated strong results in terms of jobs and state net revenue created. Almost all allowable dollars have been invested through the eligible funds. Should the program be extended, we believe some minor changes could be made to make it more effective.

## 6. Property Tax Abatements for Investment in Enterprise Zones

There are currently 17 Targeted Investment Communities with Enterprise Zones in the following municipalities:

| Bridgeport | Meriden | Norwich |
| :---: | :---: | :---: |
| Bristol | Middletown | Southington |
| East Hartford | New Britain | Stamford |
| Groton | New Haven | Waterbury |
| Hartford | New London | Windham |
| Hamden | Norwalk |  |

Companies that locate in an Enterprise Zone may be eligible for certain benefits. These are:

1) A five year, $80 \%$ abatement of local property taxes on qualifying real and personal property subject to the property being new to the grand list of the municipality as a direct result of a business expansion or renovation project or in the case of an existing building, having met the vacancy requirement.
2) A ten-year, $25 \%$ credit on that portion of the state's corporation business tax that is directly attributable to a business expansion or renovation project as determined by DRS.
3) Newly formed corporations located in a zone and meeting certain conditions qualify for a $100 \%$ corporate tax credit for their first three taxable years and a $50 \%$ tax credit for the next seven taxable years.
4) A business engaged in biotechnology, pharmaceutical, or photonics research, development or production with not more than 300 employees, is eligible for Enterprise Zone benefits if it is located in a municipality with (1) a major research university with programs in biotechnology, pharmaceuticals, or photonics and (2) an Enterprise Zone. Benefits are subject to the same conditions as those for businesses located in an Enterprise Zone.

Firms that locate or expand in certain census tracts in certain towns designated as enterprise zones described above under benefits (1) and (4) may apply for a property tax abatement equal to a fraction of the increase in the Grand List (the value of the new plant and equipment) as a result of their investment. The firm's property tax abatement is equal to $80 \%$ of the assessed value (which is $70 \%$ of market value) of new plant and equipment, multiplied by the appropriate mill rate. The municipality absorbs $50 \%$ of the abatement and the state has traditionally reimbursed the municipality for $50 \%$ of the abatement.

The table below shows the dollar amounts claimed for newly certified eligible investments by year for recent years. We transcribed claim amounts for each company from OPM paper records and matched the DECD-assigned certification number with DECD records to extract the NAICS code from DECD records for each company. We aggregated claims by NAICS code. We see that the largest industry sectors claiming this abatement for the first time in 2017 are the transportation equipment manufacturing industry (which includes the state's aerospace product and parts manufacturing sector) and the chemical manufacturing industry.

| Table 17: Enterprise Zone Claims and Investments |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | Average |  |
| Claimed Abatements for <br> Newly Certified Investments | $\$ 644,573$ | $\$ 961,130$ | $\$ 462,409$ | $\$ 1,248,258$ | $\$ 2,536,355$ | $\$ 1,170,545$ |  |
| Number of New Certifications | 37 | 44 | 45 | 44 | 38 | 42 |  |
| Associated Investment Value <br> Based on Assessment | $\$ 44,104,521$ | $\$ 44,635,539$ | $\$ 30,032,098$ | $\$ 54,798,509$ | $\$ 147,109,381$ | $\$ 64,136,010$ |  |

We analyze the estimated total economic impact of the enterprise zone abatements utilizing the REMI Tax-PI model. We assume the investment would not have occurred in the region were not for the EZ program. The full estimated economic impact is shown below.

The estimated results suggest that the EZ abatement program has a positive impact on the state, with over three dollars earned for each dollar the state contributes to the program for investments beginning in 2013. This is a partial, "rolling" analysis as it does not include abatements made for projects beginning before 2013. Each project is then assumed to make the equal claims for five years before completing eligibility. We assume the state makes its full contribution to the municipalities towards the abatements; however in 2017 the state made no contribution under the EZ program so we model its contribution as zero.

| Table 18: Estimated Economic Impact of Enterprise Zone Abatements from 2013-2017 |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Annual <br> Average | Cumulative <br> Total | Revenue earned <br> per \$1 of state <br> contribution |
| Claims for New Investments | $\$ 1,348,748$ | $\$ 6,743,742$ |  |
| Estimated State Contribution <br> (including \$0 for 2017) | $\$ 763,476$ | $\$ 3,817,379$ |  |
| Changes in: |  |  |  |
| Total Employment | 499 |  |  |
| Total Private Non-Farm Employment | 478 |  |  |
| GDP | $\$ 46,493,820$ | $\$ 232,469,101$ |  |
| State Revenues | $\$ 2,197,729$ | $\$ 10,988,644$ |  |
| State Expenditures | $\$ 1,021,524$ | $\$ 5,107,619$ |  |
| Net State Revenue | $\$ 1,176,205$ | $\$ 5,881,025$ |  |

Source: DECD

It is important to note that the purpose of the enterprise zone program is to yield benefits to the designated community, and the return to the state is of secondary concern. The goal is that by locating in an area in which it normally would not, the company fuels local economic development by employing local residents and stimulating local businesses. The community's tax base is also strengthened.

Other areas may be designated as additional enterprise zones or enterprise corridor zones with certain benefits (see Appendix for details). The data on all these additional programs are included in the Enterprise Zone data provided to DECD by OPM, and therefore are incorporated into the Enterprise Zone analysis above.

## a. Recommendation

Because of the significant economic impact when the full investment is taken into account, we recommend continuing the enterprise zone property tax abatement program with changes. We recommend modifying the program so that the abatement percentage declines over the five years (instead of the constant $80 \%$ that currently exists), but doing so in a way that the total value of the abatement to the recipient remains equivalent to what they would currently receive under the program. We further believe that more milestones and requirements should be added to the program to ensure that the benefit provided to the user of the credit is more than offset by the increased revenue to the state. Since state funding has been eliminated for this program in the FY 2018 budget, it makes sense to reassess the program now. Finally, we believe this program should be funded by the state on an ongoing annual basis (where the state reimburses local communities for $50 \%$ of the abatement) though the General Fund versus bonded financing as it was in FY 2019.

## 7. Additional Enterprise Zones

Additional Enterprise zones include Contiguous Municipality Zones, Defense Plant Zones, Manufacturing Plant Zones, the Bradley Airport Development Zone, Bioscience Enterprise Corridor Zones and Enterprise Corridor Zones. For more detail on each of these please see page 133 of the Appendix.
The data on all these additional Enterprise Zones and Enterprise Corridor Zone programs are included in the Enterprise Zone data provided to DECD by OPM, and therefore the analysis of these programs are incorporated into the Enterprise Zone analysis above.

## 8. Urban Jobs Program

The Urban Jobs Program provides benefits to eligible companies with suitably induced projects located in a Targeted Investment Community but outside of the Enterprise Zone, which are not impacted by any of the newly designated Enterprise Zone level benefit areas described above.

## Benefits of the Urban Jobs Program

The benefits associated with the Urban Jobs Program in a Targeted Investment Community outside of the Enterprise Zone are provided at the discretion of the DECD commissioner and are as follows:

- A five-year, $80 \%$ property tax abatement (captured in the Enterprise Zone analysis above).
- A ten-year, 25\% corporation business tax credit to qualified manufacturing businesses.
- Property tax benefits for real estate and/or equipment are provided on a sliding scale for qualifying service facilities located outside of an Enterprise Zone in a Targeted Investment Community. The minimum investment is $\$ 20$ million to qualify for a five-year, forty percent property tax abatement. This benefit increases to an eighty percent, five-year tax abatement for projects with an investment greater than $\$ 90$ million. The equipment qualifies only if installed in a facility that has been newly constructed or substantially renovated or expanded.

For more details on the Urban Jobs Program please see page 138 of the Appendix.

## Recommendation

There have been no claims for the Urban Jobs corporate tax credit. We recommend this tax credit be eliminated because the job creation thresholds are unrealistically high and there are similar tax
credits offered such as the Job Creation and the Apprenticeship in Manufacturing, Plastics and Construction tax credit programs.

## B. Non-DECD Administered Business Assistance Tax Credits

In this section, we present publically available information on tax credit programs that target economic development but are not administered by DECD. We give details on the use of the credit, such as the number of claims and the amounts claimed by industry, which will give a portrait of the popularity of the credit and its use over time. The source of this data is the Department of Revenue Services (DRS). The analysis provides estimated activity incented by the credit, which is a measure of the direct economic activity associated with the credit.

For each of these credits we present the number of claims and total value of claims by year, from 2005 to 2016 . We present the main industries (by claim size) that utilize these by evaluating total claims by industry from 2005 to 2015 (claim data by industry for 2016 was not available at the time of this analysis).

We are unable to do an extended analysis of these credits because we do not have the necessary information. Companies utilizing these credits are not required to report on the economic activity that can be attributed to the credit, such as new jobs created or expenditures undertaken. Therefore we can only provide an estimate of the particular economic activity for which the credit was claimed.

## 1. Angel Investor Tax Credit

The Angel Investor tax credit is administered by Connecticut Innovations, Inc. (CI). It provides a credit for a cash investment of not less than $\$ 100,000$ (and not less than $\$ 25,000$ effective October 27,2011 ) in the qualified securities of a Connecticut business by an angel investor. The credit is applicable to taxable years beginning on or after January 1, 2010 and is applicable to the investors' personal income tax. Qualified Connecticut businesses must have been in business for less than seven years and have less than 25 paid employees, $75 \%$ of whom must be Connecticut residents. Gross revenue must be less than $\$ 1$ million and management and their families must have majority ownership of the venture.

An angel investor is an accredited investor, as defined by the Securities and Exchange Commission, or network of accredited investors who review new or proposed businesses for
potential investment who may seek active involvement, such as consulting and mentoring, in a Connecticut business. The angel investor may apply to CI to reserve a tax credit equal to 25 percent of the cash investment. The angel investor must choose from a list of Connecticut businesses that CI has determined are qualified to receive cash investments eligible for the angel investor tax credit. The angel investor must not have a majority ownership of the business it seeks to invest in.

The most current statistics for this program are shown below (2017 is the most recent tax year we have tax claims data for), followed by a summary of the investments by industry.

| Table 19: Angel Investor Tax Credit Program (Inception through December 2018) |  |
| :--- | ---: |
| Number of Investments | 810 |
| Investments in Qualified Connecticut Businesses | $\$ 72,433,441$ |
| Tax Credits Issued (through 2018) | $\$ 18,249,109$ |
| Tax Credits Claimed (through 2017, from DRS) | $\$ 12,945,102$ |

Source: Connecticut Innovations and DRS

Angel Investor tax credits claimed against the personal income tax are shown below. A total of 155 claims were filed in 2017 for this tax credit, for a total of over $\$ 1.6$ million.


Based on the $25 \%$ tax credit calculation, the tax credits claimed through 2017 are associated with over $\$ 51$ million of investments by angel investors in qualified Connecticut businesses. The businesses by broad industry category and the amounts invested in them are shown below.

| Table 20: Angel Investments by Company Category and Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Company } \\ \text { by } \\ \text { Category } \\ \hline \end{gathered}$ | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Bioscience | \$1,145,005 | \$1,955,000 | \$6,143,058 | \$3,295,271 | \$2,334,999 | \$2,568,135 | \$3,133,501 | \$2,182,000 | \$3,318,168 |
| Clean <br> Technology | \$450,000 | \$0 | \$1,199,000 | \$2,365,773 | \$685,000 | \$1,060,000 | \$1,270,000 | \$537,500 | \$80,000 |
| Information Technology | \$300,000 | \$5,278,083 | \$7,842,896 | \$2,618,734 | \$4,689,932 | \$2,401,499 | \$2,489,888 | \$3,285,000 | \$3,805,000 |
| Advanced Materials | \$0 | \$0 | \$0 | \$0 | \$525,000 | \$0 | \$0 | \$0 | \$0 |
| Other | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,633,000 | \$3,842,000 |
| Total | \$1,895,005 | \$7,233,083 | \$15,184,954 | \$8,279,777 | \$8,234,930 | \$6,029,634 | \$6,893,390 | \$7,637,500 | \$11,045,168 |

Source: Connecticut Innovations and DRS
Note: Numbers may not total due to rounding.
The Angel Investor tax credit was created to encourage investment in certain targeted industries and almost all qualified companies have so far received funds.

## 2. Apprenticeship in Manufacturing, Plastics and Construction Tax Credit

A tax credit may be applied by corporations that employ apprentices who receive training in the manufacturing, plastics, plastics-related, or construction trades. Wages of pre-apprentices are not eligible for this tax credit. The maximum credit is $\$ 4,800$ per apprentice available to firms in the plastics and manufacturing industries and $\$ 4,000$ per apprentice available to firms in construction industries. The credit was modified during the 2013 legislative session by increasing the credit from $\$ 4$ to $\$ 6$ per hour and raising the cap from $\$ 4,800$ or $50 \%$ of the actual apprentice wages, whichever is less, to $\$ 7,500$ or $50 \%$ of such wages, whichever is less, effective January 1, 2015. The recent claims activity of this credit is shown below.


We cannot directly estimate the actual number of apprentices that were eligible over this period because it is a multi-year program; i.e. a company can file for the tax credit for the same apprentice for more than one year. In 2016 there were 13 claims filed for this tax credit totaling over $\$ 161,000$, suggesting a minimum of 34 apprentices that companies were eligible to file claims for in 2016 based on $\$ 4,800$ per apprentice. The industry sectors claiming the largest portion of these tax credits are listed below. From 2006 to 2015 (the last year for which we have claims data at the industry sector level) the industry that filed the largest amount of claims was the transportation equipment manufacturing sector, which includes the state's aerospace products and parts manufacturers.

| Table 21: Apprenticeship in Manufacturing, Plastics and Construction Tax Credit Claims |  |  |
| :--- | ---: | ---: |
| Claiming Industry by NAICS Code | 2006 to 2015 Sum of Claims | Average Annual Claim |
| Transportation Equipment Manufacturing | $\$ 1,935,818$ | $\$ 193,582$ |
| Fabricated Metal Product Manufacturing | $\$ 483,410$ | $\$ 48,341$ |
| Construction | $\$ 156,641$ | $\$ 15,664$ |
| Total claims including sectors not listed above | $\mathbf{\$ 2 , 8 4 4 , 2 6 5}$ | $\$ \mathbf{2 8 4 , 4 2 6}$ |

Source: DRS
Note: Numbers may not total due to rounding.

## 3. Electronic Data Processing Equipment Property Tax Credit

Firms can claim a credit equal to $100 \%$ of the property tax they paid on electronic data processing equipment. The credit effectively reduces the cost of electronic data processing equipment. As this tax credit is based on the full property tax payment and not on incremental
changes, we do not know if the property taxes are paid on new or existing equipment. A total of 1,086 claims were filed in 2016 for this tax credit, for a total of almost $\$ 45$ million.


Almost all industries in the state file for this tax credit, with the Insurance sector claiming the most by a significant margin; an industry breakdown of the largest claims through 2015 is shown below.

Table 22: Electronic Data Processing Equipment Property Tax Credit Claims

| Claiming Industry by NAICS Code | $\mathbf{2 0 0 6}$ to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| :--- | ---: | ---: |
| Insurance Carriers and Related Activities | $\$ 112,269,452$ | $\$ 11,226,945$ |
| Management of Companies and Enterprises | $\$ 18,693,455$ | $\$ 1,869,345$ |
| Computer and Electronic Product | $\$ 18,348,429$ | $\$ 1,834,843$ |
| Ambulatory Health Care Services | $\$ 17,292,986$ | $\$ 1,729,299$ |
| Total claims including sectors not listed above | $\$ 255,375,149$ | $\$ \mathbf{2 5 , 5 3 7 , 5 1 5}$ |

Source: DRS
Note: Numbers may not total due to rounding.

## 4. Fixed Capital Investment Tax Credit

The fixed capital investment tax credit is $5 \%$ of the amount paid or incurred by a corporation for new fixed capital investment. The full value of the associated investment is therefore 20 times the tax credit. The claims for this tax credit over the most recent 10 years for which data is available (2007-2016) totals over $\$ 650$ million, which points to associated new fixed capital investment of over $\$ 13$ billion over this time period. For the most recent year available (2016),
the total associated investment is almost $\$ 900$ million, estimated based on the year's 1,501 claims totaling $\$ 44.9$ million.


The average annual claim over the last 10 years (total claims divided by total number of claims) is roughly $\$ 36,000$, which indicates new capital investment of approximately $\$ 730,000$ per claimant.

An industry breakdown of the largest claims through 2015 show a variety of industries utilizing this credit, including manufacturing.

| Table 23: Fixed Capital Investment Tax Credit Claims |  |  |
| :--- | ---: | ---: |
| Claiming Industry by NAICS Code | 2006 to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| Broadcasting, except Internet: <br> Telecommunications | $\$ 122,602,326$ | $\$ 12,260,233$ |
| Utilities | $\$ 113,144,856$ | $\$ 11,314,486$ |
| Professional and technical services | $\$ 90,470,288$ | $\$ 9,047,029$ |
| Management of Companies and Enterprises | $\$ 78,932,506$ | $\$ 7,893,251$ |
| Transportation Equipment Manufacturing | $\$ 69,554,821$ | $\$ 6,955,482$ |
| Retail Trade | $\$ 52,029,990$ | $\$ 5,202,999$ |
| Total claims including sectors not listed above | $\mathbf{\$ 6 8 0 , 8 2 0 , 4 5 2}$ | $\$ \mathbf{6 8 , 0 8 2 , 0 4 5}$ |

Source: DRS

## 5. Machinery and Equipment Expenditure Tax Credit

The machinery and equipment expenditure tax credit is $5 \%$ or $10 \%$ of the incremental increase in expenditures for machinery and equipment acquired for and installed in a facility in Connecticut that exceeds the amount spent for such expenditures in the prior income year. A $5 \%$ credit is
available to companies that employ between 251 and 800 full-time, permanent employees whose wages or other compensation are earned in Connecticut, and a $10 \%$ credit applies if it employs fewer than 250 such workers. We calculate the associated incremental machinery and equipment expenditures assuming a $10 \%$ tax credit to be more conservative (the expenditure is therefore 10 times the tax credit). The claims for this tax credit over the most recent 10 years for which data is available (2007-2016) totals almost $\$ 12$ million, which points to eligible expenditures of almost $\$ 120$ million over this time period. For the most recent year available (2016), the total associated investment is at least $\$ 8.6$ million, based on the year's 49 claims totaling $\$ 863,842$.


The average annual claim over the last 10 years (total claims divided by total number of claims) is roughly $\$ 15,000$, which indicates new capital investment of approximately $\$ 150,000$ per claimant. Note that this is an estimate of the company's incremental spending in this category, not total spending. An industry breakdown of the largest claims through 2015 show a variety of industries utilizing this credit.

## Table 24: Machinery and Equipment Expenditures Tax Credit Claims

| Table 24: Machinery and Equipment Expenditures Tax Credit Claims |  |  |
| :--- | ---: | ---: |
| Claiming Industry by NAICS Code | $\mathbf{2 0 0 6}$ to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| Miscellaneous Manufacturing | $\$ 2,178,277$ | $\$ 217,828$ |
| Broadcasting, except Internet: <br> Telecommunications | $\$ 1,362,869$ | $\$ 136,287$ |
| Wholesale trade | $\$ 1,042,448$ | $\$ 104,245$ |

## Table 24: Machinery and Equipment Expenditures Tax Credit Claims

| Claiming Industry by NAICS Code | 2006 to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| :--- | ---: | ---: |
| Fabricated metal product manufacturing | $\$ 1,026,978$ | $\$ 102,698$ |
| Total claims including sectors not listed above | $\$ 12,330,808$ | $\$ 1,233,081$ |

Source: DRS

## 6. Research and Development Expenditures Tax Credit

This tax credit is available for research and development (R\&D) expenses incurred in Connecticut. The tax credit varies from $1 \%$ to over $6 \%$; we calculate the associated activity assuming a conservative $5 \%$ average rate. The estimated full value of the associated investment is therefore 20 times the tax credit. The claims for this tax credit over the most recent 10 years for which data is available (2007-2016) totals over $\$ 117$ million, which points to associated $R \& D$ expenditures of over $\$ 2.3$ billion over this time period. For the most recent year available (2016), the total associated investment is over $\$ 126$ million, based on the year's 159 claims totaling $\$ 6.3$ million. Over $\$ 60$ million in claims from the Transportation Equipment Manufacturing sector is behind the significant spike in claims in 2015.


The average annual claim over the last 10 years (total claims divided by total number of claims) is roughly $\$ 78,500$, which indicates new capital investment of approximately $\$ 1.6$ million per claimant. An industry breakdown of the largest claims through 2015 show mostly manufacturing industries utilizing this credit.

| Table 25: Research \& Development Expenditures Tax Credit Claims |  |  |
| :--- | ---: | ---: |
| Claiming Industry by NAICS Code | 2006 to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| Transportation Equipment Manufacturing | $\$ 68,867,796$ | $\$ 6,886,780$ |
| Miscellaneous Manufacturing | $\$ 9,484,841$ | $\$ 948,484$ |
| Professional and Technical Services | $\$ 8,052,730$ | $\$ 805,273$ |
| Chemical Manufacturing | $\$ 7,786,526$ | $\$ 778,653$ |
| Management of Companies and Enterprises | $\$ 4,393,216$ | $\$ 439,322$ |
| Electrical Equipment and Appliance <br> Manufacturing | $\$ 3,900,758$ | $\$ 390,076$ |
| Total claims including sectors not listed above | $\mathbf{\$ 1 1 6 , 4 1 2 , 1 4 0}$ | $\$ \mathbf{1 1 , 6 4 1 , 2 1 4}$ |

Source: DRS

## 7. Research and Experimental (Incremental) Expenditures Tax Credit

This tax credit is equal to $20 \%$ of the incremental increase in research and experimental (R\&E) expenditures incurred in Connecticut over the previous year's research and experimental expenditure. The estimated full value of the associated R\&E expenditures is therefore five times the tax credit. The claims for this tax credit over the most recent 10 years for which data is available (2007-2016) totals over $\$ 179$ million, which points to associated incremental R\&E expenditures of over $\$ 898$ million over this time period. For the most recent year available (2016), the total associated investment is over $\$ 90$ million, based on the year's 222 claims totaling $\$ 18$ million.


The average annual claim over the last 10 years (total claims divided by total number of claims) is roughly $\$ 100,000$, which indicates new $\mathrm{R} \& E$ expenditures of approximately $\$ 500,000$ per claimant. Note that this is an estimate of the company's incremental spending in this category, not total spending. An industry breakdown of the largest claims through 2015 show mostly manufacturing industries utilizing this credit.

| Table 26: Research \& Experimental Expenditures Tax Credit Claims |  |  |
| :--- | ---: | ---: |
| Claiming Industry by NAICS Code | 2006 to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| Transportation Equipment Manufacturing | $\$ 38,604,652$ | $\$ 3,860,465$ |
| Professional and Technical Services | $\$ 37,013,255$ | $\$ 3,701,325$ |
| Miscellaneous Manufacturing | $\$ 30,808,332$ | $\$ 3,080,833$ |
| Computer and Electronic Product Manufacturing | $\$ 12,516,133$ | $\$ 1,251,613$ |
| Electrical Equipment and Appliance <br> Manufacturing | $\$ 11,286,097$ | $\$ 1,128,610$ |
| Management of Companies and Enterprises | $\$ 9,155,797$ | $\$ 915,580$ |
| Total claims including sectors not listed above | $\$ \mathbf{1 7 7 , 9 8 0 , 2 2 6}$ | $\$ \mathbf{1 7 , 7 9 8 , 0 2 3}$ |

Source: DRS

## 8. Human Capital Tax Credit

This tax credit is $5 \%$ of the amount paid or incurred by the corporation as a human capital investment. These are costs incurred by a firm for a variety of human capital investments including employee training, donations to institutions of higher learning, day care facilities' construction and child care subsidies. The full value of the associated investment is therefore 20 times the tax credit. The claims for this tax credit over the most recent 10 years for which data is available (2007-2016) totals over $\$ 28$ million, which points to associated human capital investments of over $\$ 563.4$ million over this time period. For the most recent year available (2016), the total associated investment is $\$ 46.5$ million, based on the year's 88 claims totaling $\$ 2.3$ million.


The average annual claim over the last 10 years (total claims divided by total number of claims) is roughly $\$ 23,600$, which indicates new capital investment of approximately $\$ 472,000$ per claimant. An industry breakdown of the largest claims through 2015 show a variety of industries utilizing this credit, with Transportation Equipment Manufacturing claiming the most by a significant margin.

Table 27: Human Capital Investment Tax Credit Claims by NAICS Code

|  | $\mathbf{2 0 0 6}$ to 2015 Sum of <br> Claims | Average Annual <br> Claim |
| :--- | ---: | ---: |
| Transportation Equipment Manufacturing | $\$ 18,330,142$ | $\$ 1,833,014$ |
| Management of Companies and Enterprises | $\$ 2,122,240$ | $\$ 212,224$ |
| Monetary Authorities and Credit Intermediation | $\$ 1,446,427$ | $\$ 144,643$ |
| Professional and Technical Services | $\$ 1,411,402$ | $\$ 141,140$ |
| Broadcasting, except Internet: <br> Telecommunications | $\$ 1,041,251$ | $\$ 104,125$ |
| Total claims including sectors not listed above | $\mathbf{\$ 2 7 , 6 3 1 , 1 4 8}$ | $\$ 2,763,115$ |

Source: DRS

## II. ECONOMIC DEVELOPMENT PROGRAMS AND ACTIVITIES

## A. Economic Development Investment Analysis

A complete listing of DECD's Economic Development recipients over the last 10 fiscal years can be found at: https://data.ct.gov/Business/Department-of-Economic-and-Community-Development-D/xnw3-nytd

Table 28 shows the various types of direct financial assistance DECD provided over the last 10 fiscal years (2009-2018) through the Manufacturing, Small Business Express program, and other specialized funding sources. Financial assistance may be in the form of a loan or grant.

| Table 28: Active Direct Assistance Portfolio Value by Assistance Type |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| FY 2018 |  | Portfolio |  |  |
| Assistance <br> Type | Assistance <br> Amount | Percentage of <br> Total | Assistance <br> Amount | Percentage of <br> Total |
| Loans | $\$ 116,154,284$ | $70.8 \%$ | $\$ 895,901,978$ | $67.3 \%$ |
| Grants | $\$ 47,987,179$ | $29.2 \%$ | $\$ 435,791,279$ | $32.7 \%$ |
| TOTAL | $\$ \mathbf{1 6 4 , 1 4 1 , 4 6 3}$ | $\mathbf{1 0 0 . 0 \%}$ | $\$ 1,331,693,258$ | $\mathbf{1 0 0 . 0 \%}$ |

Source: DECD
Note: Numbers may not total due to rounding

The state's borrowing cost per the Office of the State Comptroller as of June 30, 2018 was $3.48 \%$. Table 29 provides a breakdown of funding by funding source. Please note that throughout this section MAA program data includes First Five companies that received direct financial assistance.

| Table 29: Value by Funding Source |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 2018 |  |  | Portfolio |  |  |
| Funding Source | No. of Companies | Assistance Amount | Percentage of Total | No. of Companies | Assistance Amount | Percentage of Total |
| MAA | 36 | \$139,227,000 | 84.8\% | 248 | \$932,131,864 | 70.0\% |
| EXP | 142 | \$24,914,463 | 15.2\% | 1,401 | \$248,411,394 | 18.7\% |
| Other | 0 | \$0 | 0.0\% | 5 | \$151,150,000 | 11.4\% |
| TOTAL | 178 | \$164,141,463 | 100.0\% | 1,654 | \$1,331,693,258 | 100.0\% |
| MAA- Lending Partners |  |  |  | 107 | \$8,552,306 | n/a |
| MAA- CI Seamless |  |  |  | 7 | \$5,115,050 | n/a |
| EXP- Lending Partners |  |  |  | 303 | \$35,942,770 | n/a |


| Inactive MAA Projects | 17 | $\$ 46,680,199$ | n/a |
| :--- | :---: | :---: | :---: |
| Inactive EXP Projects | 424 | $\$ 46,659,948$ | n/a |

Source: DECD
Note: For MAA funding, only business assistance recipients are included in the count above. Companies may have received funding under more than one program or under more than one contract. Companies assisted by DECD's lending partners and MAA-CI Seamless recipients are not listed on Open Data since compliance is managed by our Partner entity. Inactive projects include companies that have gone out of business, repaid their assistance and left the program or completed all the contract requirements. A company may appear on the active and inactive list if it has multiple contracts. Inactive projects, lending partner projects and Seamless projects are not included in the tables that follow unless otherwise noted.

Of DECD's entire MAA and EXP active and inactive portfolio of 2,090 companies, 92 have gone out of business. These companies represent $4.4 \%$ of companies funded and $1.6 \%$ of dollars invested. When a company goes out of business or otherwise defaults on its obligations, DECD gives the company an opportunity to cure the default. If the company is unable to do so, DECD attempts to collect its collateral and pursues all available legal options, including litigation, if appropriate.

In FY 2018 DECD received the following principal and interest payments: $\$ 49,357,601$ through the MAA program, $\$ 17,319,489$ through the EXP program, and $\$ 798,281$ from Small Business Assistance Account recipients (both direct and indirect recipients). As of June 30, 2018 the principal balance of outstanding MAA loans is $\$ 419,935,674$, the principal balance of outstanding EXP loans is $\$ 134,316,533$ and the principal balance of outstanding Small Business Assistance Account loans (direct and indirect) is $\$ 9,025,135$.

As a result of DECD's active business assistance investments of approximately $\$ 1.3$ billion, an additional $\$ 5.1$ billion in leveraged funds were invested in Connecticut's economy. In other words, for every dollar invested by DECD, $\$ 3.88$ dollars were invested by other sources into the same business projects.

|  | Table 30: Active Portfolio Leverage Ratio |  |  |
| ---: | ---: | ---: | ---: |
|  | Leverage <br> Ratio | Non-DECD Funds | DECD Investment |
| Active Portfolio | 3.88 | $\$ 5,178,172,285$ | $\$ 1,331,693,258$ |

## Source: DECD

Note: The table above includes $\$ 1,184,000,000$ in project costs for Lockheed Martin, a Special Act recipient. This is a $\$ 140,000,000$ grant with a total budget of $\$ 19,341,402,994$. Including the total $\$ 19 B$ budget would have skewed the leverage ratio to $\$ 17.52$ dollars invested for each dollar of DECD assistance.

Table 31 shows the industry mix of DECD's active business assistance portfolio as a percentage of the total investment. The department's assistance is closely aligned with targeted industries, with $47.3 \%$ of DECD business assistance invested in manufacturing and $14.1 \%$ in the finance and insurance sector.

| Table 31: Active Portfolio Industrial Composition |  |  |  |
| ---: | :--- | ---: | ---: |
| NAICS | Industry | Direct <br> Assistance | $\%$ |
| $31-33$ | Manufacturing | $\$ 629,263,201$ | $47.3 \%$ |
| 52 | Finance and Insurance | $\$ 187,762,339$ | $14.1 \%$ |
| 54 | Professional, Scientific and Technical Services | $\$ 104,138,988$ | $7.8 \%$ |
| 51 | Information | $\$ 72,565,997$ | $5.4 \%$ |
| 62 | Health Care and Social Assistance | $\$ 57,911,468$ | $4.3 \%$ |
| 56 | Administrative and Support and Waste Management/ <br> Remediation Management | $\$ 52,941,332$ | $4.0 \%$ |
| $44-45$ | Retail Trade | $\$ 46,048,665$ | $3.5 \%$ |
| 42 | Wholesale | $\$ 44,099,927$ | $3.3 \%$ |
| $22-23$ | Utilities/Construction | $\$ 32,900,527$ | $2.5 \%$ |
| 81 | Other Services | $\$ 29,347,774$ | $2.2 \%$ |
| 72 | Accommodation and Food Services | $\$ 18,731,716$ | $1.4 \%$ |
| $48-49$ | Transportation and Warehousing | $\$ 16,742,384$ | $1.3 \%$ |
| 53 | Real Estate and Rental and Leasing | $\$ 9,075,780$ | $0.7 \%$ |
| 55 | Management of Companies and Enterprises | $\$ 9,200,000$ | $0.7 \%$ |
| 71 | Arts, Entertainment and Recreation | $\$ 8,421,330$ | $0.6 \%$ |
| 11 | Agriculture | $\$ 6,025,000$ | $0.5 \%$ |
| 61 | Educational Services | $\$ 3,345,400$ | $0.3 \%$ |
| 21 | Mining | $\$ 2,040,000$ | $0.2 \%$ |
| 92 | Public Administration | $\$ 331,430$ | $0.0 \%$ |
|  | ToTAL | $\$ 1,331,693,258$ | $100 \%$ |

Source: DECD

## B. Job Creation and Retention Analysis

DECD's financial assistance agreements with businesses generally require the creation and/or retention of jobs as of a specific date as a condition of financial assistance. DECD auditors or an independent public accountant conduct contractual job audits that cover a specific period in which the companies are required to create and retain these positions.

Companies may have the opportunity to earn loan forgiveness credit in exchange for meeting or exceeding their contractual job requirement. Companies in DECD's MAA and EXP portfolios (active and inactive) have earned $\$ 175,157,789$ in forgiveness as of June 30, 2018.

In cases where companies fail to reach their targets, DECD assistance agreements require companies to repay all or a portion of their financial assistance; have their loan interest rates increase; and/or reduce the amount of incentive that may be available, such as forgiveness withheld or a reduction in tax credits that may be issued.

The following information in Table 32 is a summary of job audits that have been conducted for companies in DECD's portfolio (Direct Assistance and URA Tax Credits) that have contractual employment obligations. Overall, contractual employment targets have been exceeded by 3,453 jobs.

| Table 32: Business Assistance Portfolio Job Audit Results as of 6/30/2018 |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | Contract Requirements |  |  | \% of Contract |  |
| Job Goal <br> Attainment <br> Status | \# of Audits <br> Completed | Jobs <br> Retained | Jobs <br> Created | Total | Actual <br> Jobs Per <br> Audit | Requirement <br> Attained |
| Met | 639 | 43,243 | 9,741 | 52,984 | 58,065 | $109.6 \%$ |
| Not Met | 254 | 3,631 | 1,721 | 5,352 | 3,724 | $69.6 \%$ |
| TOTAL | $\mathbf{8 9 3}$ | $\mathbf{4 6 , 8 7 4}$ | $\mathbf{1 1 , 4 6 2}$ | $\mathbf{5 8 , 3 3 6}$ | $\mathbf{6 1 , 7 8 9}$ | $\mathbf{1 0 5 . 9 \%}$ |

## Source: DECD

Note: A company may have had more than one audit completed if it has more than one contract. Duplicate jobs retained, created and jobs per audit have been removed from this analysis across contracts and programs.
Note: This table includes audits completed on or before 6/30/2018. Audits completed after that date will be included in the FY 2019 Annual Report.
Note: Includes URA tax credit recipients with completed job audits.
Note: Companies may have multiple audit requirements over a span of several years. The results above are not meant to show the results of the company's final job audit.

| Table 33: Business Assistance Portfolio Job Goal Attainment |  |  |  |
| :---: | :---: | :---: | :---: |
| $\%$ of <br> Target | \# of Audits | Total Jobs Required by Contract | Total Jobs Based on Job Audit |
| >150\% | 98 | 1,829 | 3,763 |
| 141-150\% | 29 | 357 | 526 |
| 131-140\% | 29 | 2,861 | 3,808 |
| 121-130\% | 31 | 2,897 | 3,554 |
| 111-120\% | 106 | 4,499 | 5,213 |
| 101-110\% | 127 | 34,648 | 35,982 |
| 100\% | 218 | 3,842 | 3,840 |
| 99-90\% | 36 | 1,117 | 978 |
| 89-80\% | 49 | 2,233 | 1,861 |
| 79-70\% | 31 | 780 | 589 |
| 69-60\% | 25 | 2,185 | 1,457 |
| 59-50\% | 30 | 207 | 105 |
| <50\% | 84 | 881 | 113 |
| TOTAL | 893 | 58,336 | 61,789 |

[^0]DECD's financial assistance agreements are protected against non-performance by including clawbacks in the event that a company is unable to fulfill their contractual obligations. DECD actively enforces the provisions of the financial assistance agreement. Of the 254 audits that fell short of achieving the job goal 104 had interest rate increases, 110 were charged a financial penalty, 13 had both a financial penalty and a rate increase, 14 repaid its loan and 1 had a tax credit reduction.

DECD is responsible for balancing financial risk and return with the fulfillment of public policy and the agency has strategies and systems in place to safeguard the state's investments. For large projects, DECD routinely conducts an economic impact analysis as a part of its underwriting process to determine a project's economic benefit to the state, including the incremental increase in tax revenues on the direct basis as a result of the investment. DECD's due diligence process includes
several components: a project eligibility review, financial analysis, economic impact analysis, consistency with state land use policies, and technical and regulatory feasibility.

## C. Wage Analysis

Table 34 provides the results of a portfolio wage analysis based on survey results. According to survey responses, companies in DECD's active portfolio paid an average annual salary of $\$ 57,916$.

| Table 34: Active DECD Portfolio Wage Analysis <br> Based on Survey Responses |  |
| :--- | ---: |
| Average | $\$ 57,916$ |
| High | $\$ 330,585$ |
| Low | $\$ 21,008$ |
| Median | $\$ 50,000$ |

Source: DECD
Table 35 provides the portfolio wage data, stratified over the portfolio industry mix. The highest average wage was paid by those businesses in the Finance and Insurance industry. The lowest average wage was with those businesses in the accommodation and Food Service industry.

| Table 35: Active DECD Portfolio Wages by Industry <br> Based on Survey Responses |  |  |  |
| :--- | :--- | ---: | ---: |
| NAICS <br> Code | NAICS Category | \# of <br> Companies | Portfolio <br> Average <br> Wage |
| 52 | Finance and Insurance | 29 | $\$ 103,627$ |
| 51 | Information | 17 | $\$ 81,709$ |
| 54 | Professional, Scientific, and <br> Technical Services | 59 | $\$ 64,044$ |
| 42 | Wholesale Trade | 37 | $\$ 63,991$ |
| 81 | Other Services | 17 | $\$ 39,432$ |
| 62 | Health Care and Social Assistance | 36 | $\$ 50,168$ |
| $31-33$ | Manufacturing | 169 | $\$ 55,514$ |
| $22-23$ | Utilities/Construction | 31 | $\$ 55,816$ |
| $44-45$ | Retail Trade | 37 | $\$ 45,419$ |
| 56 | Administrative and Support and <br> Waste Management/Remediation | 16 | $\$ 65,446$ |
| $48-49$ | Transportation and Warehousing | 8 | $\$ 55,139$ |
| 71 | Arts, Entertainment and Recreation | 13 | $\$ 44,983$ |

Department of Economic and Community Development
2018 Annual Report

| Table 35: Active DECD Portfolio Wages by Industry <br> Based on Survey Responses |  |  |  |
| :--- | :--- | ---: | ---: |
| NAICS <br> Code | NAICS Category | \# of <br> Companies | Portfolio <br> Average <br> Wage |
| 61 | Other Services | 4 | $\$ 36,152$ |
| 53 | Real Estate and Rental / Leasing | 3 | $\$ 53,809$ |
| 11 | Agriculture, Forestry, Fishing and <br> Hunting | 2 | $\$ 41,000$ |
| 72 | Accommodation and Food Service | 25 | $\$ 33,798$ |

## D. Economic Development Direct Assistance Programs

## 1. Manufacturing Assistance Act Program (MAA)

The MAA program is DECD's primary funding source for providing direct financial assistance to businesses. Per CGS Sec. 32-221, the goals of the MAA program are to:

- Promote the retention, expansion, and diversification of existing manufacturing and other economic base businesses in targeted industries;
- Encourage manufacturing and other economic base businesses from other geographic areas to locate into the state; and
- Enhance employment opportunity and the tax base of communities, particularly in the state's more economically disadvantaged communities.

An analysis of the MAA portfolio shows these goals are being met. Approximately $86 \%$ of MAA active assistance has gone to businesses in DECD's strategically targeted clusters and projects. 64 MAA recipients are located in the state's distressed municipalities. Companies in DECD's MAA portfolio (active and inactive) have committed to create 15,228 new Connecticut jobs and retain 43,816 existing employees. Please note these job numbers have been adjusted for duplication across contracts and programs. Also, the contractual job requirements of companies that went out of business are not included above. Additional data collection to monitor the MAA program's achievements could include tracking the number of manufacturers that relocate to Connecticut with DECD assistance.

| Table 36: MAA Financial Assistance per Job to be Created or Retained <br> Based on Maximum Contractual Job Obligations |  |
| :--- | ---: |
| Total Assistance | $\$ 978,812,063$ |
| Jobs to be Retained | 43,816 |
| Jobs to be Created | 15,228 |
| Financial Assistance per Job | $\$ 16,578$ |

Note: This calculation includes the Active and Inactive MAA projects. Duplicate jobs to be created/retained have been removed. Duplicates could be caused by a company having multiple MAA contracts or MAA/URA contracts. For companies that went out of business, we assumed no job retention or creation.

## a. Economic and Fiscal Impact of the MAA Program:

## Estimated Direct Fiscal Impact of the MAA Program

| Table 37: MAA Direct Economic Impact to Date and Future Projection In Constant Dollars (2018 \$) |  |  |  |
| :--- | ---: | ---: | :---: |
|  | To Date (2009-2018) | Future (2019-2037) |  |
| Estimated Direct Net State Revenue in 2018 \$ | $\$ 132,679,391$ | $\$ 766,717,931$ |  |
| Direct Net State Revenue - Total Value of Program <br> $(2009-2037) ~ i n ~$ <br> 2018 |  | $\$ 899,397,322$ |  |

Source: DECD analysis
The above table shows the cumulative direct impact of the MAA program over the most recent 10 years (FY 2009- FY 2018) and future projections. The direct net state revenue estimated above is the difference between the direct revenues generated by the program and its direct expenses. The direct impact comes from the jobs created at the company and capital expenditures made by the recipients of the MAA funds, so the direct revenues under the program are the income taxes and sales taxes generated by each of these respectively. The direct expenses are the costs to the state government to fund the program, which is the debt service it pays on the bonds issued to finance MAA grants and loans. These costs are offset by the repayments of loans made by the recipients and any penalties they pay for not meeting required conditions after receiving the funds. Earned and potential forgiveness affect the loan repayment amounts and are included as well. The direct net revenue above shows that on average estimated direct revenues exceeded the costs of the program by over $\$ 13$ million a year in constant 2018 dollars over the last ten years, as the cumulative total of the net direct revenue it generated over this time period is over $\$ 132$ million (in 2018 dollars). This analysis does not include
any potential downstream (i.e. indirect and induced) impacts in the economy from the additional spending or jobs created.

The future projections incorporates the direct fiscal impact of the program over the next twenty years, which is when all expenses associated with the current projects are completed (includes the twenty years of debt service the state incurs to finance the MAA assistance). The total value of the estimated direct fiscal impact to the state over the next twenty years is estimated at $\$ 766.7$ million, and the full estimated direct fiscal impact of the MAA program to the state (over the 30 years) is $\$ 899$ million, expressed in 2018 dollars.

## Estimated Total Economic Impact of the MAA Program:

| Table 38: MAA Total Estimated Economic Impact to Date and Future Projection |  |  |
| :--- | ---: | ---: |
| In Constant Dollars (2018 $\$$ ) |  |  |
|  | Impact To Date (2009-2018) | Total Impact (2009-2037) |
| New State GDP | $\$ 21,843,512,130$ | $\$ 169,712,178,448$ |
| New Personal Income | $\$ 13,296,827,090$ | $\$ 108,535,512,090$ |
| Total Revenues | $\$ 1,097,948,552$ | $\$ 8,881,114,906$ |
| Total Expenditures | $\$ 418,580,909$ | $\$ 5,448,667,514$ |
| New Net State Revenue | $\$ 679,367,643$ | $\$ 3,432,447,393$ |

## Source: DECD

Note: Joint MAA/URA recipients that earned a URA tax credit are not included in the MAA economic impact calculations above, they are included in the URA section earlier in this report. This is to avoid the double counting of the project's economic benefit. However, recipients with incentives from both MAA/URA but that have not yet earned a URA tax credit are included in the MAA economic impact calculations.

The above table shows the total economic impact of the MAA program since its inception estimated using the REMI Tax-PI economic model. The REMI model and the modeling method has been substantially revised (due to an upgrade from the vendor) over that used for the 2017 Revised Annual Report and therefore the result is not comparable to that of last year. For this year DECD used the upgraded Tax-PI model. The methodology revisions now allow us to model the assistance more accurately. For details on the methodological revisions see page 139 in the Appendix.

The model's results reflect the total economic impact of the MAA program FY 2009-FY 2018 and the projected future total impact (2009-2037). The total impact consists of the direct, indirect and
induced effects the program, offset by state assistance. The fiscal results therefore incorporate the 'direct' impacts to state net revenues (for example, the increase in income taxes from the specific new jobs at each company, the principal and interest payments from the company on the MAA loan), the 'indirect impacts' (for example, the income taxes from the construction jobs needed to build a new building) and the 'induced impact' (for example, revenues generated when new employees at the company and those filling indirectly created jobs spend their income on food, clothing and other items which would generate sales tax revenue to the state). The estimated state expenses similarly comprise of direct, indirect and induced expenses, ranging from the principal and interest payments on bonds the state buys to finance the loan to additional maintenance and support activity generated by the economic activity.

It is important to point out that the REMI model holds all other components of the economy constant to isolate the estimated impact of what we are modeling. Actual economic impacts will differ based on other activities in the economy. Therefore, DECD uses expected direct impacts in setting the level of economic support for each MAA recipient, which is the most conservative economic impact methodology we use.

The program has generated an estimated $\$ 21$ billion in state GDP and is expected to generate over $\$ 169$ billion over the full 30 years, when expressed in constant (2018) dollars. It has generated an estimated $\$ 679$ million in net state revenue and is expected to generate $\$ 3.4$ billion (in 2018 dollars) over the full 30 years. Given the documented success this program has had, it should be continued.

Table 39 provides the estimated impact that DECD's FY 2018 MAA investments will have on property values in the municipalities in which the investments were made and provides the estimated property taxes generated by these investments.

$|$| Table 39: MAA Estimated Property and Tax Value for FY 2018 Projects |  |
| :--- | ---: |
| FY 2018 Project Towns' Assessed Values | $\$ 584,702,993$ |
| FY 2018 Property Tax Revenue | $\$ 13,549,677$ |

Source: DECD
Note: All MAA/URA recipients, regardless of whether or not they earned a URA tax credit, are included above
along with regular MAA recipients. This analysis is not done for the URA portfolio.

## b. First Five Plus Program

On January 1, 2019 DECD released an analysis of the First Five Plus Program, a subset of the MAA program. The report can be found at www.decd.org

## 2. Small Business Express Program (EXP)

The goal of the EXP program is to provide the capital necessary to fuel small business growth. Since its inception in FY 2012, 3,735 companies have applied to the EXP program and 1,825 have been funded directly by DECD of which 1,401 are active. These companies have committed to create 6,944 jobs and retain an existing 19,305 jobs. (Please note these job numbers have been adjusted for duplication across contracts and programs. Also, the contractual job requirements of companies that went out of business are not included above). The job tables that appear later in this report have accounted for this potential duplication.

| Table 40 : EXP Financial Assistance per Job to be Created or Retained <br> Based on Contractual Requirements |  |
| :--- | ---: |
| Total Assistance | $\$ 295,071,342$ |
| Jobs to be Retained | 19,305 |
| Jobs to be Created | 6,944 |
| Financial Assistance per Job | $\$ 11,241$ |

Source: DECD
Note: This calculation includes the Active and Inactive EXP portfolios. Duplicate jobs to be created/retained have been removed. Duplicates could be caused by a company having multiple EXP contracts or an EXP and MAA contract.

## a. Estimated Economic and Fiscal Impact of the EXP Program:

## Estimated Direct Fiscal Impact of EXP Program

| Table 41 : EXP Estimated Direct Economic Impact To Date |  |
| :--- | ---: |
| Net Fiscal Impact in Nominal Dollars, 2012-2018 |  |
| Average Direct Net State Revenue | $\$ 6,531,000$ |
| Cumulative Direct Net State Revenue | $\$ 45,720,000$ |

Source: DECD.
Note: New analysis for 2018 Annual Report.
The above table shows the estimated direct impact of the EXP program from its inception through FY 2018. The direct net state revenue is defined as the difference between the direct revenues generated by the program and its direct expenses. The direct impact comes from the jobs and capital expenses created by the recipients of the EXP funds, so the direct revenues under the program are the income taxes and sales taxes generated by each of these respectively. The direct expenses are the costs to the state government to fund the program, which is the debt service it pays on the bonds issued to finance EXP grants and loans. These costs are offset by the repayments of loans made by the recipients and any penalties they pay for not meeting required conditions after receiving the funds. Any forgiveness earned is incorporated into the analysis as well. The estimated direct net revenue shows that on average direct revenues exceeded the costs of the program by over $\$ 6$ million a year over the life of the program to date through FY 2018, and the cumulative total of the net direct revenue it generated is over $\$ 45$ million. This analysis does not include any potential downstream impacts (i.e. indirect and induced) in the economy from the additional spending or jobs created.

## Total Economic Impact of EXP Program

| Table 42 : Estimated EXP Portfolio Economic Impact in Nominal Dollars, 2012-2018 |  |
| :--- | ---: |
| New State GDP | $\mathbf{\$ 5 , 4 5 8 , 3 2 4 , 4 9 0}$ |
| New Personal Income | $\mathbf{\$ 3 , 6 8 6 , 4 2 6 , 0 3 9}$ |
| Total New Revenue | $\$ 293,311,579$ |
| Total New Expenses | $\$ 126,873,404$ |
| New Net State Revenue | $\$ 166,438,175$ |

Source: DECD analysis
The above table shows the total estimated economic impact of the EXP program since its inception estimated using the REMI Tax-PI economic model. The REMI model and the modeling
method has been substantially revised over that used for the 2017 Annual Report and therefore the result is not comparable to that of last year. The methodology revisions now allow us to model the assistance more accurately. For details on the methodological revisions see page 145 in the Appendix.

The model's results reflect the estimated total economic impact of the EXP program through FY 2018. The modeling strategy is similar to that of the MAA to-date impact analysis (see page 59). The program has generated an estimated $\$ 5.4$ billion in state GDP and over $\$ 166$ million in net state revenue from 2012 through 2018. Given the popularity of the program and the number of jobs created and retained, it should be continued.

Table 43 provides the estimated impact that DECD's FY 2018 EXP investments will have on property values in the municipalities in which the investments were made and provides the estimated property taxes generated by these investments.

| Table 43: Estimated EXP Property and Tax Value for FY 2018 Projects |  |
| :--- | ---: |
| FY 2018 Project Towns' Assessed Values | $\$ 29,669,462$ |
| FY 2018 Property Tax Revenue | $\$ 1,024,771$ |
| Source: DECD |  |

## 3. Other Funding Sources

As identified in table 29, DECD has 5 active projects that received direct financial assistance from a program other than MAA or EXP. The funding sources are Brownfields, Special Act, Urban Act and Public Act. These are not business assistance programs but these 5 projects are included in this section to the uniqueness of their contracts.

Table 44 shows the financial assistance per job for the 5 business assistance projects from a funding source other than MAA or EXP.

| Table 44: Financial Assistance per Job to be Created or Retained <br> Based on Contractual Requirements |  |
| :--- | ---: |
| Total Assistance | $\$ 151,150,000$ |
| Jobs to be Retained | 7,206 |
| Jobs to be Created | 1,735 |
| Financial Assistance per Job | $\$ 16,905$ |

Source: DECD

## a. Lockheed Martin Corporation

In FY 2017 DECD and Lockheed Martin Corporation entered into a Special Act contract for up to $\$ 140,000,000$ in grants and $\$ 80,000,000$ in sales and use tax exemptions (administered by Connecticut Innovations) to be funded evenly between 2019 and 2031. In exchange for this assistance Lockheed Martin will maintain its primary helicopter manufacturing operation and headquarters in Connecticut and produce up to $200 \mathrm{CH}-53 \mathrm{~K}$ (King Stallion) heavy lift helicopters in the state through at least June 2032. Please click HERE for additional details on the employment, in-state supply chain spending, and capital expenditure targets Lockheed Martin must achieve to earn the entire incentive package.

## E. Other Business Support Programs

## 1. Manufacturing Innovation Fund

The Manufacturing Innovation Fund (MIF) was created to support the growth, innovation and progress of Connecticut's advanced manufacturing sector. The MIF is capitalized with $\$ 75$ million in funding, offering manufacturing focused programs and initiatives in the areas of workforce and training, innovation, operational improvements and capital access. The MIF programs are centered on four principles: Accelerate growth, cultivate talent, develop talent, and facilitate innovation.

As of June 30 2018, the MIF had assisted approximately 1,200 companies and invested over $\$ 58.2$ million to help accelerate growth, cultivate talent, and boost investments in innovation. The MIF is administered by DECD, the agenda and programming developed through the advice and counsel of a

10-member advisory board made up of senior leaders from the manufacturing industry. The Board's 2018 MIF Annual Report can be found HERE.

## 2. Minority Business Initiative

Financial assistance under this $\$ 25,000,000$ program is in the form of loans targeting minority businesses. HEDCO, Inc. was chosen to administer the program and will manage the program with $\$ 5,000,000$ per year for five years. FY 2018 was the first year funds were awarded under the program.

| Table 45: FY 2018 MBI Program Activity |  |
| :--- | ---: |
| Loans Approved | 48 |
| Assistance Amount | $\$ 3,397,000$ |

Source: DECD and HEDCO
Note: $\$ 500,000$ was to be used for administrative expenses.
In exchange for MBI funding, the 48 companies funded to date have committed to creating 130 jobs and retaining 307 existing jobs.

In 2017 the state legislature formally established the Minority Business Advisory Board (MBI Board). The legislature awarded the Board funding of $\$ 2,000,000$ for FY 18 and $\$ 1,000,000$ for FY 19 for programming and operation costs. The MBI Board has created a $\$ 300,000$ outreach and technical assistance program (administered by the Black Business Alliance) to focus primarily on minority business development. For the period covering September 1, 2017 through September 30, 2018 the Black Business Alliance held 14 outreach events and developed 89 qualified leads for the loan program. Additionally, the Board has contracted with Inroads to develop a job training program which will focus on job skill development for junior college students in the coming year.

## 3. International Trade and Foreign Direct Investment

The role of the International and Domestic Business Development Team is to facilitate commercial international and out-of-state activities in Connecticut. Responsibilities include the following:

- Recruitment of foreign direct investment (FDI) to Connecticut by providing assistance to foreign companies interested in expanding and/or relocating their operations to the state;
- Promote Connecticut abroad as an ideal business location;
- Serve as the liaison to Connecticut's foreign-owned companies;
- Coordinate and lead business development missions and international trade shows; and
- Support protocol duties for members of the international diplomatic corps and foreign delegations visiting Connecticut in conjunction with the state's economic development objectives.

Accomplishments during FY 2018 include:

- DECD submitted a successful State Trade and Export Promotion (STEP) grant application to the U.S. SBA and was awarded $\$ 300,000$ for federal FY 2018 funds to increase the number of small businesses that export, increase the value of exports for current small business exporters, and increase significant new trade opportunities for small businesses. FY 18 STEP is projected to assist 67 eligible small businesses with various export activities, including trade missions, foreign and domestic trade shows, business-to-business meetings, translations and international marketing efforts.
- Supported the global presence of Connecticut companies by sponsoring booths at the following trade shows:
- Medica 2017 and 2018 in Dusseldorf, Germany - participation as part of the "Best of New England" booth at the world's leading medical trade fair. Anticipated sales for Medica 2017 booth participants is $\$ 500,000$
- Hannover Messe 2018 in Hannover, Germany - 4 companies participated in the Connecticut booth in the Energy Hall's Hydrogen, Fuel Cell and Battery Technology exhibit, which resulted in $\$ 6,625,000$ in anticipated export sales for Connecticut subexhibitors in the booth
- Farnborough Air Show 2018 in Farnborough, U.K. - 8 companies participated in the Connecticut booth in one of the world's largest aerospace and defense trade shows, which resulted in $\$ 19,150,000$ in anticipated sales for the Connecticut booth's subexhibitors
- Connecticut participated in FDI lead generation opportunities at the 2018 Select USA Summit in Washington, D.C. where in addition to the companies that visited our booth, we were
invited to make a presentation to the Taiwanese delegation and met with 27 companies in matchmaking efforts.
- Continued support of Connecticut's targeted global geographic focus in Israel, Brazil and Germany:
- In partnership with the Connecticut Economic Resource Center, leveraged in country consultants in Israel and Brazil and engaged a new consultant in Germany.
- DECD also served on committees and boards of various internationally-oriented organizations, including the Commissioner serving on the U.S. International Advisory Board (an FDI-focused board reporting to the U.S. Secretary of Commerce), Eastern Trade Council (ETC), New England Governors and Eastern Canadian Premiers' (NEG/ECP), State International Development Organizations (SIDO), MetroHartford Alliance's Global Business Committee, and the UConn Center for International Business and Education Research.
- In FY 2018, DECD hosted and interfaced with several inbound delegations, including Germany, Israel, and Spain.


## 4. Airport Development Zones

During the period of October 1, 2017 - September 30, 2018, the Bradley Airport Development Zone and Waterbury-Oxford Development Zone continued to experience ongoing interest and development. Three applicants, SCA Pharmaceuticals, LLC, Design Automation Associates, Inc. and UPS Expedited Mail Services, Inc. were approved by DECD for the Bradley Airport Development Zone benefits. SCA Pharmaceuticals, LLC leased 90,000 SF facility and UPS renovated and leased a 73,500 SF facility both in Windsor. Meanwhile, Design Automation Associates renovated and leased a 7,000 SF facility in Windsor Locks. Based on the applications the three companies had a combined capital investment of $\$ 1,304,633.00$ resulting in the retention of 169 jobs and the creation of 241 jobs.

Table 46: DECD Airport Development Zone Program Activity

|  | Program <br> Year 2018 | Total ADZ <br> Program <br> $(2014-2018)$ |
| :--- | ---: | ---: |
| Companies Approved for Eligibility | 3 | 11 |
| Total SF Built or Acquired | 170,500 | 488,821 |

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| Table 46: DECD Airport Development Zone Program Activity |  |  |
| :--- | ---: | ---: |
|  | Program <br> Year 2018 | Total ADZ <br> Program <br> $(2014-2018)$ |
| Total Anticipated Expenditures on Construction, <br> Acquisition and Equipment | $\$ 1,304,633$ | $\$ 19,524,963$ |
| Total Full-Time Jobs to be created/ retained | 410 | $\mathbf{8 0 8}$ |

## Source: DECD

Note: Five companies were certified prior to DECD taking over the ADZ program. They are not included in the table above. Anticipated expenditures and full-time jobs to be created and retained are provided by the zone on its application and have not been audited by DECD.

The following tables show the Oxford and Groton Airport Development Zone's projected Economic Impact on Connecticut. These projections were prepared by the towns before the zones were certified. Due to the timing of its application, the Bradley Development Zone was not required to submit a projected economic impact.

| Table 47: Oxford Airport Development Zone Projected Economic Impact |  |  |
| :--- | ---: | ---: |
| Impacts | Ten Year Total | Per Year <br> Average |
| State Net New Revenue | $\$ 165,532,499$ | $\$ 16,553,250$ |
| Gross State Product | $\$ 1,914,391,282$ | $\$ 191,439,128$ |
| Direct and Indirect Employment | 1,639 |  |

Source: DECD

| Table 48: Groton Airport Development Zone Projected Economic Impact |  |  |
| :--- | ---: | ---: |
| Impacts | Ten Year Total | Per Year <br> Average |
| State Net New Revenue | $\$ 316,268,000$ | $\$ 31,626,800$ |
| Gross State Product | $\$ 4,169,800,000$ | $\$ 416,980,000$ |
| Direct and Indirect Employment | 1,731 |  |

Source: DECD

Claims data from companies located in Airport Development Zones is included in the Enterprise Zone data provided to DECD by OPM, and therefore are incorporated into the Enterprise Zone analysis in the tax credit section of this report.

## 5. Qualified Opportunity Zones

Qualified Opportunity Zones ("OZs") were established by the 2017 Federal Tax Cuts and Jobs Act to spur long-term private sector investments in low income communities nationwide. The OZ program offers significant tax incentives to investors who realize capital gains and subsequently reinvest those capital gains into OZs through a Qualified Opportunity Fund ("Fund").

OZ eligibility was based on a census tract's population's socio-economic characteristics defined as lowincome communities. To be eligible as an OZ , census tracts must have a poverty rate of at least 20 percent, or, for rural areas, have a median family income that does not exceed 80 percent of the statewide median. Designated zones in metropolitan areas must have a median income that does not exceed 80 percent of the metro area's median income, or be a census tract adjacent to a low-income area as long as the median income does not exceed 125 percent of the area's median income. State governors were authorized to designate up to 25 percent of the qualifying low-income census tracts in the state as OZs. Once approved by the U.S. Treasury, the OZ designations are final for the duration of the program.

In April of 2018, Connecticut nominated 72 OZs in the state. DECD, in conjunction with the Governor's office and the Office of Policy and Management, worked closely with the targeted communities to prioritize and select tracts - looking for those that had shovel ready opportunities; proximity to employers, universities and other key institutions; and transit connectivity. All 72 were approved. A list of the qualified opportunity zones can be found HERE.

DECD will monitor this program's activity in the coming years.

## 6. Tech Talent Fund

DECD in consultation with Technology Talent Advisory Committee, administers Tech Talent Funda resource for both workers and employers to ensure Connecticut has the workforce talent needed to fuel growth in its tech sectors. After issuing a comprehensive report on strategies to address the issue in December 2016, DECD then began making a series of strategic investments. The first was in the

Tech Talent Bridge, a program which provides matching grants to companies hiring tech interns from local colleges and universities. The department also put out a RFP in 2018, and subsequently selected three organizations to begin specialized technology training programs focused on building capacity in the areas of Full Stack Development and Data Science \& Analytics to meet a critical area of skills demand by Connecticut companies.

DECD will monitor this program's activity in the coming years.

## 7. Programs Administered by Connecticut Innovations

DECD works very closely with the quasi-public entity Connecticut Innovations (CI), which provides equity lending and seed / pre-seed funding to more than 25 startups and smaller entrepreneurial companies annually. One program of note is the Connecticut Bioscience Innovation Fund, a \$200 million fund that makes investments in the form of grants, equity investments and loans to increase and accelerate the number of bioscience breakthroughs brought to market. CTNext, a subsidiary of CI, manages the Innovation Places program that supports entrepreneurs and leaders developing places that will attract the talent high-growth enterprises need.

Read CI's Annual Report and Highlighted Activity presentation in the Appendix of this report to learn more about how it supports high-tech development and entrepreneurship in Connecticut. It is important to note that CI and DECD fund some of the same companies. Combining CI and DECD's numbers would likely lead to double counting in certain categories such as number of recipients, leveraged dollars and jobs to be created or retained.

## F. Office of the Permit Ombudsman

The Office of the Permit Ombudsman was created within DECD to expedite regulatory state agency approvals for qualified economic development projects that need environmental, public health, and transportation permits. The Permit Ombudsman acts as a facilitator between state regulatory agencies and businesses to fast track projects through regulatory approvals and to resolve permitting
issues by maintaining an active relationship with many state agencies, including the Department of Energy and Environmental Protection, the Department of Consumer Protection, the Department of Transportation and the Department of Housing.

During FY 2018 the Office of the Permit Ombudsman has:

- Responded to numerous inquiries for businesses and companies seeking to understand state applicable regulatory framework and permitting processes. Helped set up preapplication meetings with the key regulatory decision makers to map out the process and timeline for obtaining critical permits and approvals.
- Coordinated and facilitated regulatory permitting meetings with the Department of Energy and Environmental Protection, Department of Transportation, and Department of Public Health.
- Reviewed and commented on new regulatory draft proposals that may impact small business as required by CGS section 4-168a.
- Reviewed state's proposed properties releases and transfers for economic development potential by the DECD or an affected municipality. Shepherded the conveyance of the 470 James property in New Haven from DOT through DECD ultimately to the developer of the District NHV.

Table 49: Office of the Permit Ombudsman FY 2018 Activity

| Municipality | Applicant's Name | Date of <br> Request | Reasons for eligibility | Jobs/ <br> Housing <br> Units | Participating <br> Agencies | Permit Granted/ <br> Denied Date | Reason for <br> Disqualification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Haven | District NHV | $4 / 19 / 2017$ | Economic <br> Development | 200 | DEEP SW | $8 / 31 / 2017$ | N/A |
| New Haven | District NHV | $5 / 22 / 2017$ | Economic <br> Development | 200 | OSTA/DOT | $8 / 8 / 2017$ | N/A |
| Regional <br> sediment <br> processing <br> facility in <br> New Haven | Tipping Point Resource <br> Group | $7 / 18 / 2017$ | Green jobs, economic <br> development | green jobs | Solid Waste <br> demonstration <br> pilot permit | $3 / 21 / 2018$ | N/A |
| Watertown | Amgraph | $11 / 21 / 2017$ | Commis, Smith <br> request/DECD funding |  | DEEP | $1 / 22 / 2018$ | N/A |
| North Haven | Rabina Properties, <br> Amazon | $4 / 3 / 2018$ | Economic <br> Development | 200 | DOT/DEEP |  |  |
| ACOE |  |  |  |  |  |  |  |

Source: DECD, Office of the Permit Ombudsman

## G. Office of Brownfield Remediation and Development

A brownfield is any abandoned or underutilized site where redevelopment and reuse has not occurred due to the presence of pollution in the buildings, soil or groundwater that requires remediation before or in conjunction with the restoration, redevelopment or reuse of the property.

A listing of DECD's Brownfields projects can be found online at:
https://data.ct.gov/Business/Department-of-Economic-and-Community-Development-B/t2xi-dmhg
The Office of Brownfield Remediation and Development (OBRD) is a dedicated office within DECD with the primary mission to be a one-stop resource for brownfield development in Connecticut. As such, OBRD coordinates the state's response for brownfield assistance to communities and businesses. Brownfield redevelopment projects are usually long term and have a variety of complicated environmental, legal, and financial obstacles to overcome.

In the past ten years (from FY 2009), DECD has funded 228 brownfield projects spanning over 71 municipalities with approximately $\$ 198$ million in funding through a mix of loans and grants. This funding has leveraged approximately $\$ 3$ billion in other funds, resulting in a leverage ratio of approximately $\$ 15.10$ invested by non-DECD partners for every dollar of OBRD funding.

| Table 50: Brownfield Program Activity |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | ---: | :---: |
|  | \# of <br> Projects | Total DECD <br> Investment | Non- DECD <br> Funds | Leverage <br> Ratio | Acreage |  |
| FY 2018 | 33 | $\$ 37,701,840$ | $\$ 654,916,543$ | 17.37 | 462.81 |  |
| Brownfield Portfolio | 228 | $\$ 198,048,074$ | $\$ 2,990,767,047$ | 15.10 | $3,120.94$ |  |

Source: DECD/ OBRD
Note: Brownfield Program Activity statistics in this table do not include the federal EPA RLF program. The number of projects and acreage columns may have been adjusted to eliminate duplication for sites that have received funding in multiple phases or under multiple contracts.

OBRD collaborates with state agency partners such as the CT Department of Energy and Environmental Protection, the CT Department of Public Health, federal agency partners such as the Environmental Protection Agency and the regional council of governments to bring back brownfields into economic use.

## A. OBRD-Specific Brownfield Funding Programs

The main OBRD funding programs that assist with brownfield redevelopment are listed below. For more information on these programs, please visit the OBRD Website https://www.ct.gov/ctbrownfields:

1. Remedial Action and Redevelopment Municipal Grant Program - As per C.G.S. Sec. 32763, this program provides grants to municipalities, economic development agencies, regional council of governments, or Connecticut brownfield land banks for brownfield remediation projects based on OBRD's request for applications made periodically on a competitive basis (Brownfield Municipal Grant Rounds).

The Municipal Grant Round 11 (Round 11) was announced and funding awards were made in FY 2018. In this round, a total of $\$ 13.6$ million in brownfield grants were awarded to 14 municipalities. A portion of the funds ( $\$ 1.5$ million) was awarded to eight assessment projects that will prepare for the potential redevelopment of almost 52 acres of property. The balance of $\$ 12.1$ million was awarded to eight remediation and redevelopment projects totaling over 34 acres.

A total of 20 Municipal Grant Project contracts were executed in FY 2018 totaling approximately $\$ 14.6$ million in funding. Many of these contracts were related to projects awarded in competitive funding rounds prior to Round 11.

| Table 51: Municipal Grant Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| FY 2018 | 20 | $\$ 14,610,840$ |
| DECD Portfolio | 149 | $\$ 78,992,642$ |

Source: OBRD, DECD
Note: In order to highlight the work OBRD has done in FY 2018, all projects are included even if the project was previously awarded brownfield funds from this program or another program. The number of projects in the DECD portfolio may have been adjusted to eliminate this duplication.
2. Targeted Brownfield Development Loan Program - As per C.G.S. Sec. 32-765, this program provides low-interest loans to potential brownfield purchasers or current brownfield owners provided that the loan applicant did not contribute to any existing environmental contamination. Applications for loans are usually accepted on a rolling basis.

In FY 2018, 14 Targeted Brownfield Loan Project contracts were executed, totaling approximately $\$ 23$ million in funding.

| Table 52: Targeted Brownfield Development Loan Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| FY 2018 | 14 | $\$ 22,986,000$ |
| DECD Portfolio | 47 | $\$ 83,443,580$ |

Source: OBRD, DECD
Note: In order to highlight the work OBRD has done in FY 2018, all projects are included even if the project was previously awarded brownfield funds from this program or another program. The number of projects in the DECD portfolio may have been adjusted to eliminate this duplication.
3. Brownfield Area-Wide Revitalization (BAR) Planning Grant - As per C.G.S. Sec. 32-763 $(f)$, this program provides grants to municipalities, economic development agencies or regional council of governments to prepare comprehensive plans for remediation and redevelopment of one or more brownfield sites. OBRD periodically issues a request for applications for this competitive program (BAR Planning Grant Rounds).

The BAR Planning Grant Round 2 was conducted and the funding awards were made in FY 2018 following the success of the pilot round. $\$ 1$ million in grant funding will be used to create plans to redevelop clusters of brownfields in six municipalities in the state. The Assistance Agreements for these Round 2 projects were not yet completed in FY 2018

| Table 53: BAR Planning Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| DECD Portfolio | 6 | $\$ 1,040,000$ |

4. State-Owned Brownfield Properties Remediation Program - This program was established under PA 15-193, Sec. $3 \& 4$ to enable the marketing and remediation of state-owned and formerly state-owned brownfields based on a priority list developed in consultation with DEEP.

No new project contracts were executed under this program in FY 2018.

| Table 54: State-Owned Brownfield Properties Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| DECD Portfolio | 3 | $\$ 15,660,000$ |

Source: OBRD, DECD
Note: The number of projects column may have been adjusted to eliminate duplication for projects that have received funding in multiple phases or under multiple contracts.
5. Special Contaminated Property Remediation and Insurance Fund Revolving Loan Program (SCPRIF) - This is an older dedicated program for brownfield redevelopment and was established under C.G.S. Sec. 22a-133t and 22a-133u. Program funds rely on loan repayments of some of the older OBRD-SCPRIF projects. No new authorizations have been made to this funds in recent years. (Please note that there is a separate SCPRIF fund maintained by DEEP with fee proceeds from the Brownfield Remediation and Revitalization (BRRP) Liability Relief program and is used for DEEP-funded projects). The balance of funds available through the loan repayments provides financial assistance through low-interest, five-year loans for environmental investigation, remediation and demolition. Any person, corporation, municipality or business is eligible to apply for SCPRIF funds.

In the past 10 years, the SCPRIF program has funded 12 projects with a contract value of approximately $\$ 1.4$ million. One new SCPRIF contract was executed in FY 2018 for $\$ 105,000$. The available balance funds under this program at the end of the FY 2018 was approximately $\$ 600,000$.

| Table 55: DECD SCPRIF Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of <br> Projects | Total DECD <br> Investment |
| FY 2018 | 1 | $\$ 105,000$ |
| DECD Portfolio | 12 | $\$ 1,399,500$ |

Source: OBRD, DECD
Note: In order to highlight the work OBRD has done in FY 2018, all projects are included even if the project was previously awarded brownfield funds from this program or another program. The number of projects in the DECD portfolio may have been adjusted to eliminate this duplication.

## B. Other State and Federal Brownfield Funding Programs

1. Urban Action Program (OPM) -This is an OPM program that provides funds for largescale urban development initiatives. Five brownfield projects have been funded by the Urban Act Program since FY 2009. No new Urban Act-Brownfield project contracts were executed in FY 2018.

| Table 56: Brownfield Urban Act Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| DECD Portfolio | 5 | $\$ 11,100,000$ |

Source: OBRD, DECD
Note: The number of projects column may have been adjusted to eliminate duplication for projects that have received funding in multiple phases or under multiple contracts.
2. MAA and MAA Revolving Fund Program- The MAA program (C.G.S. Chapter 5881) and MAA Revolving Fund Program (C.G.S. Sec. 32-231) have funded three OBRD brownfield projects since FY 2009. No new project contracts were executed in FY 2018.

| Table 57: MAA Program Activity |  |  |
| :--- | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |
| DECD Portfolio | 4 | $\$ 1,884,827$ |

Source: OBRD, DECD
Note: The number of projects column may have been adjusted to eliminate duplication for projects that have received funding in multiple phases or under multiple contracts.
3. Urban Sites Remedial Action Program (USRAP) - This is one of the state's flagship, and the oldest Brownfield specific redevelopment program (established under C.G.S. Sec. 22a133 m ) and is jointly managed by the OBRD and DEEP for projects that are significant to Connecticut's economy and quality of life. An eligible site must be located in a distressed municipality. This program provides seed capital to facilitate the transfer, reuse and redevelopment of the property. No new project contracts were executed in FY 2018.

| Table 58: Urban Sites Remedial Action Program Activity |  |  |  |
| :--- | :---: | :---: | :---: |
|  | \# of Projects | Total DECD <br> Investment |  |
| DECD Portfolio | 3 | $\$ 4,527,475$ |  |

Source: OBRD, DECD
Note: The number of projects column may have been adjusted to eliminate duplication for projects that have received funding in multiple phases or under multiple contracts.
4. EPA Statewide Revolving Loan Fund Program (EPA RLF) - DECD has been awarded a total $\$ 2,582,308$ in funding from the EPA Revolving Loan Fund (RLF) program. Municipalities and nonprofit organizations can apply for sub-grants and private entities for loans from this DECD EPA-RLF program for the remediation of brownfield properties anywhere in the state. The loan income generated is used to recapitalize the program funds. To date the OBRD has provided funding for nine projects (sites) for a total investment of $\$ 2,377,500$.

| Table 59: EPA RLF Program Activity |  |  |
| :--- | :---: | ---: |
|  | \# of Projects | Total DECD <br> Investment |
| FY 2018 | 1 | $\$ 205,000$ |
| DECD Portfolio | 9 | $\$ 2,377,500$ |

Source: OBRD, DECD
Note: In order to highlight the work $O B R D$ has done in $F Y 2018$, all projects are included even if the project was previously awarded brownfield funds from this program or another program. The number of projects in the DECD portfolio may have been adjusted to eliminate this duplication.

## C. Brownfield Liability Relief and Other Non-funding OBRD Programs

1. Brownfield Remediation and Revitalization (BRRP) Liability Relief Program -

OBRD administers the Brownfield Remediation and Revitalization Program (BRRP) established under C.G.S. Section 32-769. Acceptance into the program protects participants from liability to the state or any third party for the release of contamination that participants did not cause, exacerbate, or contribute to and that existed before they acquired the eligible property. Applicants must meet the definition of a Bona Fide Prospective Purchaser, Innocent Landowner or Contiguous Property Owner. The subject property must meet the definition of a brownfield and have been subject to a release of a regulated substance in an amount that is in excess of the remediation standards. This pioneering program was established as one of the first of its kind in the U.S. and is providing a catalyst for the redevelopment of brownfields in Connecticut.

The DECD Commissioner in consultation with the DEEP Commissioner determines admission of eligible properties based on statewide portfolio factors for up to 32 projects per year. Applicants who are accepted into the BRRP shall remediate the release of any regulated substance within the property boundary but are not required to investigate or clean up any contamination beyond the property's boundary. Any applicant accepted into the BRRP shall pay DEEP a fee equal to $5 \%$ of the assessed value of the land, as stated on the last-completed grand list of the relevant town (subject to certain fee waiver provisions). In accordance with CGS Section 32-769 DEEP collects fees from approved
recipients which are deposited into the SCPRIF (DEEP) fund. The funds remain available for use by the Commissioner of Energy and Environmental Protection pursuant to CGS 22a-133u.

During the FY 2018 OBRD issued 7 approvals as presented in Table 11.

| Table 60: Brownfield Remediation and Revitalization Program Activity FY 2018 |  |  |
| :--- | :---: | :---: |
| Applicant | Address | Status |
| BC Montgomery Mill, LLC | Windsor Locks | Approved 12/1/2017 |
| Windsor Locks Canal Company | Windsor Locks | Approved 12/1/2017 |
| Bloomfield Specialty Housing, LLC | Bloomfield | Approved 8/2/2017 |
| Cherry Avenue Partners, LP | Waterbury | Approved 7/19/2017 |
| Borough of Naugatuck | Naugatuck | Approved 11/7/2017 |
| Seaview Bridgeport II, LLC | Bridgeport | Approved 2/16/2018 |
| Taom Heritage New Haven, LLC | New Haven | Approved 6/16/2018 |

Source: OBRD, DECD

| Table 61: |  |
| :--- | :---: |
|  | DECD BRRP Activity |
| \# of Projects |  |
| FY 2018 | 7 |
| DECD Portfolio | 34 |

Source: OBRD, DECD
2. Abandoned Brownfield Cleanup (ABC) Liability Relief Program - OBRD administers the Abandoned Brownfield Cleanup (ABC) established under C.G.S. Sec. 32-768. The ABC Program offers an opportunity for developers who are not responsible for contamination to be afforded liability relief from the responsibility to investigate and remediate off-site contamination provided that the projects meet certain economic development thresholds and remediation is completed under the DEEP voluntary remediation program. The DECD Commissioner, in consultation with the Commissioner of Energy and Environmental Protection, determines properties and persons eligible for the program. The ABC Program has been utilized effectively by many developers to facilitate the redevelopment of brownfields in Connecticut. Any applicant accepted into the ABC program shall (1) enter and remain in DEEP's Voluntary Remediation Program (2)
investigate and remediation pollution only to the extent of the property boundary and (3) eliminate further emanation or migration of any pollution from such property.

Designation of a property in the abandoned brownfield cleanup program by DECD shall not limit the applicant's ability to seek funding for such property under any other brownfield grant or loan program administered by DECD or DEEP.

During the FY 2018 OBRD issued 4 approvals as presented in Table 62.

| Table 62: Abandoned Brownfield Cleanup Program Activity FY 2018 |  |  |
| :--- | :---: | :---: |
| Applicant | Address | Approval Date |
| City of Ansonia | 65 Main Street Ansonia | October 4, 2017 |
| BRT General Corp | 333 Main Street Danbury | December 22, 2017 |
| Torrington Savings Bank | 18 Mason Street Danbury | March 27, 2018 |
| Kennedy Flats Property <br> Corp | 1 Kennedy Avenue Danbury | May 9, 2018 |

Source: OBRD, DECD

| Table 63: DECD BRRP Activity |  |
| :--- | :---: |
|  | \# of Projects |
| FY 2018 | 4 |
| DECD Portfolio | 17 |

3. Connecticut Brownfields Land Banks Program - In 2017, the Connecticut General Assembly passed a new law (Public Act 17-214, "the Act") authorizing DECD to certify certain specialized non-profit organizations as "Connecticut Brownfield Land Banks" ("Land Banks").

The purpose of encouraging the formation and use of Land Banks in Connecticut is, generally, to advance the remediation and redevelopment of the numerous brownfield sites throughout the state, and specifically, to give municipalities (particular smaller
communities) a new set of tools to advance the redevelopment of strategic sites that might otherwise remain idle and blighted.

Under the Act, Land Banks are eligible to participate in a range of Connecticut state brownfield redevelopment programs, such as grants and liability relief regimes, which are otherwise restricted to municipalities or economic development corporations.

The Act envisions the formation of multiple Land Banks that, once certified with DECD, would partner with cities and towns to redevelop brownfields.

Only one entity, Connecticut Brownfield Land Bank, Inc., has applied and been approved to be a Land Bank by DECD in FY 2018.

## C. Dry Cleaning Establishment and Remediation Fund

Since January 1, 1995, all dry cleaning establishments have been required to pay a one-percent surcharge on the gross receipts at retail for any dry cleaning services performed. This money is deposited into the dry cleaning establishment remediation account which is a non-lapsing account within the General Fund. Eligible entities can apply to DECD for grants to facilitate the environmental remediation of property contaminated as a result of the chemicals used in the dry cleaning industry. Eligible entities consist of dry cleaning business owners and owners of real estate whereby a dry cleaner is currently or was formally located. The maximum funding that any dry cleaning establishment site can receive is $\$ 300,000$. The program is available statewide and requires a $\$ 10,000$ co-pay by the applicant.

Funding decisions are dependent on availability of funds in the Dry Cleaning Establishment Remediation Account. Funding is also on a first-come first-serve basis from a waiting list of applicants generated by three application intake rounds in 2009,2014 and 2016. The waiting list at the end of FY 2018 included 47 applicants, totaling a fund request of $\$ 9.59$ million. Please visit https://www.ct.gov/ctbrownfields/lib/ctbrownfields/drycleaning/full intake pipeline.pdf for the full list. Applicants who are closer to the top of the list are contacted when the Fund is in a
position to offer the grant funds. The average surcharge collection/receipts per year into the Dry Cleaning Fund (based on collections over the last 14 years) is approximately $\$ 710,000$. Therefore, there is a significant waiting period as the annual dry cleaning surcharge receipts do not cover the industry demand.

DECD works with the Department of Revenue Services and the Department of Energy and Environmental Protection to run the Dry Cleaning Program, conducting public information sessions and maintaining a dedicated website: https://portal.ct.gov/DECD/Content/CommunityDevelopment/03 Funding Opportunities/Brownfields-Remediation/Dry-Cleaning-RemediationFund

FY 2018 included one public informational meeting held on January 17, 2018. The meeting was well attended by dry cleaning owners and members of the environmental community.

In FY 2018, three new contracts with a total grant amount value of $\$ 335,000$ were executed. Additionally, as of June 30, 2018, DECD was working on executing four additional contracts with a total value of $\$ 810,875$.

| Table 64: Projects funded by the Dry Cleaning Remediation Funds FY 2018 |  |  |
| :--- | :---: | :---: |
| Applicant | Dry Cleaning <br> Establishment/Address | Grant Amount |
| Renzulli Associates Shopping <br> Center LLC | Dean Cleaners (415 Post Rd., <br> Westport) | $\$ 250,000$ |
| Fams Group Incorporation (Ph 2 <br> supplemental assistance) | Sunset Cleaners (700 Burnside <br> Ave., Hartford) | $\$ 35,000$ |
| Best Cleaners, Inc (Ph 3 <br> supplemental assistance) | Best Cleaners (1684, <br> Farmington Ave, Unionville) | $\$ 50,000$ |
| TOTAL |  | $\$ 335,000$ |

Source: OBRD, DECD

## III. COMMUNITY DEVELOPMENT PROGRAMS

## A. Community Development Impact

DECD's broad community development portfolio includes a wide variety of project types including arts and entertainment, economic development planning and technical program support. Community development activities create the environment necessary for sustainable economic growth, stable neighborhoods and healthy communities. Community development activities address the quality-oflife issues that create and reinforce the foundation that effective economic and housing development depend upon for success.

## B. Capital Projects

A complete listing of DECD's Capital Projects recipients can be found at: https://data.ct.gov/Business/DECD-Capital-Projects-Portfolio/5jrt-794p

DECD's Capital Projects Portfolio includes projects funded through a variety of programs including the Small Town Economic Assistance Program and Urban Action Grant Program. In general, DECD acts only as the administrator of these programs, since OPM has primary decision-making responsibility. In FY 2018 the state invested over $\$ 53$ million into 20 community development projects bringing total active investment oversight by DECD to over $\$ 567$ million.

## Table 65: DECD Community Development (CD) Activity

|  | \# of <br> Projects | Leverage <br> Ratio | Total Project <br> Cost | State <br> Investment |
| :--- | ---: | ---: | ---: | ---: |
| FY 2018 | 20 | .81 | $\$ 95,942,471$ | $\$ 53,066,000$ |
| CD Portfolio | 526 | .72 | $\$ 980,602,185$ | $\$ 567,524,609$ |
| Source: $D E C D$ |  |  |  |  |

## C. State Historic Preservation Office (SHPO)

## 1. Tax Credits

A complete listing of DECD's SHPO tax credit recipients can be on DECD's Tax Credit Portal at: https://data.ct.gov/Tax-and-Revenue/Department-of-Economic-and-Community-Development-T/ihra-gwrn

## a. State Historic Structures Rehabilitation Tax Credit (G.G.S. §10-416c)

The State Historic Structures Rehabilitation Tax Credit is a $25 \%$ tax credit for qualified rehabilitation expenditures (QREs) associated with the rehabilitation of certified historic structures. Nonresidential uses include commercial, institutional, governmental or manufacturing. An additional $5 \%$ tax credit is available for projects that include affordable housing. If the project includes an affordable housing component, at least $20 \%$ of the rental units or $10 \%$ of for sale units must qualify under CGS Section 839 a, which defines affordable housing as housing for which persons and families pay thirty per cent or less of their annual income, where such income is less than or equal to the area median income for the municipality in which such housing is located, as determined by the United States Department of Housing and Urban Development. Qualified rehabilitation expenditures are hard costs associated with rehabilitation of the certified historic structure; site improvements and non-construction costs are excluded. Buildings must be listed on the National or State Register of Historic Places, either individually or as part of an historic district. The program has an annual aggregate cap of $\$ 31.7$ million in tax credit reservation, and a cap of $\$ 4.5$ million in tax credits per building.

In FY 2018, SHPO received 20 new applications to the program and reserved $\$ 31,700,000$ in tax credits. SHPO issued 22 tax credit vouchers totaling $\$ 34,962,712$ under the State Historic Rehabilitation Tax Credit Program during FY 2018. Note that by statute the SHPO can only reserve up to $\$ 31,700,000$ in tax credits during the fiscal year, but the final tax credit voucher shall be available in the tax year in which the substantially rehabilitated historic structure is placed in service and can exceed the amount reserved.

\left.| Table 66: FY 2018 Federal Historic Preservation |  |
| :---: | :---: |
| Tax Credit Activity |  |$\right]$

## b. Federal Historic Preservation Tax Incentives Program

The Federal Historic Preservation Tax Incentives Program was established in 1977 by the National Park Service in response to the Tax Reform Act of 1976, which corrected a longstanding imbalance in the federal tax code that favored new construction. By offering a $20 \%$ tax credit for the rehabilitation of income-producing properties, the law helped historic buildings attract major private investment for the first time. Nationwide during Federal FY 2017, 1.035 completed rehabilitation projects were approved and $\$ 6.5$ billion investment dollars were spent on new rehabilitation work.

In Connecticut during Federal FY 2017, 17 completed rehabilitation federal tax credit applications were approved. Of the completed projects, $\$ 143,864,904$ was generated in private investment.

| Table 67: Federal FY 2017 Federal Historic Preservation |  |
| :---: | :---: |
| Tax Credit Activity |  |$|$| \# of |
| :---: | :---: |
| Approvals |$\quad$ Private Investment Generated 1

## c. The Historic Homes Rehabilitation Tax Credit

The Historic Homes Rehabilitation Tax Credit (HHRTC) is a $30 \%$ tax credit for qualified rehabilitation expenditures associated with the rehabilitation of owner-occupied historic homes of 1-4 dwelling units. In the case of multiple dwelling units at least one unit must be owneroccupied. Buildings must be listed on the National or State Register of Historic Places, either individually or as part of a historic district. The annual aggregate cap is $\$ 3$ million in tax credit reservations, with a $\$ 30,000$ cap per dwelling unit for private homeowners and $\$ 50,000$ for nonprofit housing development corporations.

During FY 2018 SHPO reserved $\$ 1.9$ million in Historic Homes Rehabilitation Tax Credits for 108 private homes.

| Table 68: FY 2018 Historic Homes Rehabilitation  <br> Tax Credit Activity  |
| :--- |
| \# of <br> Recipients |
| 108 |$\quad$ Tax Credits Reserved $10 . \$ 1,898,725$

## 2. Grants

In FY 2018 SHPO granted $\$ 876,175$ grants to 30 eligible recipients through its various grant programs. A complete listing of DECD's SHPO grant recipients can be found at:
https://data.ct.gov/Housing-and-Development/DECD-Arts-and-SHPO-Grant-Recipients/ud2k-2im4

| Table 69: FY 2018 SHPO Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 30 | $\$ 876,175$ |

Source: DECD

A description of each grant program follows.

## a. Historic Preservation Enhancement Grant (HPEG)

HPEG are non-matching federal funds of up to $\$ 20,000$ available to municipalities that have been designated Certified Local Governments. Grants are to support activities sponsored by Municipal Historic District Commissions that enhance the commission's administrative capabilities, produce public education materials and activities and strengthen local preservation programs. HPEG is funded through the Historic Preservation Fund of the National Park Service.

In FY 2018 SHPO awarded $\$ 55,200$ in HPEG grants to five municipalities.

| Table 70: FY 2018 HPEG Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 5 | $\$ 55,200$ |

## b. Supplemental Certified Local Government Grant

Supplemental Certified Local Government Grants (CLG) are up to $\$ 30,000$ and are available to municipalities that have been designated Certified Local Governments. The grant requires nonstate matching funds except for survey work. The grants may be used to support activities sponsored by municipalities for a wide range of historic preservation planning activities including conditions assessments, feasibility studies and architectural plans and specs to support restoration projects. Supplemental CLG grants are funded through the Community Investment Act (Public Act 05-228).

In FY 2018 SHPO awarded $\$ 22,500$ in Supplemental CLGs to one municipality.

Table 71: FY 2018 Supplemental Certified Local Government Grant Activity

| Number of Recipients | Grant Amount |
| :---: | :---: |
| 1 | $\$ 22,500$ |

Source: DECD

## c. Historic Preservation Survey \& Planning (S\&P) Grants

S\&P grants may be used by Connecticut non-profit organizations and municipalities for a wide range of historic preservation planning activities, including surveys, nominations to the National or State Registers of Historic Places, pre-development studies, heritage tourism and other planning documents. With state funds provided by the Community Investment Act, SHPO awards S\&P grants of up to $\$ 20,000$ on a competitive basis. Applications are accepted on a continuing basis as long as grant funds are available. Non-profit organizations or municipalities may have only one active $\mathrm{S} \& \mathrm{P}$ grant at a time. $\mathrm{S} \& \mathrm{P}$ grants are funded through the Community Investment Act (Public Act 05-228).

During FY 2018 SHPO awarded $\$ 175,500$ in S\&P grants to 11 organizations.

| Table 72: FY 2018 S\&P Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 11 | $\$ 175,500$ |

[^1]
## d. Partners in Preservation Grants (PIP)

PIP grants provide financial assistance to a municipality or a $501(\mathrm{c})(3)$ or $501(\mathrm{c})(13)$ nonprofit organization for Historic Preservation Education and Awareness projects and programs. Grants cap at $\$ 20,000$ and require non-state matching funds. PIP grants are funded through the Community Investment Act (Public Act 05-228).

During FY 2018 SHPO awarded 2 grants totaling $\$ 225,000$.

| Table 73: FY 2018 PIP Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 2 | $\$ 225,000$ |

Source: DECD

## e. Basic Operational Support (BOS)

BOS grants provide financial assistance to local historic preservation organizations. Funds are used for basic operational needs in order to help build an organization's capacity and independence. Grant awards are spread out over 3 years and require non-state matching funds. After the initial 3 -year grant period, the organization is eligible to apply yearly for up to $20 \%$ of its operating budget. BOS grants are funded through the Community Investment Act (Public Act 05-228).

During FY 2018 SHPO continued to work with the 3 BOS recipients who were awarded 3 -year grants in prior fiscal years.

## f. Historic Restoration Fund (HRF)

HRF grants provide financial assistance for the rehabilitation, restoration, stabilization, or acquisition of historic properties listed on the State or National Registers of Historic Places. The property must be owned by a municipality or a $501(\mathrm{c})(3)$ or $501(\mathrm{c})(13)$ nonprofit organization and the grant awards are paid as a one-time reimbursement. Applications are accepted once a year. The grant awards range from $\$ 5,000-\$ 50,000$. All work must meet the Secretary of the Interior's Standards for the Treatment of Historic Places. A preservation restriction or easement of limited
duration must be placed on the property following completion of the project. HRF grants are funded through the Community Investment Act (Public Act 05-228).

During FY 2018 SHPO awarded 11 HRF grants totaling $\$ 397,975$.

## Table 74: FY 2018 HRF Grant Activity

| Number of Recipients | Grant Amount |
| :---: | :---: |
| 11 | $\$ 397,975$ |

Source: DECD

## D. Connecticut Office of the Arts (COA)

The Connecticut Office of the Arts uses the lenses of relevance, equity, access, diversity, and inclusion (READI) to guide programmatic and investment decisions within a framework of artistic excellence. Equity, inclusion and access involving all populations are critical to the vitality of our neighborhoods, towns, and cities. We are committed to supporting and fully engaging diverse members of our communities in arts policy, practice, and decision making. Continually changing demographics invite opportunity for responsible and responsive social change by attracting new perspectives that connect minds to a vision and hands to a purpose through the arts.

During FY 2018, COA granted $\$ 5,653,633$ to 488 recipients.

| Table 75: FY 2018 Arts Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 488 |  |
| Source: $D E C D$ | $\$ 5,653,633$ |

A complete listing of the recipients of the DECD Arts programs described below can be found at:
https://data.ct.gov/Housing-and-Development/DECD-Arts-and-SHPO-Grant-Recipients/ud2k-2im4
A description of each COA grant programs follows.

## 1. Arts Learning Grant Program

The Arts Learning Grant Program awards grants for the planning and implementation of new or expanded arts in education-based projects that engage partners to advance teaching and learning for birth to grade 12 in a defined community setting. COA provided funding to 29 organizations
under this program in FY 2018. The total amount granted through the Arts Learning program was $\$ 41,166$. This grant is supported by state and federal funds.

| Table 76: FY 2018 Arts Learning Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 29 | $\$ 41,166$ |

Source: DECD

## 2. Supporting Arts Grants

Supporting Arts Grants are formula-based awards to provide support for the basic operations of arts organizations whose on-going work is relevant to the community. For FY 2018, COA awarded a total of $\$ 597,354$ to 120 arts organizations through the Supporting Arts in Place program. This grant is supported by state and federal funds.

| Table 77: FY 2018 Supporting Arts Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 120 | $\$ 597,354$ |

Source: DECD

## 3. Arts Project Grants

The Arts Project grant program encourages and supports arts-based projects of artistic excellence for Connecticut audiences, communities, and participants. Projects must engage at least one (1) Connecticut artist in a significant project role. COA provided funding for 27 projects totaling $\$ 290,650$ under this program in FY 2018. This grant is supported by state and federal funds.

| Table 78: FY 2018 Arts Project Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 27 | $\$ 290,650$ |

Source: DECD

## 4. Artist Fellowship

The Artist Fellowship program encourages the continuing development of Connecticut artists. The program provides competitive Artistic Excellence grants of $\$ 5,000$; Artist Fellowship grants of $\$ 3,000$; and Emerging Recognition grants of $\$ 1,000$. The funding provides an
opportunity for artists to pursue new work and achieve specific creative and career goals. In FY 2018, COA awarded $\$ 119,000$ to 39 Connecticut artists. This grant is supported by state and federal funds.

Table 79: FY 2018 Artist Fellowship Grant Activity

| Number of Recipients | Grant Amount |
| :---: | :---: |
| 39 | $\$ 119,000$ |

Source: DECD

## 5. The Connecticut Arts Endowment Fund

The Arts Endowment Fund was established by the State of Connecticut to stimulate the development of private sector funding and help stabilize arts institutions. Interest earned on the Fund's principal is distributed annually to Connecticut non-profit arts organizations which have received a minimum of $\$ 15,000$ in contributions from non-governmental sources in each of the last two years. Grant awards are calculated based on a mathematical formula. Organizations may use funds for capital projects, general operations, programming, or to build their own endowments. During FY 2018, 133 organizations received funding totaling $\$ 778,537$ through the Arts Endowment Fund program.

| Table 80: FY 2018 Connecticut Arts Endowment Fund Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 133 | $\$ 778,537$ |

Source: DECD

## 6. Regional Service Organizations (RSO)

The Office of the Arts partners with 9 Regional Service Organizations (RSO) that serve as local field offices to constituents and citizens. This statewide network plays a key role that is mutually beneficial to the state's citizens and the creative economy, the regional arts and cultural infrastructure, and COA's goals, programs, and services. These service organizations support Connecticut's economy and provide arts and cultural leadership at the regional level. In FY 2018,

COA provided an aggregate total of $\$ 204,000$ to 6 RSOs via state and federal funds. The other three RSOs receive legislatively directed funds.

| Table 81: FY 2018 RSO Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 6 | $\$ 204,000$ |

Source: DECD

## 7. Regional Initiative Arts Grants

Regional Initiative Arts Grants support small community arts projects that engage in a specific community matter, reflect on personal experience, and/or bring neighborhoods together. In FY 2018, COA awarded 33 grants totaling $\$ 112,745$ in grant funds which were regionally distributed throughout the state through the statewide network of the 9 Regional Service Organizations to 33 organizations and artists. This program is supported by state and federal funds.

| Table 82: FY 2018 Regional Initiative Arts Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 33 | $\$ 112,745$ |

Source: DECD

## 8. Legislatively Directed Funds

The Office of Arts administers legislatively directed funds ("line items") for a wide range of cultural institutions and organizations throughout the state. During FY 2018, these funds provided 42 arts organizations an aggregate of $\$ 2,988,231$ in financial support. Recipients of Legislatively Directed Funds are included in the Arts recipient link at the beginning of this section. It should be noted that the Office of the Arts receives its state allocation of $\$ 1,422,433$ through the "Arts Commission" line item.

Table 83: FY 2018 Legislatively Directed Funds Grant Activity

| Number of Recipients | Grant Amount |
| :---: | :---: |
| 42 | $\$ 2,988,231$ |

Source: DECD

## 9. Elizabeth L. Mahaffey Arts Administration Fellowship

The Elizabeth L. Mahaffey Arts Administration Fellowship supports emerging and mid-career arts administrators in Connecticut as they pursue professional development and other opportunities that will advance their careers in arts administration. COA awarded 2 individuals, Jennifer Dupre, Development Manager at Long Wharf Theater in New Haven and Dr. Colette Hall, Artistic Operations Director at Hartford Symphony Orchestra, with $\$ 2,500$ each to support a wide-range of activities aimed at strengthening the individuals' arts leadership, business and career goals. This program is supported by state funds.

| Table 84: FY 2018 Elizabeth L. Mahaffey Arts Administration Fellowship Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 2 | $\$ 5,000$ |

Source: DECD

## 10. Arts Workforce Initiative

With funding from the National Endowment for the Arts, COA administered the Arts Workforce Initiative, a paid ten-week internship program giving college students and emerging arts professionals an opportunity to gain hands-on and engaging work experience with creative organizations throughout the state. The program was specifically designed to provide an opportunity for applicants from diverse and traditionally underrepresented backgrounds to gain professional experience in the arts. In FY 2018, the initiative supported 25 internships totaling $\$ 108,750$. The full list of individuals placed as interns and the host organizations can be viewed HERE. This program is supported by state and local funds.

| Table 85: FY 2018 Arts Workforce Initiative Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 25 | $\$ 108,750$ |

Source: DECD

## 11. Poetry Out Loud

With funding from the National Endowment for the Arts and the National Poetry Foundation, COA administers the Poetry Out Loud competition. Poetry Out Loud encourages students to
learn about great poetry through memorization and recitation. This program, funded with $\$ 17,500$, helps students master public speaking skills, build self-confidence, and learn about the literary history and contemporary life. Poetry Out Loud uses a pyramid structure that starts at the classroom level. Winners advance to a school-wide competition, then to a regional and/or state competition, and ultimately to the National Finals in Washington, DC. Audrey Molina from West Hill High School in Stamford was named the 2018 Poetry Out Loud State Champion.

## 12. Connecticut Cultural Heritage Arts Program (CHAP)

With $\$ 11,500$ of support from the National Endowment for the Arts, in FY 2018 COA partnered with the Connecticut Historical Society to administer the Cultural Heritage Arts Program (CHAP). The CHAP program encourages and promotes traditional artists and their communities through research and program development which allows traditions and the cultural histories of these communities to be preserved and carried forward to new audiences.

## 13. Arts Education - Higher Order Thinking (HOT) Schools

COA believes that arts education is essential to the creative learning process and is dedicated to advancing the arts as an essential element of life-long learning. COA supports teaching and learning for all ages through high quality arts engagement, community connections and arts integration. For the past 25 years, HOT Schools has been a comprehensive approach to school improvement that directly serves select Connecticut PreK-12 urban, suburban and rural schools. This program is currently in transition to better respond to the changing needs of teachers and schools. During this transition and redevelopment phase COA issued grants of $\$ 161,000$ support the 14 fully participating HOT Schools. This program is supported by state and federal funds.

| Table 86: FY 2018 HOT Schools Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 14 | $\$ 161,000$ |

Source: DECD

## 14. Connecticut Arts Day

COA presented the 3rd annual Connecticut Arts Day on April 25, 2018. Connecticut Arts Day celebrates Connecticut's investment in and support of the arts and reaffirms the significant role the arts play in our state. The day includes networking opportunities and a selection of workshops, performances, and interactive opportunities.

## 15. Art in Public Spaces ( $1 \%$ for Art)

Connecticut's Art in Public Spaces program requires that not less than $1 \%$ of the cost of construction or renovation of publicly accessible state buildings be allocated for the commission or purchase of artwork for that building. This program was not funded in the FY 2017-18 state budget. Due to this change, the commission or purchase of new works of art will be made for only those publicly accessible state buildings fully allocated for construction, including issuance of a Notice to proceed, prior to 12/31/17.

In FY 2018, an exterior sculpture entitled Gnomon was installed at Asnuntuck Community College in Enfield, CT; and 33 works of art were purchased for installation at Gateway Community College in New Haven, CT. Both projects had state funds allocated prior to 12/31/2017.

## 16. Honorary Positions

The honorary position of Connecticut's Poet Laureate was established in 1985. The Poet Laureate for 2015-2020 is Rennie McQuilkin of Simsbury, Connecticut. As the state's representative poet, Rennie McQuilkin serves as an advocate for poetry and promotes the appreciation of and participation in poetry and literary arts activities among Connecticut citizens. In FY 2018, he received an annual stipend in the amount of $\$ 2,500$. In June 2018, Mr. McQuilkin stepped down from his role and COA is currently reviewing candidates.

The honorary position of Connecticut State Troubadour was established in 1991. The State Troubadour is an individual singer-songwriter who serves as an ambassador of music and song and promotes cultural literacy among Connecticut citizens. Connecticut's State Troubadour for

2016-2018 is Kate Callahan of West Hartford, Connecticut. Ms. Callahan received her final stipend in the amount of $\$ 2,500$ in FY 2017.

These programs are supported by state funds.

| Table 87: FY 2018 Honorary Positions Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 1 | $\$ 2,500$ |

Source: DECD

## 17. Special Project Grants

Special Project Grants fund arts-related initiatives that align with the Connecticut Office of the Arts' READI framework. Fifteen Special Projects Grants totaling $\$ 216,700$ were awarded in FY 2018.

- The Connecticut Arts Council Foundation received $\$ 35,000$ to support the next phase of COA's Higher Order of Thinking (HOT) Schools and HOT Approach activities.
- The Southeastern CT Cultural Coalition received $\$ 2,950$ to support activities related to Arts Day 2018 and $\$ 10,000$ to conduct arts and economic impact conversations (roundtables) across the state.
- The Willimantic Whitewater Partnership, Inc. received $\$ 20,000$ to support the Land Art Generator Initiative (LAGI) Willimantic project.
- Sally Rogers of Pomfret Center received $\$ 7,000$ to support the extension of the Arts, Wellness and Vital Involvement of Aging pilot program.
- Shoreline Arts Alliance received $\$ 10,000$ to support the advancement of COA's READI initiative.
- The Northwest CT Arts Council received $\$ 15,000$ to support the planning, development, and execution of professional development offerings for artists and arts organizations as it pertains to making the arts accessible to individuals with disabilities.
- The Massachusetts Museum of Contemporary Art Foundation, Inc. received $\$ 13,000$ to identify artists in all disciplines to participate in financial and business-focused professional development in rural communities throughout Connecticut.
- The Hartford Foundation for Public Giving received $\$ 20,000$ to support Connecticut's participation in the Greater Hartford Arts Landscape Study.
- Flock Theatre Company, Inc. received $\$ 10,000$ to conduct a formal study of the effect of a HOT Approach Arts Integration Strategy on $4^{\text {th }}$ grade students with low-level fluency.
- The Cultural Alliance of Western Connecticut received $\$ 10,000$ to advance individual Arts Workforce conversations and professional development across the state.
- The Arts Council of Greater New Haven received $\$ 10,000$ to support internship opportunities for Connecticut college students, emerging professionals and military veterans with professional media artists; $\$ 18,300$ to administer the funds for the Artists Are READI Music Conference and the Artists Are READI Master Classes; and $\$ 7,500$ to support SpaceFinder for the New Haven region.
- NXTHVN, through fiscal sponsor United Way of Greater New Haven, received $\$ 25,000$ to support a partnership between Movement Art Is and the Connecticut Department of Education for the development and execution of a teaching training and educational residency to benefit students in Grades $9,10 \& 11$ in the New Haven and Bridgeport school districts.

| Table 88: FY 2018 Special Projects Grant Activity |  |
| :---: | :---: |
| Number of Recipients | Grant Amount |
| 15 | $\$ 216,700$ |

Source: DECD

## E. Connecticut Office of Tourism

Released in 2016, The Economic Impact of Travel in Connecticut report revealed that all business sectors of the Connecticut economy benefit from tourism activity directly and/or indirectly. The report indicated that tourism:

- Generated $\$ 14.7$ billion in business sales supported by traveler spending in Connecticut in 2015;
- Generated $\$ 1.7$ billion in tax revenues, including $\$ 910$ million in state/local and $\$ 778$ million in federal, by visitor activity in 2015; and
- Supported 82,688 jobs directly, and 121,527 jobs indirectly (jobs supported by tourism activities) in 2015.
The report can be found HERE.

In calendar year 2017, the Office of Tourism took a number of strategic steps - rooted in a year of extensive research - to ensure the Connecticut tourism industry continues to grow. In doing so, it involved hundreds of tourism and industry partners from across the state, and engaged with dozens of local representatives through its Regional Tourism Marketing Program.

With the Tourism Industry's support, in calendar year 2017, the Office of Tourism:

- Continued to enhance the statewide tourism industry website, CTvisit.com, now a mobileresponsive, content-marketing-optimized, extremely effective, statewide tourism website;
- Represented over 4,000 industry partners on CTvisit.com;
- Increased the traffic to the website to a record-breaking 5 million visits ( $15 \%$ over 2016);
- Increased public relations coverage with PR Impressions up $6 \%$ and PR Placements up $25 \%$;
- Increased social media impressions by $243 \%$ with Engagement, including Pinterest up $53 \%$ and Clicks to CTvisit.com up $52 \%$;
- Over 3.2 million referrals were generated by CTvisit.com for Tourism Industry Partners (clicks to partner websites, calls or e-mails); and
- Over 1,000 Tourism Partners were featured in Office of Tourism PR articles and 600+ Tourism Partners were promoted in Advertising \& Content Marketing.

Continuing in calendar year 2017, the Office of Tourism launched a content marketing program that helped drive interest in the state. The program, which included the development of hundreds of
thought-provoking and timely articles about where to eat, stay, and play in Connecticut, drove nearly half of the web traffic to CTvisit.com.

The Office of Tourism's supported statewide Connecticut Convention \& Sports Bureau (CTCSB) partnership contracted 230 future meetings, conventions and sports events which are expected to generate more than $\$ 54$ million in local spending and over $\$ 3.1$ million in tax revenue for the state. In addition, there were 513 leads issued accounting for 292,162 room nights.

In addition, the CTCSB partnership provides the Office of Tourism representation in the important International and Domestic Group Travel industries.

Another key performance indicator, lodging tax revenues, was up in 2017. Revenues reached $\$ 123.6$, showing an annual occupancy rate growth rate of 1.0 percent.

Overall, the Office of Tourism maximized marketing efficiencies in 2017, and drove more website traffic, promoted more partners, and generated more lodging tax revenues in 2017 than in the previous year.

## IV. EMPLOYMENT INDICATORS AND GROSS STATE PRODUCT (GSP)

## A. Industry Employment

Table 89 provides the Connecticut employment by industry at the two-digit North American Industry Classification System (NAICS) code level. Health Care and Social Assistance is the largest industry in terms of annual average employment which accounted for $16.0 \%$ of total employment in 2017, followed by Government sector at $13.6 \%$ and Retail Trade industry at $11.0 \%$.

Table 89: Connecticut Employment by Industry

| NAICS <br> Code | Industry | 2016 Annual <br> Average <br> Employment | \% of <br> Total | 2017 Annual <br> Average <br> Employment | \% of <br> Total |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 62 | Health care and social assistance | 264,831 | $15.9 \%$ | 267,590 | $16.0 \%$ |
|  | Total government | 231,034 | $13.9 \%$ | 227,238 | $13.6 \%$ |
| $44-45$ | Retail trade | 184,616 | $11.1 \%$ | 183,501 | $11.0 \%$ |
| $31-33$ | Manufacturing | 156,431 | $9.4 \%$ | 158,810 | $9.5 \%$ |
| 72 | Accommodation and food services | 126,536 | $7.6 \%$ | 128,235 | $7.7 \%$ |
| 52 | Finance and insurance | 107,751 | $6.5 \%$ | 106,207 | $6.4 \%$ |
| 54 | Professional and technical services | 96,911 | $5.8 \%$ | 96,354 | $5.8 \%$ |
| 56 | Administrative and waste <br> management | 88,351 | $5.3 \%$ | 89,707 | $5.4 \%$ |
| 81 | Other services, except public <br> administration | 63,042 | $3.8 \%$ | 64,284 | $3.8 \%$ |
| 42 | Wholesale trade | 62,527 | $3.8 \%$ | 62,553 | $3.7 \%$ |
| 23 | Construction | 59,103 | $3.5 \%$ | 58,311 | $3.5 \%$ |
| 61 | Educational services | 56,912 | $3.4 \%$ | 57,860 | $3.5 \%$ |
| $48-49$ | Transportation and warehousing | 44,669 | $2.7 \%$ | 46,012 | $2.8 \%$ |
| 55 | Management of companies and <br> enterprises | 32,915 | $2.0 \%$ | 32,309 | $1.9 \%$ |
| 51 | Information | 32,336 | $1.9 \%$ | 31,513 | $1.9 \%$ |
| 71 | Arts, entertainment, and recreation | 27,343 | $1.6 \%$ | 28,285 | $1.7 \%$ |
| 53 | Real estate and rental and leasing | 20,007 | $1.2 \%$ | 19,864 | $1.2 \%$ |
| 22 | Utilities | 5,626 | $0.3 \%$ | 5,333 | $0.3 \%$ |
| 11 | Agriculture, forestry, fishing and <br> hunting | 4,738 | $0.3 \%$ | 4,767 | $0.3 \%$ |
| 21 | Mining | 556 | $0.0 \%$ |  | 538 |
| 99 | Nonclassifiable establishments | 344 | $0.0 \%$ | $49.0 \%$ |  |
|  | Statewide Total | $\mathbf{1 , 6 6 6 , 5 8 0}$ | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{1 , 6 6 9 , 7 6 6}$ | $\mathbf{1 0 0 . 0 \%}$ |

Source: Connecticut Department of Labor, Labor Market Information, 2016 and 2017 QCEW Program Data Note: Numbers may not total due to rounding.

## B. Unemployment Rates

Connecticut's annual average unemployment rate continued to decline from $8.8 \%$ in FY 2010 to $4.4 \%$ in FY 2018. The state's unemployment rate was four tenth percentages higher than the United States.

| Table 90: Unemployment Rates |  |  |
| :---: | :---: | :---: |
| Fiscal Year | CT | US |
| 2010 | $8.8 \%$ | $9.8 \%$ |
| 2011 | $9.1 \%$ | $9.3 \%$ |
| 2012 | $8.4 \%$ | $8.5 \%$ |
| 2013 | $8.2 \%$ | $7.8 \%$ |
| 2014 | $7.1 \%$ | $6.8 \%$ |
| 2015 | $6.1 \%$ | $5.7 \%$ |
| 2016 | $5.4 \%$ | $5.0 \%$ |
| 2017 | $4.8 \%$ | $4.7 \%$ |
| 2018 | $4.4 \%$ | $4.0 \%$ |

## C. Gross State Product (GSP) by Industry

The Real Estate, Rental and Leasing industry accounted $14.3 \%$ of the total state economy in 2016, followed by the Finance and Insurance industry with $13.5 \%$ and Manufacturing with $10.8 \%$. The Government and Health Care and Social Assistance sectors rounded the top five with $10.3 \%$ and 8.1\%, respectively. At the U.S. level, the Real Estate, Rental and Leasing, Government and Manufacturing sectors accounted for $37.1 \%$ of the national economy in 2017.

| Table 91: 2017 GSP by Industry (millions of current \$) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Industry | CT | \% of <br> Total | U.S. | \% of <br> Total |
| Real estate, rental and leasing | 37,760 | $\mathbf{1 4 . 3 \%}$ | $2,591,221$ | $13.3 \%$ |
| Finance and Insurance | 35,719 | $13.5 \%$ | $1,465,909$ | $7.5 \%$ |
| Manufacturing | 28,436 | $10.8 \%$ | $2,179,633$ | $11.2 \%$ |
| Government | 27,309 | $10.3 \%$ | $2,453,704$ | $12.6 \%$ |
| Health care and social assistance | 21,322 | $8.1 \%$ | $1,454,719$ | $7.5 \%$ |
| Professional and technical services | 18,381 | $7.0 \%$ | $1,449,993$ | $7.4 \%$ |
| Wholesale Trade | 17,627 | $6.7 \%$ | $1,174,123$ | $6.0 \%$ |
| Retail Trade | 13,285 | $5.0 \%$ | $1,087,107$ | $5.6 \%$ |
| Information | 13,197 | $5.0 \%$ | $1,050,767$ | $5.4 \%$ |
| Construction | 8,027 | $3.0 \%$ | 781,413 | $4.0 \%$ |
| Management of companies and enterprises | 6,593 | $2.5 \%$ | 369,380 | $1.9 \%$ |
| Administrative and waste services | 7,574 | $2.9 \%$ | 606,974 | $3.1 \%$ |
| Accommodation and food services | 6,448 | $2.4 \%$ | 590,589 | $3.0 \%$ |
| Educational Services | 6,206 | $2.4 \%$ | 245,556 | $1.3 \%$ |


| Table 91: 2017 GSP by Industry (millions of current \$) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Industry | CT | \% of <br> Total | U.S. | \% of <br> Total |
| Other services, except government | 5,120 | $1.9 \%$ | 416,083 | $2.1 \%$ |
| Transportation and warehousing, <br> excluding Postal Service | 4,416 | $1.7 \%$ | 608,735 | $3.1 \%$ |
| Utilities | 3,993 | $1.5 \%$ | 307,496 | $1.6 \%$ |
| Arts, entertainment and recreation | 2,562 | $1.0 \%$ | 214,148 | $1.1 \%$ |
| Mining | 218 | $0.1 \%$ | 268,619 | $1.4 \%$ |
| Agriculture, forestry, fishing, and hunting | 318 | $0.1 \%$ | 169,225 | $0.9 \%$ |
| Total | $\mathbf{2 6 4 , 5 1 0}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{1 9 , 4 8 5 , 3 9 4}$ | $\mathbf{1 0 0 \%}$ |

Source: U.S. Bureau of Economic Analysis, 2017 Gross Domestic Product

## V. APPENDIX

The methodology for evaluating DECD programs has been modified from that presented in the 2017 Revised Annual Report. The changes that apply to all programs are presented first, and changes that apply to each specific program are presented in the relevant sections below.

## A. Changes to Analysis and Reporting for All Programs

All analyses in this report are limited to the last ten years (FY 2009- FY 2018), unlike in previous years where we evaluated each program since its inception.

In prior years we have reported the economic impact of DECD programs by presenting the total economic impact (estimated using the REMI model, described below) to assess the impact of a program to the state. This year, in addition to the total economic impact, we have presented a "direct impact" if all required data is available.

## Direct Impact (new to this report):

Typically a company when seeking DECD assistance commits to making capital investments and creating a particular number of jobs. The direct impact is the tax revenue generated by these jobs and capital investments net of the cost of the assistance to the state. The tax revenue from jobs are the new income taxes generated by the workers' salaries. The tax revenue from investment is the sales taxes generated by the construction and purchases of new capital equipment. We do not report direct corporate taxes as we do not have a reliable method of estimating it. The cost of the assistance to the state is the debt service the state must pay on the bonds issued to finance the loans and/or grants, or in the case of tax credits, the tax revenues the state foregoes when the recipient company claims the credits. The difference between the new revenues and the cost to the state is the direct net fiscal impact, and a positive value indicates that the assistance program is covering its costs and bringing in a net return to the state. The direct impact is the most conservative economic impact estimate with which we can evaluate a state program, and for programs for which we have the data to estimate it, we present it in this report in addition to the total estimated economic impact. We cannot estimate a
full direct impact for certain programs, such as tax credits which do not explicitly require job creation, so for those we only report the total economic impact. In this report we estimate the direct fiscal impact for the MAA program, the EXP program and URA tax credits.

## Total Impact:

The total economic impact of a program consists of the direct, indirect and induced economic activity that occurs as a result of the program. The total economic and fiscal impact of the DECD tax credits are analyzed using the REMI Tax-PI model for the state of Connecticut. The Connecticut REMI model is a dynamic, multi-sector, regional economic model developed and maintained for the Department of Economic and Community Development by Regional Economic Models, Inc. of Amherst, Massachusetts. The model includes the major inter-industry linkages among 466 private industries, aggregated into 67 major industrial sectors. With the addition of farming and three public sectors (state and local government, civilian federal government, and military), there are 70 sectors represented in the model for the state of Connecticut.

A company undertakes certain economic activities based on their receipt of economic assistance from DECD. This could be a renovation, expansion, or a relocation where some construction activity takes place generally followed by the creation of new jobs. The state provides the funds as defined in the contract with the firm. This economic activity by the firm is the direct activity that results from the state assistance. This activity however will have a ripple effect. The developer hired for the construction phase will buy materials, for example, generating sales for its suppliers. The completed space will need to be equipped with fixtures and software and office supplies, generating sales for the providers of these necessities who in turn increase their purchases from their own suppliers to meet this demand. This is the indirect impact of the economic activity that directly resulted from the state assistance. Once the firm hires new workers, these workers will receive new income which they will then spend, generating further sales outside of the economic activity created by their employer. This is the induced effect of the state assistance program. The total economic impact is the sum of these
three effects - the direct, indirect and induced - which captures the complete ripple effect of the economic activity originally incented by the state assistance program.

When evaluating state assistance programs, knowing the direct incented activity is critical to obtaining a fair assessment of the total economic impact. Ideally, we would like to have information from the recipients themselves on what, if any, impact the assistance has had on their investments decisions, and what other activity resulted from their availability. We do have this information for DECD programs: the conditions attached to the Urban and Industrial Site Reinvestment tax credits (URA) and the information they are required to provide regularly to DECD, for example, allows us to know the direct impact of this tax credit. We know that film companies would not have located their productions to the state without the film tax credits, so in this case too we know the activity that resulted directly from these credits. Gathering this type of data on a regular basis is essential for the effective evaluation of these programs.

We enter the direct economic activity as inputs into the REMI model. A typical scenario will include any construction activity, fit-out costs, and professional and other services employed as part of the construction phase, and any new jobs that are created as part of the agreement. The state assistance benefit to the recipient is modeled, in the case of tax credits, as a reduction in the recipient's production costs, and in the case of a loan, as a reduction in the recipient's cost of capital equivalent to the savings over obtaining the same loan on the open capital market. The cost to the state is modeled as reductions in state revenue due to the tax credits.

All macroeconomic and fiscal results from the REMI model are presented as changes from the baseline forecast in each year the credit or exemption was in effect. The baseline reflects the state of the state economy absent any tax credit stimuli. When the direct activity reported above is entered into the model and the simulation is run, the resulting change from the baseline is the total economic activity (sum of direct, indirect and induced activity) that results from the state program.

Methodological Changes in Modeling the Total Economic Impact:
Two major changes have been made in our modeling strategies for all DECD programs from last year. The first is a change made to DECD's REMI Tax-PI model to better reflect economic migration over the long run. When a project is modeled in Tax-PI, the estimated economic impact is the result of a simulation where all other variables are held constant, in order to isolate the impact of this one project we are evaluating. A typical DECD-assisted project will consist of a construction phase followed by a period of ramped up then steady employment (the direct effect). Over time, the results will show some economic migration to the area as the ripple effects (indirect and induced effects) of the project results in more employment opportunities and wage increases in the area (this is because all other variables are held constant for the simulation - in reality this may or may not occur as other economic events impact the conditions in the area as well). DECD's Tax-PI model has been modified recently to better represent the migration that occurs because of economic opportunities and development. Economic migration due to more economic opportunities consists of mostly workingage population moving to the area. Prior to the modification all population segments, including children and seniors, were increasing in the model following the development, resulting in a spike in the demand for services and social assistance, which was overstating changes in state expenditures following economic development. To correct for this, the REMI simulations run for the FY 2017 Annual Report suppressed the economic migration effects. DECD worked with REMI developers in the interim to structure the underlying model to better reflect the economic effects that follow the kind of economic development DECD is engaged in evaluating. Economic migration over time as represented in the updated forecasting model now is narrowed to changes in the working age population, with its associated impacts on state fiscal conditions. We therefore include it in our modeling this year, and as a result the estimated fiscal impacts are not comparable between the two reports. Allowing for economic in-migration increases estimated state expenditures as more people require more services, and also increases state revenues as the migration results in more taxpayers.

The second major change in modeling strategy applies to DECD tax credits. In the FY 2017 report, with the exception of the URA tax credit program, all tax credit amounts modeled as costs to the state were based on claims. This is a carry-over of the modeling strategy as established for the
comprehensive Tax Credit Analysis report that was statutorily mandated (until 2017) every three years. Claims data is provided by DRS, categorized by NAICS sector. We assigned the credit claimed as production cost savings to the relevant claiming NAICS sector in the REMI model to represent the benefit to the company. This year we represent the credit amounts by the credits issued by DECD. There are two advantages to using the credits issued versus claimed. First, the claims data by NAICS is only available with a three-year lag. For this reason, the 2017 Report's economic impact estimations ended in 2014. Using credits issued allows us to extend our analyses into the most recent fiscal year, because DECD has data on the amounts of credits issued by recipient to date. The second advantage is that when modeled using the credits issued, the credits immediately follow the activity that earned it, instead of sometimes years later when the often reassigned credits are finally claimed (reassigned credits are often claimed by an industry sector different from that of the original recipient). The activity and assistance that incented it are therefore more closely aligned in the modeling. By using the credits issued we are assuming for modeling purposes that the full amounts issued will be claimed, and will, therefore, cost the state an equivalent amount in tax revenue. In reality, not all credits issued will be claimed immediately; often the cost to the state is spread over several years, and we cannot predict when all credits are actually claimed.

Any changes to modeling strategy made for individual programs are listed in each program's section below.

## B. Methodology for Evaluating the DECD Tax Credits

## 1. Urban and Industrial Site Reinvestment Tax Credit

This tax credit may be applied for investments in eligible industrial site investment projects or eligible urban reinvestment projects. The Commissioner of DECD may register managers of funds and community development entities created to invest in eligible urban reinvestment projects and eligible industrial site investment projects. A fund manager or community development entity must have its primary place of business in Connecticut. A fund manager registered under the Insurance Reinvestment Fund Tax Credit on or before July 1, 2000, will be eligible to serve as a fund manager

[^2]for purposes of this credit. No taxpayer will be eligible for this tax credit and the tax credit for manufacturing and service facilities or the insurance reinvestment fund tax credit for the same investment. No two taxpayers will be eligible for a tax credit with respect to the same investment or the same project costs. The relevant statute is CGS $\S 32-9 \mathrm{t}$.

A taxpayer making an investment may claim the credit if it is made:

- Directly and at least $\$ 5$ million in a qualified urban or industrial site project;
- Directly and at least $\$ 50$ million in a municipality approved by the Commissioner of DECD;
- Through a DECD approved fund manager with a fund that has a total asset value of at least $\$ 60$ million for the income year in which the initial credit is taken and not less than three investors who are not related persons; or
- Through a DECD approved community development entity.

The tax credit is allowable over ten years as follows:

- The income year in which the investment was made and the two succeeding income years, $0 \%$;
- The third full income year following the year in which the investment was made and the three succeeding income years, $10 \%$; and,
- The seventh full income year following the year in which the investment occurred and the two succeeding income years, $20 \%$.

The tax credit may be carried forward for the five immediately succeeding income years until the full tax credit has been taken. No carryback is allowed. An assignee is entitled to carryforward any unused tax credit as provided in the statute. A taxpayer allowed an urban and industrial reinvestment tax credit (assignor) may assign the credit to another taxpayer or taxpayers (assignees). Assignees of the tax credit must claim the tax credit in the same tax year that the assignor would have been eligible to claim the credit. An assignee may not assign the credit.

This tax credit program intends to increase jobs and investment in plant and equipment in the state, particularly in urban areas. Its broad scope defines investment below and may include almost any type of business expansion in or relocation to the state for businesses in any industry. Because the program includes remediation and demolition, it encourages brownfield redevelopment that is an important consideration in adaptive reuse in the state's economic development strategy. The program provides for an annual audit of each business claiming the credit to show that its project produces more state revenue than state expenditure and if not, allows the DECD commissioner to recapture a portion of the credit. In effect, the claiming business must earn the credit each year and if it does not, DECD may reduce or eliminate the credit and levy penalties.

Investment means all amounts invested in an eligible project by or on behalf of a taxpayer whether directly, through a fund, or through a community development entity, including but not limited to equity investments made by the taxpayer and loans. 'Project' means the acquisition, leasing, demolition, remediation, construction, renovation, expansion or other development, or redevelopment of real property and improvements within Connecticut including furniture, fixtures, equipment, associated interest and financing costs, relocation costs, start-up costs, architectural, engineering, legal and other professional services, plans, specifications, surveys, permits and studies necessary to the project.

The Urban and Industrial Site Reinvestment Tax Credit program is capped at $\$ 800$ million in awardable credits while individual projects may not exceed $\$ 100$ million in awardable credits. If a project exceeds $\$ 20$ million in awardable tax credits, it must be approved by the legislature.

## Recapture Provision

No later than July 1 in each year that tax credits are claimed, the DECD Commissioner may conduct a study to estimate the state revenue generated by the eligible project in which the investment is made. If the sum of all state revenue actually generated by the project is less than the amount of the
total sum of tax credits claimed on the date of the analysis, the DECD Commissioner may determine an applicable recapture amount and may revoke the certificate of eligibility. Any taxpayer that has claimed credits related to a project for which the DECD Commissioner has revoked the certificate of eligibility will be required to recapture its pro-rata share of the recapture amount, and no subsequent credit will be allowed unless the certificate of eligibility is reinstated. The amount of the credit that the taxpayer is required to recapture varies depending upon the year in which the tax credit is required to be recaptured as follows:

| Year | Percentage |
| :--- | :--- |
| Year 4 | $90 \%$ |
| Year 5 | $65 \%$ |
| Year 6 | $50 \%$ |
| Year 7 | $30 \%$ |
| Year 8 | $20 \%$ |
| Years 9-10 | $10 \%$ |

The DRS Commissioner may recapture the credit first from a taxpayer who claimed the credit, then from any taxpayer who assigned the credit and finally, from any fund through which the investment was made.

## Methodology and Modeling Strategy for the Urban and Industrial Site Reinvestment Tax Credit

 This analyses is conducted for the ten most recent years, FY 2009 to FY 2018. Any companies that entered the URA program (i.e., signed a contract) in this time frame is included in the analysis. If any such companies had activity that occurred prior to FY 2009 that was part of the contract agreement those expenses are included in the analysis as well.Because DECD performs an annual audit as required by statute of each claiming firm's Connecticut project, we present the net, aggregate economic impact of the recipient companies along with URA
tax credits issued through FY 2018. We use actual company data from the DECD audits to model their activity. For the three companies that completed their contracts in FY 2016 (and therefore did not require audits beyond their end date), we held their employment at their last reported levels for the next two years. For the one company that reported decreased jobs, we assumed no additions to state income taxes in those years.

DECD has not audited firms whose first credit has not yet come due, so they are not included in the analysis; these firms will be added to future analyses as they earn the credits. Firms may not claim credits in the years in which they are eligible for several reasons (carryforward, carryback, assignment or they do not provide audit information in a timely manner). Further, the DECD audit may reduce a firm's claim for not meeting its job creation commitment.

Projects typically consist of a construction and/or renovation phase in which a site is secured and a new facility is built. For an existing site, the firm typically undertakes an expansion and/or renovation of its current facilities. The construction phase usually includes some of the following expenditures for architectural and engineering services, building construction and/or leasehold improvements to an existing structure and site improvements consisting of access roads, parking lots, utility hookups, as well as the installation of furniture, fixtures and equipment. To the extent the firm purchases these goods and services in Connecticut, the purchases provide part of the economic and fiscal impact of the project. If there is a real estate purchase, there are conveyance taxes paid to the state and the town in which the firm locates or expands. Real estate brokers receive a fee as well for their services in a real estate transaction. There may be permit fees related to construction and/or renovation paid to the town as well.

The firms report the office furniture and equipment, computer hardware and software purchased from Connecticut vendors. We increase the state's stock of non-residential capital by the dollar amount of construction. The increase in the state's stock of non-residential capital approximates the additions to the Grand List of the municipality in which the project occurs. Total project costs typically exceed the value of the increase in the non-residential capital stock because project costs
may include equipment, working capital, relocation costs, architectural and engineering, legal, financial and other services that do not increase the value of the state's capital stock. If these costs represent purchases from Connecticut businesses, they create economic and fiscal impact for the state.

When new, renovated or expanded facilities are ready for occupancy, the firm typically relocates some workers and hires others and the firm's employment ramps up according to plan. We assume that as firms hire new workers, they compete with other firms for the same labor and some of the firm's new hires leave their current positions in Connecticut firms and therefore do not represent net new jobs to the state (this is job displacement). Depending on where the firm's workers live and their average compensation (wages plus non-wage fringe benefits) relative to the average compensation of the Connecticut industry in which the firm is situated, we adjust the economic model to account for these effects (for example, we do a residence adjustment to account for the workers who live outside Connecticut and therefore spend most of their money out-of-state, though they do pay taxes to Connecticut and these are accounted for). The cost to the state is the forgone tax revenue equal to the credit issued. We assume taxes are not increased to make up the lost revenue from the credit issued. We assume the claiming firm's production costs declines by an amount equivalent to the tax credit issued.

## Direct Fiscal Impact:

This year for the first time we report the direct fiscal impact of the URA program, from FY 2009 to FY 2018. The direct impact is the tax revenue generated by the newly created jobs at these companies under the URA contract and the sales taxes generated by the construction and investment activity they undertook. Direct corporate taxes are not reported as we do not have a reliable method of estimating it. For the three companies that completed their contracts in FY 2016 (and therefore did not require audits beyond their end date), we held their employment at their last reported levels for the next two years. For the one company that reported lost jobs, we assumed no additions to state income taxes in those years.

## Total Economic Impact:

We modified the URA REMI modeling strategy from last year by running one simulation with each company's data entered separately. This is as opposed to estimating each company's impact separately and aggregating the results, which is the methodology we used for the 2017 annual report. We are able to model one simulation this time because we have limited our study period to the most recent ten fiscal years as opposed to the life of the program. This prevents companies that have completed their contracts many years ago and for which we have no current data from being included in the analysis. One complete simulation also allows for interactions that occur in the economy when all projects are in play simultaneously. The difference in methodology therefore means that these results are not directly comparable to that reported for the URA program in the 2017 annual report.

The total of $\$ 186.3$ million earned credits are modeled by aligning the earned tax credit with its associated economic activity in the modeling process (so a tax credit issued in 2018 for economic activity in 2017 was modeled as being claimed in 2017). This prevents distortions that can result when the last year's credits are modeled by themselves with no offsetting economic activity in the same year.

The total economic impact includes the direct, indirect and induced effects of each tax credit, and includes the complete fiscal impact as well (total, indirect and induced state government revenues and expenditures). The total of $\$ 186.3$ million earned credits are modeled by aligning the earned tax credit with its associated economic activity in the modeling process (so a tax credit issued in 2018 for economic activity in 2017 was modeled as being claimed in 2017). This prevents distortions that can result when the last year's credits are modeled by themselves with no offsetting economic activity in the same year, resulting in a negative overall impact on the economy.

## 2. Film \& Digital Media Production Tax Credit

An eligible production company that produces a qualified production and incurs qualified production expenses or costs in excess of $\$ 100,000$ may apply for a tax credit equal to $10 \%$ to $30 \%$ of production expenses and costs incurred in Connecticut. This credit may be applied against the taxes imposed
under Chapter 207 and Chapter 208 of the Connecticut General Statutes. This tax credit may be assigned to another Connecticut taxpayer. Expenses claimed for the film and digital media production tax credit may not be used in claiming either the digital animation tax credit or the infrastructure tax credit (see below). This tax credit intends to attract more film, television, and digital media productions to the state than if the credit did not exist.

## Definitions

'Eligible production company' means a corporation, partnership, limited liability company, or other business entity that is engaged in the business of producing qualified productions on a one-time or ongoing basis, and is qualified by the Secretary of the State to engage in business in the state.
'Qualified production' means entertainment content created in whole or in part within the state, including motion pictures; documentaries; long-form, specials, mini-series, series, sound recordings, videos and music videos, and interstitials television programming; interactive television; interactive games; video games; commercials; infomercials; any format of digital media, including an interactive website, created for distribution or exhibition to the general public; and any trailer, pilot, video teaser, or demo created primarily to stimulate the sale, marketing, promotion, or exploitation of future investment in either a product or a qualified production via any means and media in any digital media format, film, or videotape, provided such program meets all the underlying criteria of a qualified production.
'Production expenses and costs' means those qualifying expenditures that are clearly and demonstrably incurred in the state in the development, preproduction, production, or post production cost of a qualified production, provided that: 1) on or after January $1,2009,50 \%$ of such expenses or costs shall be counted toward such credit when incurred outside the state and used within the state, and $100 \%$ of such expenses or costs shall be counted toward such credit when incurred within the state and used within the state, and 2) on or after January 1, 2010, no expenses or costs incurred outside the state and used within the state shall be eligible for a credit, and $100 \%$ of such expenses or costs shall be counted toward such credit when incurred within the state and used within the state.

As of July 1, 2013, motion pictures are no longer a "qualified production" with the exception of any motion picture for which twenty-five per cent or more of the principal photography shooting days are at a facility that receives not less than twenty-five million dollars in private investment and opens for business on or after July 1, 2013.

## Tax Credit Voucher

DECD requires that an independent audit by a Connecticut licensed, DECD-approved Certified Public Accountant accompany applications for final tax credit vouchers. DECD will enter the amount of the production company's finally approved tax credit on such voucher.

## Methodology and Modeling Strategy for the Film \& Digital Media Production Tax Credit

Because we do not obtain jobs numbers regularly from productions, and some productions are in the state temporarily, we do not have the data to perform a direct fiscal impact analysis for the Film Production Tax Credit. We only perform a total economic impact analysis using the REMI Tax-PI model, details of which are given below.

The economic and fiscal impact analysis uses itemized amounts from tax credit applications to quantify the direct economic effects of film production in Connecticut. The direct impact measures the goods and services purchased from the Connecticut economy by production companies and their staffs. The indirect impact captures the ripple (multiplier) effect of this primary demand and describes the subsequent rounds of business-to-business spending as one company expands its business and buys more goods and services from its supply chain. From these additional (ripple) sales, Connecticut firms experience increased revenues and workers have more income to spend as well. This secondary effect increases the volume of goods and services sold in Connecticut.

This analysis assumes the expenditure of productions applying for the film and digital media tax credit represents 'net new' spending in the state (it does not displace existing spending but exclusively adds to spending in the state). That is, we assume these productions would not have located in Connecticut absent the tax credit. The film industry is highly mobile and able to relocate production
easily. That these productions located in Connecticut and applied for the credit suggests that Connecticut's film tax credit influenced their decision to locate production in the state.

We exclude salary and fringe payments to above-the-line (ATL) producers, executive producers, directors, principal cast and supporting cast from the analysis, even though these payments count towards the tax credits, because we assume that ATL workers do not spend their Connecticut earnings in the state although these earnings are taxed and paid to Connecticut. Although a few major motion picture stars, producers and directors call Connecticut home, most 'talent' earns its wage here and returns to another state to spend income earned in Connecticut. Therefore, including such income in the model as if it were entirely spent it in the state would overstate the impact of Connecticut's film production tax credit. We exclude payments to all other payroll recipients as well because we do not know how much was paid to whom or where they lived.

We do include the full-time permanent employment of certain tax credit recipients who have established operations in the state after the creation of the tax credit. This employment number has been rising steadily over the last few years, illustrating the increasing presence of the film and digital media production industry in the state. In 2017, the number of full-time permanent employed in the state among film production tax credit recipients was 1,943, up from 113 reported in 2009. However this is not a complete accounting of all permanent full-time jobs that were newly created as a result of the tax credit. Permanent jobs in newly established companies that have utilized credits in the past are excluded if they have not applied for credits more recently. We also cannot separate (and do not model) full-time, permanent jobs at World Wrestling Entertainment, Inc., Connecticut Public Broadcasting, and ESPN due exclusively to the film production tax credit from those that existed before the program was created in 2006, even though these companies utilize the film production tax credits and likely expanded their activities in the state due to their availability. Our modeling thus understates the full-time permanent employment created as a result of the film and digital media production tax credits.

Jobs reported by these productions include each person receiving pay including extras. These do not drive economic impact (and are not modeled) because they are not permanent, full-time jobs. In line with industry norms, these productions use part-time labor as needs arise. Many employ independent contractors and these we categorize as the purchase of labor services. Independent contractors pay personal income taxes but we cannot estimate these taxes from the data provided.

Qualified Connecticut vendor spending includes qualified purchases of goods and services from the Connecticut economy and is the primary driver of economic and fiscal impact. Note that prior to 2010, some spending accruing to vendors outside Connecticut qualified for the tax credit.

As mentioned, we do not model payroll in this study. Some BTL workers cash their paychecks and spend locally (above their per diem earnings) but we do not include such expenditure as we have no data or information about how much BTL workers spend of their pay beyond their per diem allotments. Per diem payments for some ATL workers are included in their salary and we do not see these per diem payments separately. This renders the economic and fiscal impact results conservative as it underestimates the actual spending impact of ATL and BTL workers.

In some instances, employees travel to Connecticut to work. While in Connecticut, they stay in hotels, eat meals, shop and travel and we assume they behave as tourists. Film production budgets include allowances for such expenses. For instance, meals or 'craft services' are typically provided on set. When shooting continues through meals, workers receive meal-offset payments (supplemental income). Transportation to and from the state and to and from the set is typically provided by the production for out-of-state workers. Some productions specify per diem payments as a catchall for non-accommodation expenditures.

We assume that workers receiving per diem payments spend like in-state tourists (day-trippers). We model day-tripper expenditures based on data from the North Carolina Division of Tourism, Film and

Sports Development. ${ }^{1}$ The per diem amounts modeled in the study are for BTL workers (ATL workers' per diem is typically incorporated into their pay). The spending categories defined in the North Carolina study are grouped into REMI spending categories in the manner shown in the table below.

| REMI Spending Category (Industry <br> sector) | Visitor spending <br> as a share of total |
| :--- | :---: |
| Retail | $56 \%$ |
| Food services \& drinking places | $25 \%$ |
| Rental \& leasing services | $10 \%$ |
| Amusement, gambling \& recreation | $3 \%$ |
|  <br> parks | $6 \%$ |
| Total | $\mathbf{1 0 0 \%}$ |

We assume independent contractors are Connecticut residents and their income is modeled as an increase in household consumption expenditure in the state. We model permit and other fee costs as payments to municipalities. Production companies pay some fees to the state, but these are relatively small and cannot be separated from the total fees paid.

From expenditure data derived from production company applications, we translate expenditure categories (purchases of goods and services) into 70 REMI industry sectors using the North American Industry Classification System (NAICS). In most instances, accounting descriptions made translation

12012 North Carolina Visitor Profile, North Carolina Department of Commerce, April 2013. See https://www.nccommerce.com/Portals/8/Documents/Research/Visitation/2012\ North\ Carolina\ Visitor \%20Profile.pdf.
categories apparent. Examples of expenditure types include lodging, food and drink, set construction, editing equipment rentals and film stock.

Unlike for the 2017 Annual Report, we use credits issued instead of credits claimed to model the cost of the tax credits to the state. As described in the introduction above, this allows us to avoid the lag in availability of claim data and to align the credits to the associated activity more closely. We model the credits as a reduction in production costs for the motion picture and film industries. We reduce state government output each year by the amount of the credit to reflect the lost revenues as we assume the legislature does not increase taxes or borrowing to offset the tax cost of the credits issued.

## 3. Film Production Infrastructure Tax Credit

A tax credit is available to a taxpayer that invests in a state-certified entertainment infrastructure project. An entity interested in obtaining this tax credit must apply to DECD. This tax credit may be applied against taxes imposed under Chapter 207 and Chapter 208 of the Connecticut General Statutes. For state-certified projects costing $\$ 3$ million or more, each taxpayer may be allowed a tax credit equal to $20 \%$ of the investment of the taxpayer.

After the initial issuance of a tax credit voucher, such credit may be sold, assigned, or otherwise transferred, in whole or in part, to one or more taxpayers, provided no credit, after issuance, may be sold, assigned, or otherwise transferred, in whole or in part, more than three times. In the event of an assignment, the transferor and the transferee shall jointly submit written notice of such transfer to DECD no later than 30 days after such transfer. The notification after each transfer includes the credit voucher number, the date of transfer, the amount of such credit transferred, the tax credit balance before and after the transfer, the tax identification numbers for both the transferor and transferee and other information DECD may require. A taxpayer holding a credit voucher must claim the credit for the income year in which expenditures were made by the taxpayer for the infrastructure project.

A tax credit not used in the income year in which it is claimed may be carried forward for three succeeding income years. No carryback is allowed. An assignee of the infrastructure tax credit is allowed to carryforward any unused tax credit as provided in the statute.

The credit intends to help establish a film and digital animation industry presence in Connecticut by incentivizing capital investment in plant and equipment for pre- and post-production facilities and investment in educational programs that produce the workforce needed by the film and digital animation industry.

## Definitions

'Infrastructure project' means a capital project to provide basic buildings, facilities, or installations needed for the functioning of the digital media and motion picture industry in this state.
'State-certified project' means an infrastructure project undertaken in this state by an entity that (A) is in compliance with the adopted regulations, $(B)$ is authorized to conduct business in this state, (C) is not in default on a loan made by the state or a loan guaranteed by the state, nor has ever declared bankruptcy under which an obligation of the entity to pay or repay public funds was discharged as a part of such bankruptcy, and (D) has been approved by DECD as qualifying for the Infrastructure Project Tax Credit.
'Eligible expenditures' includes all expenditures for a capital project to provide buildings, facilities, or installations, whether leased or purchased, together with necessary equipment for a film, video, television, digital production facility or digital animation production facility; project development, including design, professional consulting fees and transaction costs; and development, preproduction, production, postproduction and distribution equipment and system access and fixtures and other equipment.

## Methodology and Modeling Strategy for the Film Production Infrastructure Tax Credit

Using data from the DECD Film Office of the breakdown of infrastructure expenditures that were eligible for the infrastructure tax credit, we model the construction and related activities associated with the credit. We calculate real estate broker fees ( $6 \%$ of the purchase amount), state conveyance taxes $(1 \%$ of the purchase amount), and local conveyance taxes $(0.25 \%$ of the purchase amount) based on the value of eligible land and building purchases. We model construction expenses (building rehabilitation and renovations) incurred by the companies as construction of new commercial and institutional buildings. We model other eligible expenditure (furniture, fixtures and equipment, and architectural services, for example) as net new industry sales in the relevant sectors. We increase the non-residential capital stock in the state by the value of construction. The modeling methodology has been modified from the 2017 Annual Report in that we now use total tax credits issued to represent the cost to the state instead of tax credits claimed. This aligns the tax credit with the activity it was issued for and avoids the time inconsistency in the analysis that is a result of a twoyear lag in the availability of claim data. These results are therefore not comparable to those in the 2017 report. The recipient industries are classified by NAICS code and their production costs are reduced by the amount of the tax credit. State government output is reduced by the amount of the tax credit to reflect the loss in tax revenues.

## 4. Digital Animation Tax Credit

A Digital Animation Tax Credit is available to state-certified digital animation production companies that engage in digital animation production activities on an ongoing basis. The relevant statutes are CGS $\S 12-21711$ and 2007 PA 236, $\S 3$ amended by 2007 PA 4, $\S 71$ (June Spec. Sess.). This tax credit may be applied to taxes imposed under Chapters 207 and 208 of the Connecticut General Statutes. A digital animation production company receiving a digital animation tax credit is not be eligible for and cannot receive the film production tax credit. Digital animation production companies incurring production expenses or costs between $\$ 100,000$ and $\$ 500,000$ are eligible for a $10 \%$ credit, between $\$ 500,000$ and $\$ 1$ million are eligible for a $15 \%$ credit, and over $\$ 1$ million continue to be eligible for a $30 \%$ credit.

The credit intends to help establish a digital animation industry presence in Connecticut by incentivizing increased employment and capital investment in plant and equipment for digital animation facilities.

## Definitions

'Digital animation production company' means a corporation, partnership, limited liability company, or other business entity that is engaged exclusively in digital animation production activity on an ongoing basis, and that is qualified by the Secretary of the State to engage in business in the state.
'State-certified digital animation production company' means a digital animation production company that: (A) maintains studio facilities located within the state at which digital animation production activities are conducted, $(B)$ employs at least two hundred full-time employees within the state, $(C)$ is in compliance with regulations adopted, and $(D)$ has been certified by DECD.
'Digital animation production activity' means the creation, development, and production of computer-generated animation content for distribution or exhibition to the public.
'Full-time employee' means an employee required to work at least 35 hours or more per week, and who is not a temporary or seasonal employee.
'Production expenses or costs' means all expenditures clearly and demonstrably incurred in the state in the development, preproduction, production or postproduction costs of a digital animation production activity. The statute enumerates those types of expenses that qualify and certain types of expenses that are specifically excluded.

## Tax Credit Voucher

Any state-certified digital animation production company may apply to DECD no more than twice during the income year for a digital animation tax credit voucher. There must be independent certification by a licensed Connecticut Certified Public Accountant (CPA) of the production expenses or costs incurred during the period for which the voucher is issued. The voucher will list the amount of the available tax credit.

## Assignment and Carry forward/Carry back Limitations

After the initial issuance of a tax credit, such credit may be sold, assigned, or otherwise transferred, in whole or in part, to one or more taxpayers provided no credit, after issuance, may be sold, assigned or otherwise transferred, in whole or in part, more than three times. In the event of an assignment, the transferor and the transferee shall jointly submit written notice of such transfer to DECD no later than 30 days after such transfer.

The notification that is provided to DECD after each transfer shall include the credit voucher number, the date of transfer, the amount of such credit transferred, the tax credit balance before and after the transfer, the tax identification numbers for both the transferor and transferee, and such other information as DECD may require. A taxpayer that receives the credit by assignment must claim the credit only for an income year in which the production expenses or costs were incurred.

A tax credit not used in the income year in which it is claimed may be carried forward for three succeeding income years. No carry back is allowed. An assignee of the tax credit may carryforward any unused tax credit as provided in the statute.

## Methodology and Modeling Strategy for the Digital Animation Tax Credit

We model the impact of the digital animation tax credit by accounting that the sole credit recipient, Blue Sky Studios, would not have relocated to the state but for the digital animation tax credit. The digital animation tax credits issued averaged $\$ 13.51$ million per year from 2008-2015.

No new credits were Digital Animation credits were issued in FY 2018. However we re-ran the estimation because of the changes in our modeling methodology. The modeling methodology has been modified from the 2017 Annual Report in that we now use total tax credits issued to represent the cost to the state instead of tax credits claimed. This aligns the tax credit with the activity it was issued for and avoids the time inconsistency in the analysis that is a result of a two-year lag in the availability of claim data. These results are therefore not comparable to those in the 2017 report. The company had an annual average of 482 jobs through 2016. We allocate these jobs into executive $(5 \%)$ and non-executive $(95 \%)$ jobs and use the average annual wages paid by the company to calculate a weighted average wage. The executive/non-executive employment allocation and company wages are based on data provided by the company to DECD for prior economic impact analyses. Blue Sky Studios' average annual wages are higher than the industry average wage in the Connecticut economic model (REMI); we therefore adjust the wage upwards in the motion picture and sound recording industry in the model to reflect increased purchasing power. Recent data provided by the company indicated that $74 \%$ of its employees reside outside Connecticut, down from $93 \%$ in 2009: we make a residence adjustment to account for the portion of the payroll that leaves the state, adjusting it annually to represent the declining fraction of out-of-state resident employees. We reduce the company's production costs in the amount of the credits it was issued under the digital animation tax credit, and reduce government revenues and government output by the tax credits issued.

## 5. First Insurance Reinvestment Fund Tax Credit

No new investments are eligible under the First Insurance Reinvestment Program; final year of eligibility was 2015. There was no c under the First Insurance Reinvestment Fund in FY 2018.

## 6. Second Insurance Reinvestment Fund Tax Credit

In 2010, the legislature amended the Insurance Reinvestment Fund tax credit to provide a new tax credit that may be used against the taxes imposed by Chapter 207 and section 38a-743 (insurance premiums tax) of the Connecticut General Statutes. The Second Insurance Reinvestment Fund tax credit is available to insurance companies that invest eligible capital with approved fund managers, who in turn invest such capital in eligible businesses. This tax credit has different investment criteria than the First Insurance Reinvestment Fund tax credit.

The tax credit is allowable over ten years, with the first installments of $10 \%$ made available the third full calendar year following the investment. The same investment cannot generate tax credits for both the investor and the business. Any tax credit not used in the calendar year for which it was allowed may be carried forward for the five immediately succeeding calendar years until the entire tax credit is taken. No carryback is allowed.

To be certified as an Insurance Reinvestment Fund, an application must be submitted to DECD. Once the application is approved, DECD will issue an allocation of the tax credits. The fund manager must then confirm that the fund has received taxpayer investments equal to the tax credits that have been allocated.

Each Insurance Reinvestment Fund must submit an annual report to DECD, and is subject to decertification if it is not in compliance certain conditions. Decertification of an Insurance Reinvestment Fund shall cause the forfeiture of future Tax credits when: 1) such decertification occurs on or before the fourth anniversary of the fund's allocation date; and 2) such fund has invested less than $60 \%$ of its eligible capital in eligible businesses by said anniversary.

Fund investments under the Second IRF (shown below) are now spread across a variety of industries, as are the new jobs created as a result of the tax credit. Credits issued for the Second IRF tax credit are shown in the table below. Only the insurance industry can claim these tax credits as the Second IRF limits the type of taxes imposed that the credits can be applied against.

| Second Insurance Reinvestment Fund <br> Tax Credits Issued |  |
| :--- | :---: |
| Tax Credits Issued in FY 2018 | $\$ 38,010,000$ |
| Cumulative Tax Credits Issued |  |
| FY 2011- FY 2018 | $\$ 130,420,000$ |

Second Insurance Reinvestment Tax Credit Fund Managers' Investments

| Industry | NAICS Code | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | $\begin{gathered} \hline \text { Total } \\ 2011-2018 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 238 | 0 | 3500000 | 0 | 1500000 | 2750000 | 1100000 | 0 | 0 | \$8,850,000 |
| Food Manufacturing | 311 | 0 | 0 | 0 | 0 | 500000 | 0 | 0 | 0 | \$500,000 |
| Beverage and Tobacco Product Manufacturing | 312 | 100000 | 75000 | 2000000 | 0 | 135000 | 0 | 0 | 0 | \$2,310,000 |
| Paper Manufacturing | 322 | 0 | 2875000 | 0 | 0 | 0 | 1413696 | 0 | 0 | \$4,288,696 |
| Petroleum and Coal Products Manufacturing | 324 | 150000 | 0 | 0 | 1000000 | 1250000 | 0 | 0 | 0 | \$2,400,000 |
| Chemical Manufacturing | 325 | 500000 | 4400000 | 100000 | 4000000 | 0 | 0 | 0 | 0 | \$9,000,000 |
| Fabricated Metal Product Manufacturing | 332 | 14800000 | 6450000 | 1250000 | 1000000 | 0 | 1965000 | 0 | 0 | \$25,465,000 |
| Computer and Electronic Product Manufacturing | 334 | 2675000 | 2800000 | 1210000 | 4000000 | 2565000 | 0 | 0 | 0 | \$13,250,000 |
| Electrical Equipment and Appliance Manufacturing | 335 | 0 | 0 | 0 | 9950000 | 250000 | 0 | 0 | 0 | \$10,200,000 |
| Other Transportation Equipment Manufacturing | 336 | 75000 | 9250000 | 0 | 300000 | 0 | 1500000 | 0 | 530000 | \$11,655,000 |
| Furniture and Related Product Manufacturing | 337 | 0 | 0 | 0 | 3500000 | 0 | 0 | 0 | 0 | \$3,500,000 |
| Miscellaneous Manufacturing | 339 | 200000 | 125000 | 2500000 | 45994 | 796000 | 0 | 0 | 0 | \$3,666,994 |
| Merchant Wholesalers, Durable Goods | 423 | 0 | 0 | 0 | 0 | 0 | 3500000 | 0 | 750000 | \$4,250,000 |
| Merchant Wholesalers, Nondurable Goods | 424 | 0 | 0 | 600000 | 0 | 0 | 0 | 0 | 0 | \$600,000 |
| Publishing Industries Except Internet | 511 | 300000 | 150000 | 2500000 | 2450000 | 3650000 | 339280 | 0 | 0 | \$9,389,280 |
| Telecommunications | 517 | 325000 | 100000 | 2000000 | 1000000 | 600000 | 0 | 0 | 0 | \$4,025,000 |
| Data Processing, Hosting and Related Services | 518 | 150000 | 111141 | 10000 | 0 | 0 | 0 | 0 | 0 | \$271,141 |
| Other Information Services | 519 | 250000 | 650000 | 190000 | 0 | 700000 | 0 | 0 | 0 | \$1,790,000 |
| Securities, Commodity Contracts and Other Financial Investments and Related Activities | 523 | 0 | 225000 | 120000 | 0 | 0 | 0 | 0 | 0 | \$345,000 |
| Professional and Technical Services | 541 | 2125000 | 3086000 | 12100100 | 13850162.51 | 3050000 | 700000 | 0 | 525000 | \$35,436,263 |
| Administrative and Support Services | 561 | 0 | 0 | 0 | 0 | 0 | 514285 | 1285715 | 1650000 | \$3,450,000 |
| W aste Management and Remediation Services | 562 | 0 | 15276830 | 1000000 | 0 | 0 | 0 | 0 | 0 | \$16,276,830 |
| Ambulatory Health Care Services | 621 | 0 | 150000 | 150000 | 39999 | 0 | 0 | 0 | 0 | \$339,999 |
| Social Assistance | 624 | 0 | 0 | 0 | 150000 | 0 | 0 | 0 | 0 | \$150,000 |
| Performing Arts, Spectator Sports | 711 | 0 | 0 | 0 | 1500000 | 0 | 0 | 0 | 0 | \$1,500,000 |
| Repair and Maintenance Services | 811 | 0 | 0 | 0 | 0 | 0 | 2000000 | 0 | 0 | \$2,000,000 |
| Personal Services | 812 | 6250000 | 100000 | 3543000 | 0 | 0 | 0 | 0 | 0 | \$9,893,000 |
|  | Totals | \$27,900,000 | \$49,323,971 | \$29,273,100 | \$44,286,156 | \$16,246,000 | \$13,032,261 | \$1,285,715 | \$3,455,000 | \$184,802,203 |

Source: DECD

Jobs Created by the Second Insurance Reinvestment Fund Tax Credit by Industry and Year

| Industry | $\begin{gathered} \hline \text { NAICS } \\ \text { Code } \end{gathered}$ | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Construction | 238 | 0 | 0 | 0 | 36 | 63 | 0 | 0 | 0 |
| Food Manufacturing | 311 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 |
| Beverage and Tobacco Product Manufacturing | 312 | 70 | 79 | 1 | 0 | 0 | 0 | 0 | 0 |
| Paper Manufacturing | 322 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| Petroleum and Coal Products Manufacturing | 324 | 3 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| Chemical Manufacturing | 325 | 24 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fabricated Metal Product Manufacturing | 332 | 226 | 83 | 62 | 114 | 0 | 192 | 0 | 0 |
| Computer and Electronic Product Manufacturing | 334 | 35 | 5 | 12 | 0 | 0 | 0 | 0 | 0 |
| Electrical Equipment and Appliance Manufacturing | 335 | 0 | 0 | 0 | 161 | 96 | 0 | 0 | 0 |
| Other Transportation Equipment Manufacturing | 336 | 4 | 274 | 0 | 19 | 0 | 65 | 0 | 3 |
| Furniture and Related Product Manufacturing | 337 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 |
| Miscellaneous Manufacturing | 339 | 3 | 0 | 23 | 0 | 0 | 0 | 0 | 0 |
| Merchant Wholesalers, Durable Goods | 423 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 |
| Publishing Industries Except Internet | 511 | 7 | 24 | 66 | 10 | 31 | 0 | 0 | 0 |
| Telecommunications | 517 | 15 | 5 | 39 | 0 | 0 | 0 | 0 | 0 |
| Data Processing, Hosting and Related Services | 518 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Information Services | 519 | 33 | 0 | 0 | 0 | 17 | 0 | 0 | 0 |
| Securities, Commodity Contracts and Other Financial Investments and Related Activities | 523 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Professional and Technical Services | 541 | 7 | 60 | 54 | 21 | 68 | 0 | 0 | 0 |
| Administrative and Support Services | 561 | 0 | 0 | 0 | 0 | 0 | 12 | 3 | 0 |
| Waste Management and Remediation Services | 562 | 0 | 301 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ambulatory Health Care Services | 621 | 0 | 4 | 27 | 0 | 0 | 0 | 0 | 0 |
| Social Assistance | 624 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Performing Arts, Spectator Sports | 711 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 |
| Repair and Maintenance Services | 811 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 |
| Personal Services | 812 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Totals | 544 | 883 | 284 | 412 | 292 | 306 | 3 | 3 |

Source: DECD

## Methodology and Modeling Strategy for the Second Insurance Reinvestment Fund Tax Credit

The total economic impact of the Second IRF program was estimated using the REMI Tax-PI model. We used tax credits issued by DECD to represent the cost to the state of the program in the modeling process as opposed to the tax credits claimed, which is the method we have used in years past. The new methodology aligns the investment activity with the tax credits, and allows us to conduct the analysis through the most recent fiscal year. We also updated the methodology to better reflect the program. We model the benefits to the investment recipient as the cost of capital savings they get through the low cost (at $6 \%$ ) loans provided by the Funds. Payment of principal and interest on these loans are then distributed to the Insurance sector. We divide $10 \%$ of the investments into construction and $40 \%$ into other equipment purchases, and assume the other $50 \%$ is for working capital (these percentages were provided by the Funds). Because of these modeling changes, these results are not directly comparable with those published in the 2017 Annual Report.

We model the impacts of this credit by reducing the recipient firms' production costs offset by reduced government output equivalent to the aggregate credits issued each year for FY 2011 through FY 2018 (shown in the first table above). The investments in the recipient industries and new jobs created represent the direct economic activity that occurred because of the tax credit. The jobs numbers used in modeling are less than those reported for the Second IRF in the 2017 Annual Report because we have removed the jobs of companies that had other loan programs with DECD to avoid double counting.

## 7. Property Tax Abatements for Investment in Enterprise Zones

Connecticut was the first state to establish Enterprise Zones. In 1982, enterprise zones were designated in six municipalities; there are currently 17 Targeted Investment Communities with Enterprise Zones in the following municipalities:

| Bridgeport | Meriden | Norwich |
| :--- | :--- | :--- |
| Bristol | Middletown | Southington |
| East Hartford | New Britain | Stamford |


| Groton | New Haven | Waterbury |
| :--- | :--- | :--- |
| Hartford | New London | Windham |
| Hamden | Norwalk |  |

## ZONE DESIGNATION

CGS §32-70 designates the establishment of the state's Enterprise Zones. A zone consists of a census tract or several contiguous tracts within a targeted investment community. In order for a community to be eligible to establish a traditional Enterprise Zone, it must meet certain criteria related to social and economic conditions.

Primary census tracts must meet at least one of the following:

- a poverty rate of at least $25 \%$
- an unemployment rate of two times the state average
- at least $25 \%$ of the tract's population receives public assistance

Secondary census tracts must meet lower thresholds:

- a poverty rate of $15 \%$
- an unemployment rate of at least 1.5 times the state average
- at least $15 \%$ of the tract's population receiving public assistance

East Hartford, Groton and Southington were designated enterprise zone municipalities with special legislation due to the impact of severe defense industry cutbacks with each municipality losing at least 2,000 jobs. The above poverty criteria did not apply.

A municipality containing a designated Enterprise Zone, described above, is defined in CGS §32$222(\mathrm{u})$ as a Targeted Investment Community. By statute, a municipality may have only one Enterprise Zone. However, a Targeted Investment Community may, if certain conditions apply, designate other areas within the municipality as having the equivalent of Enterprise Zone level benefits.

Such designations include:

- Entertainment District (CGS §32-76) - A Targeted Investment Community may, with the approval of the DECD commissioner, designate an area within the municipality as an Entertainment District. Once an Entertainment District is designated, projects eligible for Enterprise Zone level benefits would include, but not limited to, facilities producing live or recorded multimedia products and support business necessary to sustain such operations. An eligible entertainment-related project taking place anywhere within a municipality, with an approved Entertainment District, is eligible for Enterprise Zone level benefits. In the event that an eligible entertainment-related project takes place within the boundaries of the designated Entertainment District, the municipality has the option of providing $100 \%$ property tax abatement for the eligible project for up to seven years, rather than the standard tax abatement of $80 \%$ for five years. Entertainment related to gambling or gaming facilities, or facilities whose primary source of revenue is the sale of alcoholic beverages are specifically excluded per statute. In addition, video arcades and theme parks do not fall within the range of definitions provided in statute. However, within the designated district, the municipality may provide a $100 \%$, sevenyear property tax abatement for any real property improvement (cf. CGS §32-76a). Currently, Entertainment Districts exist in Bridgeport, New Britain, Stamford, and Windham. Real estate transactions occurring in Entertainment Districts do not have to pay state real estate conveyance taxes (CGS §12-498(b) (3)).
- Qualified Manufacturing Plant (CGS §32-75c) - Any Targeted Investment Community with a manufacturing plant having an area of at least 500,000 square feet, which is located outside the Enterprise Zone may, with the approval of the DECD commissioner, designate such a facility a Qualified Manufacturing Plant. An eligible company completing an approved project in such a facility is eligible for the same benefits and subject to the same conditions, as those who qualify for benefits in an Enterprise Zone. Bristol and New Britain have applied for and received such a designation for specific facilities.
- Railroad Depot Zone (CGS §32-75a) - Any Targeted Investment Community with an abandoned or underutilized railroad depot area, which is located outside of the existing Enterprise Zone may,
with the approval of the DECD commissioner, designate this area and a reasonable amount of adjacent area as a Railroad Depot Zone. For the purpose of this designation, a railroad depot is defined as an area that abuts an active or inactive rail line and contains vacant or underutilized manufacturing or warehousing facilities that originally depended on railroad access to operate. An eligible project taking place in such a designated area is eligible for the same benefits and subject to the same conditions as those that qualify for benefits in an Enterprise Zone. Currently, East Hartford, Hamden and Norwich have applied for and received such a designation.


## Benefits for Firms in an Enterprise Zone

1) A five year, $80 \%$ abatement of local property taxes on qualifying real and personal property subject to the property being new to the grand list of the municipality as a direct result of a business expansion or renovation project or in the case of an existing building, having met the vacancy requirement. The property tax abatement is for a five-year period and takes effect with the start of the first full assessment year following the issuance of a "Certificate of Eligibility." Statutory reference to these benefits appears in CGS §§32-9p, 2-9r, 32-9s, 12-81 exemptions 59 and 60.
2) A ten-year, $25 \%$ credit on that portion of the state's corporation business tax that is directly attributable to a business expansion or renovation project as determined by DRS. The corporation tax credit is available for a ten-year period and takes effect with the start of the business' first full fiscal year following the issuance of a "Certificate of Eligibility." The corporate tax credit increases to $50 \%$ if a minimum of $30 \%$ of the new full time positions are filled by either zone residents or are residents of the municipality and are Workforce Investment Act (WIA) eligible. The statutory reference for this benefit is CGS §12-217(e). We describe this program under the Manufacturing Facilities tax credit program.
3) As of January 1, 1997, newly formed corporations located in a zone qualify for a $100 \%$ corporate tax credit for their first three taxable years and a $50 \%$ tax credit for the next seven taxable years. This is subject to corporation having at least 375 employees at least $40 \%$ of whom are either zone residents or residents of the municipality and who qualify for the WIA or the corporation has less than 375 employees at least 150 of whom are zone residents or who
reside in the municipality and qualify for the WIA. We describe this program under the Enterprise Zone Tax Credit for Qualifying Corporations.
4) Public Act 96-264 (CGS §32-229) A business engaged in biotechnology, pharmaceutical, or photonics research, development or production with not more than 300 employees, is eligible for Enterprise Zone benefits if it is located in a municipality with (1) a major research university with programs in biotechnology, pharmaceuticals, or photonics and (2) an Enterprise Zone. Benefits are subject to the same conditions as those for businesses located in an Enterprise Zone.

Firms that locate or expand in certain census tracts in certain towns designated as enterprise zones described above under benefits (1) and (4) may apply for a property tax abatement equal to a fraction of the increase in the Grand List (the value of the new plant and equipment) as a result of their investment.

Firms that locate in an Enterprise Zone are eligible for a property tax abatement equal to $80 \%$ of the assessed value (which is $70 \%$ of market value) of new plant and equipment, multiplied by the appropriate mill rate. The municipality absorbs $40 \%$ of the abatement and the state reimburses the municipality for $40 \%$ of the abatement. We model the state's 'cost' as reduced government revenue and an equivalent decrease in state government output as we assume taxes are not raised to cover the payments to municipalities. We correspondingly model the equal amount of tax revenue that municipalities forgo due to the abatement.

We transcribed abatement claim amounts for each company from OPM paper records and matched the DECD-assigned certification number with DECD records to extract the NAICS code from DECD records for each company. We aggregated claims by NAICS code. Each newly certified company is allowed to claim the abatement for four additional years following the initial claim. OPM records from which we transcribed individual firm claim data are for the grand list year (GLY) that runs from October 1 through September 30. GLY 2017 data (for which claims are filed by August 2018) was not complete at the time of study; therefore our economic impact analysis ends in 2017. Claims and payments for 2018 will be incorporated into the FY 2019 Annual Report analysis. OPM adjustments to the grand list records can occur because of late or erroneous submissions by municipalities. We did not pick up adjustments for the economic analysis.

We analyze the full estimated economic impact of the enterprise zone abatements utilizing the REMI Tax-PI model. We assume the investment would not have occurred in the region were not for the EZ program - in other words, we utilize the full value of the investments for the analysis. We also assume the initial abatement is carried through for the full five years with no adjustments. Though this may not capture the actual amounts of the abatements by year, the difficulties associated with sorting data from paper records makes this simplifying assumption necessary. Even though enterprise zones have been established in the state since 1982, we analyze the program for only the 2013-2017 period as the time commitment needed to match historical OPM paper records to DECD NAICS data for so many years is extremely high and some discrepancies in historical data make new certifications difficult to distinguish from older ones. Therefore this is a partial, "rolling" analysis as it does not include abatements made for projects beginning before 2013. Each project is assumed to make the equal claims for five years before completing eligibility. We assume the state makes its full contribution to the municipalities towards the abatements; however in 2017 the state made no contribution under the EZ program so we model its contribution as zero.

Transforming the Assessors' records filed with OPM to electronic format would greatly assist with the monitoring and analysis of this program. Additional information from the companies on job creation would give a more complete picture of the program's impact on the community.

Other areas may be designated as additional enterprise zones or enterprise corridor zones with certain benefits (see below for details). The data on all these additional programs are included in the Enterprise Zone data provided to DECD by OPM, and therefore are incorporated into the Enterprise Zone analysis.

## Additional Enterprise Zones

The Connecticut General Assembly approved legislation designating five new types of zones. In order to apply for one of these new zone designations, a municipality must meet certain specific qualifying criteria described below. We do not get data on these developments so therefore cannot perform independent analyses on them. These designations are:

1. Contiguous Municipality Zone (CGS §32-70(b)) - A municipality which is contiguous to an Enterprise Zone located in another municipality may, with the approval of the commissioner and the legislative body of the municipality containing the Enterprise Zone, designate one or more census tracts, or portions of such census tracts, as eligible for provision of Enterprise Zone level benefits. These designated census tracts must be immediately adjacent to an existing Enterprise Zone in the neighboring municipality. An eligible project taking place in such a designated area is eligible for the same benefits and subject to the same conditions as those projects qualifying for benefits in an Enterprise Zone in a Targeted Investment Community. Per statute, a municipality that designates such a zone under these conditions is not considered a Targeted Investment Community and no other incentive programs or benefits available within a Targeted Investment Community apply. The Town of Plainville has applied for and received such a designation.
2. Defense Plant Zone (CGS §32-56)- Any municipality with a former defense manufacturing plant may apply to the commissioner to provide Enterprise Zone level benefits to eligible business facilities locating in that building. Approval of the zone designation will be subject to the commissioner determining that the economy of the municipality was severely impacted by a prime defense contract cutback. Such a determination would be made after a public hearing where information was presented supporting such findings. Such a determination would be effective for two years and may be renewed for another two years subject to another public hearing. An eligible project taking place in such a designated facility will be eligible for the same benefits and subject to the same conditions as those qualifying for benefits in an Enterprise Zone in a Targeted Investment Community. A municipality that designates a Defense Plant Zone will not be considered a Targeted Investment Community and no other incentive programs or benefits available within a Targeted Investment Community apply. The Town of Stratford has applied for and received such a designation. The Town of Cheshire has applied for this designation.
3. Manufacturing Plant Zone (CGS §32-75c(a)) - Any municipality with a population less than 20,000 that is contiguous to a Targeted Investment Community may request the commissioner approve the designation as manufacturing plants those properties located in a census tract or contiguous to such census tract provided that the census tract 1 ) is contiguous to a census tract in a Targeted Investment Community and has a low or moderate income housing project, 2) contains a facility of at least 180,000 square feet formerly used for printing or allied industries, 3) includes at least 100 acres of land that is vacant and zoned industrial or commercial and 4) has a boundary that consists of a portion of a railroad track and a stream. An eligible project taking place in a designated Manufacturing Plant Zone is eligible for the same benefits, and subject to the same conditions, as those qualifying for benefits in an Enterprise Zone in a Targeted Investment Community. A municipality that designates a Manufacturing Plant Zone will not be considered a Targeted Investment Community and no other incentives programs or benefits available in a Targeted Investment Community apply. The Town of Bloomfield has applied for and received such a designation.
4. Bradley Airport Development Zone (PA 10-98) - This zone establishes tax incentives for manufacturers and certain related businesses that build or substantially renovate facilities in the area and create new jobs. Enterprise Zone level benefits will be available to businesses that manufacture, process or assemble raw materials or parts; perform manufacturing-related research and development; or significantly service, overhaul or rebuild industrial machinery and equipment. Warehousing and motor freight businesses can qualify for tax incentives if they can demonstrate their business is dependent on goods shipped by air, while service companies including information technology companies - can also qualify for credits if they can demonstrate their business is related to the airport. The zone, located around Bradley International Airport, will include specified census blocks within the towns of East Granby, Suffield, Windsor and Windsor Locks. An additional airport development zone, WaterburyOxford, has been established recently around Oxford Airport. Airport Development Zone claims are included in the Enterprise Zone data provided by OPM to DECD, and is therefore included in the Enterprise Zone analysis above.
5. Bioscience Enterprise Corridor Zone (PA 10-104) - This zone is for eligible businesses that have not had more than three hundred employees at any time during the preceding twelve months and are engaged in bioscience, biotechnology, pharmaceutical or photonics research, development or production in the state. The definition of bioscience has been included for businesses engaged in the study of genes, cells, tissues and chemical and physical structures of living organisms. Enterprise zone level benefits will include certain businesses and commercial properties in certain census blocks, groups and tracts in Farmington, Hartford, Bristol and New Britain.

## 8. Enterprise Corridor Zones

Enterprise Corridor Zones are located along Route 8 and Interstate 395. The benefits available in an Enterprise Corridor Zone are the same as in an enterprise zone, and subject to the similar qualifying terms and conditions. To obtain the enhanced $50 \%$ level of corporate credits, the hiring level for new
full-time positions remains at $30 \%$ of those positions filled by residents of the community in which the project takes place who are JTPA eligible. The communities located in enterprise corridor zones are Ansonia, Beacon Falls, Derby, Griswold, Killingly, Lisbon, Naugatuck, Plainfield, Putnam, Seymour, Sprague, Sterling, Thompson, Torrington and Winchester. Municipalities in the Enterprise Corridor Zones are not classified as Targeted Investment Communities and are therefore not eligible to extend Urban Jobs Program benefits. Benefits for eligible projects in an Enterprise Corridor Zone are identical to those in an Enterprise Zone.

## Eligible Applicants

Eligible businesses are defined by their NAICS code.

- For Urban Jobs Program benefits, in a targeted investment community but outside of an enterprise zone, ONLY manufacturers, research associated with manufacturing (NAICS sectors 31-33 inclusive) and distribution warehousing (new construction/expansion only) may qualify under the standard threshold guidelines. Certain service sector companies defined by NAICS code may be eligible for benefits based on a graduated scale subject to meeting certain thresholds of capital investment and job creation. An eligible applicant must occupy a facility that meets the criteria as defined below under Eligible Projects.
- In an Enterprise Zone, in addition to manufacturers and distribution warehousing (new construction/expansion only) certain service sector firms (defined by NAICS code) may qualify.


## Applicant Conditions

If the business occupant leases the qualifying facility (defined below), the lease term must satisfy certain minimum requirements as follows:

- In a Targeted Investment Community (Urban Jobs Program), the lease must be for an initial minimum term of five years with the option to renew at the request of the lessee for an aggregate term of not less than ten years or the lease must have the option to purchase the facility after the first five years.
- In an Enterprise Zone, the term of the lease for a business occupant is generally the same as for a facility located in a targeted investment community. However, for those companies with an average of ten or fewer employees, the lease may be for an initial minimum term of three years
with an option to renew at the request of the lessee for an aggregate term of not less than six years or the lease must have the option to purchase the facility after the first three years.


## Eligible Projects

The project eligibility for both targeted investment communities (urban jobs) and enterprise zones is defined in CGS $\S 32-9$ p. Benefits accrue to projects whose central activity revolves around capital improvements to land and/or building. A real estate transaction has to take place in order to qualify the facility that will be occupied by the eligible business. The transaction must meet one of the following criteria:

- Substantial renovation of an existing facility involving capital expenditures of at least $50 \%$ of the assessed value of the facility prior to its renovation. All renovation activities must be permitted by the town in order for their value to be recognized. The only costs that matter in meeting the $50 \%$ test are those costs that were incurred for work that required the use of a building permit.
- Construction of a new facility. The expanded portion of an existing facility is considered new construction.
- Acquisition of a facility by new owners after having been idle for at least one year prior to acquisition. Within an enterprise zone, the idleness requirement does not apply to companies with an average of five or fewer employees in the six months preceding acquisition of the facility, and is at least six months for businesses that have an average of between six and nineteen employees in the preceding six months. A one year idleness is required if there are more than nineteen employees involved.

Idleness is determined if the facility was unused, unoccupied or substantially underutilized for the appropriate period prior to being acquired for productive use. A community may request that the commissioner waive the idleness requirement for a facility for a specific client. The enterprise zone coordinator must sign the idleness waiver.

The data on all these additional Enterprise Zones and Enterprise Corridor Zone programs are included in the Enterprise Zone data provided to DECD by OPM, and therefore these programs are incorporated into the Enterprise Zone analysis above.

## 9. Urban Jobs Program

The Urban Jobs Program provides benefits to eligible companies with suitably induced projects located in a Targeted Investment Community but outside of the Enterprise Zone, which are not impacted by any of the newly designated Enterprise Zone level benefit areas described above.

## Benefits of the Urban Jobs Program

The benefits associated with the Urban Jobs Program in a Targeted Investment Community outside of the Enterprise Zone are provided at the discretion of the DECD commissioner and are as follows:

- A five-year, $80 \%$ property tax abatement (captured above).
- A ten-year, 25\% corporation business tax credit to qualified manufacturing businesses.
- Property tax benefits for real estate and/or equipment are provided on a sliding scale for qualifying service facilities located outside of an Enterprise Zone in a Targeted Investment Community. The minimum investment is $\$ 20$ million to qualify for a five-year, forty percent property tax abatement. This benefit increases to an eighty percent, five-year tax abatement for projects with an investment greater than $\$ 90$ million. The equipment qualifies only if installed in a facility that has been newly constructed or substantially renovated or expanded.

| Investment | Percent of <br> Assessed Value <br> Abated |
| :--- | :---: |
| $\$ 20$ million to $\$ 39$ million | $40 \%$ |
| $\$ 39$ million to $\$ 59$ million | $50 \%$ |
| $\$ 59$ million to $\$ 79$ million | $60 \%$ |
| $\$ 79$ million to $\$ 90$ million | $70 \%$ |
| More than $\$ 90$ million | $\mathbf{8 0 \%}$ |

- Corporate business tax credits are provided for qualifying service facilities located outside of an Enterprise Zone in a Targeted Investment Community on a sliding scale based on the number of full-time jobs created. The minimum tax credit of $15 \%$ is allowed for service companies creating 300 or more jobs but less than 599 new jobs. The benefit increases to $50 \%$ for such companies creating 2,000 or more new jobs at the eligible facility. The eligibility period for this tax credit is ten years.

| New Employees Hired | Credit |
| :--- | :--- |
| $300-599$ | $15 \%$ |
| $600-899$ | $20 \%$ |
| $900-1,199$ | $25 \%$ |
| $1,200-1,499$ | $30 \%$ |
| $1,500-1,999$ | $40 \%$ |
| 2,000 or more | $50 \%$ |

A business may not initiate a project that could qualify for incentives without first requesting and obtaining the approval of the DECD commissioner. Approval depends on the ability of the business to demonstrate 1) that the incentives are an inducement and 2) that they have an economic need that the incentives will alleviate or that the project will represent an estimated net economic benefit to the state and/or municipality (cf. CGS §§32-9r, 12-81(50)(b) \& 60 and 12-217e(b)).

## C. Methodology for Evaluating MAA

The MAA program is DECD's primary funding source for providing direct financial assistance to businesses. DECD has significantly revised its modeling strategy for the MAA program this year. For the 2017 Annual Report we modeled MAA using an approach similar to the portfolio approach DECD used to evaluate its full business assistance portfolio in prior years. This approach left out certain characteristics of the MAA program and relied on many estimates for inputs. In 2018 we evaluated and improved the modeling strategy to better represent all characteristics of the program and to better align the methodologies used for modeling all our
programs. We also used the newer REMI Tax-PI model to estimate the total economic impact of each of our programs.

## Changes in modeling strategy

The MAA analysis includes a "to-date" impact estimation for the last ten years (2009-2018) and a total projection which takes the full 30 years of the current MAA portfolio into account (20092037). To aggregate and manage our data, we used Virtual Basics for Applications (VBA), a software which is a built-in tool for Microsoft Excel and allows the user to automate mathematical calculations, formatting, and the creation of multiple tabs dependent on the number of companies. Since we are assessing the job creation, forgiveness earned, and capital expenditures of about 250 companies that are in the MAA program, we used this software to make the sheet with the data less bound to human error. Major changes to the modeling strategy are explained by category below.

Capital Expenses: The capital expense data used in the analysis has been classified into several capital expenditure categories and was manually collected from the Project Financing Plan \& Budget companies fill out when they are entering the MAA program. The length of the budget period has been used to evenly spread out the capital expenses in the 13 categories, starting at the fiscal year of the budget start date and ending at the fiscal year of the budget end date. Inactive (contract completed, repaid, and out-of-business) companies' capital expenses and job numbers are added to the analysis, insofar they were in the program during that time period. Companies that went out of business before a job audit have their committed capital expenses included but no jobs creation is assumed.

Employment: We included direct jobs created under the MAA program in our modeling, relying on multiple sources for the data. We used survey and audit data to represent direct employment, and supplemented that with employment data from the signed contracts when neither of the above were available. We assumed a linear ramp-up of employment from the start date to the actual data levels.

To model the direct impact, we use the income taxes generated by the actual jobs created. We used company wage data when available, and supplemented with state historic wage data by industry sector reported in the REMI model to estimate income taxes. The direct impact thus measures the addition to the state's tax receipts from these newly created jobs. If the company lost jobs, we report the addition to tax receipts as zero.

When modeling the total impact in REMI we use the aggregate jobs created, which incorporates jobs losses in the recipient companies as well as the job gains. We use this approach because we model the overall job changes by industry sector in REMI and we would be overstating the total economic impact if we did not include job losses in these industries as well as job gains.

DECD Assistance: We incorporate actual forgiveness earned to date into the analysis (no forgiveness was modeled in prior years). We include actual principal and interest payments on loans instead of estimated repayments. Any penalties paid by the companies are added to these payments to the state. State debt service on bonds issued through FY 2018 are modeled with the bond interest rates that prevailed at the time (5.13\% through FY 2013, 3.16\% through FY 2015, $3.23 \%$ through FY 2017 and $3.48 \%$ in FY 2018).

Special cases: Aer Lingus does not have a regular capital expenditure structure and does not have an obligation to create jobs; their contractual requirement is to make certain purchases in the state from Connecticut vendors. These purchases are included as net new sales for these industry sectors in the state.

Assumptions made to model the future projections:

After year 10 of each contract we assume that jobs decrease yearly by $2 \%$, as the companies are no longer required to maintain the contractually required job levels. Because no actual data is available for 2019-2038, we estimate the yearly principal and interest payments based on the remaining outstanding loans on a company-by-company basis. Those were then used as projections for the principal and interest payments for years 2019-2037. We included loan forgiveness based on the contracts. In some cases, companies have different 'tiers' of forgiveness, depending on the job creation they are realizing. We have assumed, if there was no data to show
otherwise, that the highest tier of jobs and forgiveness will be reached. The reason to do so is not to realize higher job creation, but rather to assume the highest possible cost to the state. The projected earned forgiveness is modeled in the fiscal year at which their required retention period ends. Companies for whom forgiveness would have been earned before or in FY 2018, but who still have audits pending, we 'shifted' the potential forgiveness earned to FY 2019. For companies that are not on track for hitting their job creation/retention goal, we assume that they will not hit their forgiveness goal in the projections. Instead, we keep their current number of jobs constant and assume no forgiveness is granted. Wages are assumed to grow $2 \%$ from 2018 onwards. We assume the state finances all future loans and grants with 20 -year bonds at $3.48 \%$.

The summary table below shows the fiscal impact of the MAA program since 2009, using both the direct impact estimates and using the REMI Tax-PI economic model. The direct impact calculations show the state showing positive cash flow each year and obtaining an estimated net fiscal gain of $\$ 133$ million (in 2018 dollars) over the most recent ten years of the program's operation, with a total gain of $\$ 900$ million (2018 \$) projected over the life of these contracts. The REMI model's results reflect the total estimated economic impact of the MAA program, consisting of the direct, indirect and induced effects of the program. The program has generated an estimated $\$ 679$ million (2018 $\$$ ) in net fiscal revenue to the state over the last decade and is projected to earn over $\$ 3.4$ billion (2018 $\$$ ) in net state revenue over the lifetime of these contracts.

## Summary of MAA Fiscal Impact Results

| MAA Results Summary |  |  |
| :--- | :---: | :---: |
| Impact in Constant (2018) Dollars |  |  |
|  | To Date | Including Projections <br> (FY 2009-FY 2038) |
| Cumulative Direct Net State Revenue | (FY 2009-FY 2018) | $\$ 133,080,371$ |
| Cumulative Total Net State Revenue | $\$ 679,380,065$ | $\$ 899,992,882$ |

The to-date results, both direct and total, are shown by year in the tables below. The results below are expressed in nominal dollars. Direct net fiscal revenue is estimated to have totaled $\$ 129.3$ million to date and total estimated net fiscal revenue is estimated at $\$ 657.8$ million.

Direct Fiscal Impact of the MAA Program to Date in Nominal Dollars (FY 2009-FY 2018):

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COSTS TO CT (\$000's): |  |  |  |  |  |  |  |  |  |  |
| COST OF FUNDS (cost to bond) | (1,607.0) | $(4,387.5)$ | $(7,231.1)$ | $(11,725.8)$ | (19,600.2) | $(30,681.5)$ | $(42,560.8)$ | $(52,302.3)$ | $(61,570.6)$ | (70,260.4) |
| ESTIMATED RETURNS/BENEFITS TO CT: |  |  |  |  |  |  |  |  |  |  |
| INCOME TAXES (from direct employment) | 1,067.4 | 3,727.5 | 4,875.4 | 9,746.6 | 11,759.7 | 26,318.7 | 34,380.0 | 46,186.4 | 56,271.8 | 71,656.6 |
| SALES TAXES (from project) | 3,310.1 | 4,529.7 | 1,303.1 | 3,377.9 | 5,855.5 | 5,994.3 | 5,998.7 | 5,482.8 | 5,492.2 | 7,574.0 |
| PAYMENTS OF P \&/or I ON LOAN (includes penalties) | 210.8 | 1,364.9 | 7,645.4 | 3,283.1 | 2,484.5 | 8,013.0 | 11,549.9 | 12,862.6 | 22,594.9 | 46,309.6 |
| NET CASH FLOWS (\$000's): | 2,981.3 | 5,234.6 | 6,592.8 | 4,681.8 | 499.5 | 9,644.5 | 9,367.7 | 12,229.5 | 22,788.3 | 55,279.9 |
| CUM CASH FLOW (\$000's): | 2,981.3 | 8,216.0 | 14,808.8 | 19,490.6 | 19,990.1 | 29,634.6 | 39,002.4 | 51,231.9 | 74,020.2 | 129,300.0 |

Total Economic Impact of the MAA Program to Date in Nominal Dollars (FY 2009-FY 2018):

|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State GDP | $\$ 232,100,990$ | $\$ 508,503,890$ | $\$ 432,132,978$ | $\$ 635,509,471$ | $\$ 960,820,097$ | $\$ 2,045,270,753$ | $\$ 2,783,595,123$ | $\$ 3,588,423,751$ | $\$ 4,088,210,768$ | $\$ 5,902,226,282$ |
| Personal Income | $\$ 162,461,425$ | $\$ 326,607,607$ | $\$ 245,808,640$ | $\$ 414,374,214$ | $\$ 561,429,218$ | $\$ 1,214,088,384$ | $\$ 1,661,732,282$ | $\$ 2,171,842,404$ | $\$ 2,521,487,917$ | $\$ 3,610,115,974$ |
| State Revenues | $\$ 12,408,795$ | $\$ 24,872,880$ | $\$ 21,023,395$ | $\$ 33,862,546$ | $\$ 46,986,027$ | $\$ 101,402,147$ | $\$ 138,418,876$ | $\$ 180,034,681$ | $\$ 207,687,711$ | $\$ 297,829,735$ |
| State Expenditures | $\$ 3,051,268$ | $\$ 7,712,155$ | $\$ 8,592,519$ | $\$ 12,293,490$ | $\$ 17,274,802$ | $\$ 32,342,541$ | $\$ 48,561,383$ | $\$ 66,395,656$ | $\$ 87,649,465$ | $\$ 120,810,399$ |
| Net State Revenue | $\$ 9,357,527$ | $\$ 17,160,725$ | $\$ 12,430,877$ | $\$ 21,569,056$ | $\$ 29,711,225$ | $\$ 69,059,606$ | $\$ 89,857,494$ | $\$ 111,639,026$ | $\$ 120,038,246$ | $\$ 177,019,335$ |

## D. Methodology for Evaluating EXP

The goal of the EXP program is to provide the capital necessary to fuel small business growth. DECD has significantly revised its modeling strategy for the EXP program this year. For the 2017 Annual Report we modeled EXP using an approach similar to the portfolio approach DECD used to evaluate its full business assistance portfolio in prior years. This approach left out certain characteristics of the EXP program and relied on many estimates for inputs. In 2018 we evaluated and improved the modeling strategy to better represent all characteristics of the program and to better align the methodologies used for modeling all our programs. We also used the newer REMI Tax-PI model to estimate the total economic impact of each of our programs.

Changes in modeling strategy:

We included direct jobs created under the EXP program in our modeling. EXP recipient companies have two years to meet their job requirements. The jobs data we use are what was reported and verified by DECD audits at the end of each company's two-year period. Jobs for companies that have audits pending are not modeled in this analysis. They will be added into the analysis in future years as the audits come due and are completed. Therefore the analysis understates the actual jobs created to date. The jobs data also does not include those of companies that had an MAA program in the last ten years; these were removed to avoid double-counting.

To model the direct impact, we estimate the income taxes generated by the actual jobs created. Because we do not have wage data for all the individual recipient companies, we use the state historic wage data by industry sector reported in the REMI model to estimate income taxes. The direct impact thus measures the addition to the state's tax receipts from these newly created jobs. If no jobs were reported yet or if the company lost jobs, we report the addition to tax receipts as zero. The total new direct jobs created through FY 2018 is 3,899 .

When modeling the total impact in REMI we use the aggregate change in jobs, which incorporates jobs losses in some of the recipient companies as well as the job gains. We use this approach because we would be overstating the total economic impact if we did not include any
job losses in the recipient companies during this time period. The net new jobs total used for the total economic impact estimation is 3,552 .

We include the combined companies' actual principal and interest payments on loans as recorded by DECD's fiscal office when accounting for the repayments to the state (in prior years' analyses we used estimated repayments based on an average interest rate). Any penalties paid by the companies to date were added to this total as well.

The companies acquired savings in their capital costs by obtaining loans from DECD as opposed to the private capital market. We model these cost of capital savings by using averages instead of individual company data for certain inputs, because of the more than 1,800 companies in the program's portfolio. For the loan interest rate, we aggregated by NAICS code to obtain the average interest rate per NAICS industry sector. This average interest rate is used to obtain the difference between repayment costs to the companies by industry sector compared to repayments at market interest rates, which is an estimate of the savings the recipient company gains by obtaining assistance from DECD compared to the private capital market.

We also use a sample representing the range of project costs of the recipient companies and their detailed capital expenses to break down the total project costs of each company into various input categories. Again, this was done to simplify the data sorting process because of the more than 1,800 companies in the program portfolio; the time and labor expense that would have been required for the manual examination and recording of individual budget data from each company is substantial. The capital expenses categories and their estimated breakdown is shown below.

| Breakdown of Project Costs by Category <br> (based on a sample of EXP recipients) |  |
| :--- | :---: |
| General Construction | $27.5 \%$ |
| Leasehold Improvements | $16.4 \%$ |
| Machinery \& Equipment | $16.7 \%$ |
| Working Capital | $35.9 \%$ |
| Furniture \& Fixtures | $1.4 \%$ |


| Computer Software | $0.3 \%$ |
| :--- | :--- |
| Computer Equipment | $0.5 \%$ |
| Land Acquisition | $1.3 \%$ |
| Total Project Costs | $\mathbf{1 0 0 \%}$ |

## Direct Fiscal Impact of the EXP Program:

|  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| COSTS TO CT (\$000's): |  |  |  |  |  |  |  |
| COST OF FUNDS (cost to bond) | $(1,681.4)$ | $(6,904.2)$ | $(9,968.2)$ | $(13,779.1)$ | $(16,391.0)$ | $(19,557.7)$ | $(21,307.6)$ |
|  |  |  |  |  |  |  |  |
| ESTIMATED RETURNS/BENEFITS TO <br> CT: |  |  |  |  |  |  |  |
| INCOME TAXES (from direct <br> employment) | 427.8 | $2,568.1$ | $5,279.8$ | $6,822.9$ | $7,521.4$ | $7,910.8$ | $8,328.3$ |
| SALES TAXES (from project) | $1,103.0$ | $3,786.6$ | $2,190.7$ | $3,158.7$ | $1,818.7$ | $2,373.8$ | $1,620.5$ |
| PAYMENTS OF P \&/or I ON LOAN <br> (includes penalties) | 28.1 | $3,191.9$ | $8,658.3$ | $13,408.2$ | $17,177.4$ | $17,509.8$ | $20,424.2$ |
|  |  |  |  |  |  |  |  |
| NET CASH FLOWS | $\mathbf{( 1 2 2 . 6 )}$ | $\mathbf{2 , 6 4 2 . 4}$ | $\mathbf{6 , 1 6 0 . 6}$ | $\mathbf{9 , 6 1 0 . 7}$ | $\mathbf{1 0 , 1 2 6 . 5}$ | $\mathbf{8 , 2 3 6 . 8}$ | $\mathbf{9 , 0 6 5 . 4}$ |
|  |  |  |  |  |  |  |  |
| CUMULATIVE CASH FLOW | $\mathbf{( 1 2 2 . 6 )}$ | $\mathbf{2 , 5 1 9 . 8}$ | $\mathbf{8 , 6 8 0 . 4}$ | $\mathbf{1 8 , 2 9 1 . 1}$ | $\mathbf{2 8 , 4 1 7 . 6}$ | $\mathbf{3 6 , 6 5 4 . 4}$ | $\mathbf{4 5 , 7 1 9 . 9}$ |


| Table _: EXP Direct Economic Impact To Date |  |
| :--- | :---: |
| Net Fiscal Impact in Nominal Dollars, 2012-2018 |  |
|  | EXP Direct Impact |
| Average Direct Net State Revenue | $\$ 6,531,000$ |
| Cumulative Direct Net State Revenue | $\$ 45,720,000$ |

New analysis for 2018 Annual Report. Source: DECD.
The above tables shows the direct impact of the EXP program from its inception through FY 2018. The net state revenue estimated is the difference between the direct revenues generated by the program and its direct expenses. The direct net revenue above shows that on average estimated direct revenues exceeded the costs of the program by an average of over $\$ 6$ million a year over the life of the
program to date through FY 2018, and the cumulative total of the net direct revenue it generated is over $\$ 45$ million.

## Total Economic Impact of the EXP Program:

|  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| State GDP | Nominal $\$$ | $\$ 105,887,609$ | $\$ 468,078,056$ | $\$ 765,224,453$ | $\$ 959,712,126$ | $\$ 1,020,997,678$ | $\$ 1,068,708,649$ |
| Personal Income | Nominal $\$$ | $\$ 64,290,690$ | $\$ 291,826,651$ | $\$ 481,370,207$ | $\$ 632,201,646$ | $\$ 695,713,395$ | $\$ 751,751,069$ |
| State Revenues | Nominal $\$$ | $\$ 4,135,102$ | $\$ 21,435,308$ | $\$ 38,529,383$ | $\$ 51,158,645$ | $\$ 56,250,946$ | $\$ 60,325,028$ |
| State Expenditures | Nominal $\$$ | $\$ 1,171,214$ | $\$ 6,084,105$ | $\$ 12,262,043$ | $\$ 18,804,841$ | $\$ 24,596,057$ | $\$ 29,875,346$ |
| Net State Revenue | Nominal $\$$ | $\$ 2,963,888$ | $\$ 15,351,203$ | $\$ 26,267,340$ | $\$ 32,353,804$ | $\$ 31,654,889$ | $\$ 30,449,683$ |


| Table_: EXP Portfolio Economic Impact |  |
| :--- | :---: |
| Estimated Changes from Baseline in Nominal Dollars, 2012-2018 |  |
|  | EXP Portfolio Aggregate |
| New State GDP | $\$ 5,458,324,490$ |
| New Personal Income | $\$ 3,686,426,039$ |
| Total New Revenue | $\$ 293,311,579$ |
| Total New Expenses | $\$ 126,873,404$ |
| New Net State Revenue | $\$ 166,438,175$ |

Source: DECD
The above table shows the total economic impact of the EXP program since its inception estimated using the REMI Tax-PI economic model. The model's results reflect the total economic impact of the EXP program through FY 2018. The total impact consists of the direct, indirect and induced effects the program, offset by state assistance. The program has generated an estimated $\$ 5.4$ billion in state GDP and over $\$ 166$ million in net state revenue.

## E. Connecticut Innovation Reports

Please see attached reports

## RE: Financial Assistance Annual Report

In accordance with Section 32-47a of the General Statutes of the State of Connecticut, I am pleased to submit the fiscal year 2018 annual financial assistance report for Connecticut Innovations, Incorporated (CI) . This report covers information for all new and outstanding financial assistance provided by CI to recipients between July 1, 1990 and June 30, 2018.

CI's job creation or retention requirements call for each recipient of financial assistance to use their best efforts to create jobs and employ Connecticut residents. It is required that each recipient of financial assistance maintain a Connecticut presence.

The economic benefit criteria used in determining which applications are approved are as follows:

- Formation and development of emerging technology companies with high potential to grow and create employment and vendor opportunities in Connecticut.
- Expansion of the level of economic activity and related employment and vendor activity by emerging technology companies in Connecticut.
- Retention of existing jobs in Connecticut.
- Attraction of new high technology businesses and workers to Connecticut.
- Stimulation of university/industry collaborations to foster the development and transfer of new technology to create and expand, as well as to increase, enhance and update the capacity of businesses in Connecticut.
- Leveraging of non-state investment in high tech enterprises in Connecticut.
- Review of the credit risk and compare it to the economic benefit received.
- Review of the financial strength of the recipient.

The audited financial statements for CI may be found on our website www.ctinnovations.com.
Please feel free to contact me at (860) 258-7822 should you have any questions.


## CONNECTICUT INNOVATIONS 2018 ANNUAL REPORT CGS 32-47a

# Connecticut Innovations <br> Year End June 30, 2018 <br> Legislative Report CGS -32-47a 

Section 1 - Name, Address, Location, Business Activity, Standard Industrial Classification Manual Code, minority or woman owned status, type and amount of financial assistance, amount leveraged by assistance, job creation or retention requirements, and high performance organization status of any new or outstanding financial assistance.

Section 2 - Total number of employees at application, number of jobs at application to be created and total current jobs. A comparison of the total number of jobs retained and the total number of jobs at application and total number of jobs created as compared to the number of jobs to be created for any new or outstanding financial assistance.

Section 3 - Gross Revenue Information

Section 4 - Average Wage rates at application for retained jobs and average anticipated wage rate at application for jobs to be created, as compared to current average wage rates for retained jobs, and current average wage rates for created jobs.

## Section 1


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Connecticut Innovations


## Section 2

| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 110 Buckland Hills, LLC | 0 | 13 | 0 | 38 | 38 | 25 | 0 |
| 3GTMS | 18 | 2 | 18 | 6 | 24 | 4 | 0 |
| Accelerando | 2 | 18 | 1 | 0 | 1 | (18) | (1) |
| Achillion Pharmaceuticals, Inc. | 1 | 49 | 1 | 80 | 81 | 31 | 0 |
| Actualmeds Corporation | 0 | 0 | 0 | 2 | 2 | 2 | 0 |
| Acucut, Inc. | 38 | 0 | 38 | 30 | 68 | 30 | 0 |
| Adriaen's Landing Hotel | 1 | 259 | 1 | 179 | 180 | (80) | 0 |
| Aeromics, Inc. | 0 | 13 | 0 | 2 | 2 | (11) | 0 |
| Affinimark Technologies, Inc. | 1 | 5 | 0 | 0 | 0 | (5) | (1) |
| All Natural Pet Food Store | 2 | 0 | 1 | 0 | 1 | 0 | (1) |
| Allomek Therapeutics LLC | 1 | 0 | 1 | 0 | 1 | 0 | (1) |
| Alton E. Woodford, Inc | 10 | 0 | 9 | 0 | 9 | 0 | (1) |
| Amazon.com dedc, LLC | 1,140 | 1,860 | 1,140 | 599 | 1,739 | $(1,261)$ | 0 |
| Amco Precision Tools, Inc. | 19 | 0 | 19 | 47 | 66 | 47 | 0 |
| Ancera, LLC | 2 | 0 | 2 | 4 | 6 | 4 | 0 |
| Anugrah, LLC | 1 | 0 | 1 | 2 | 3 | 2 | 0 |
| Aperture Optical Sciences, Inc. | 5 | 9 | 5 | 16 | 21 | 12 | 0 |
| APT Foundation, Inc. | 228 | 0 | 228 | 91 | 319 | 91 | 0 |
| Arcanatura LLC | 1 | 0 | 0 | 0 | 0 | 0 | (1) |
| Arccos Golf LLC | 22 | 38 | 21 | 0 | 21 | (38) | (1) |
| Arvinas Holding Co LLC | 0 | 20 | 0 | 70 | 70 | 50 | 0 |
| Asarasi, Inc. | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Assessment Innovation | 0 | 23 | 0 | 0 | 0 | (23) | 0 |
| Atticus Bakery, LLC | 55 | 35 | 55 | 86 | 141 | 51 | 0 |
| Aureus Tech, Inc | 0 | 2 | 0 | 2 | 2 | 0 | 0 |
| Aventri | 13 | 53 | 13 | 88 | 101 | 35 | 0 |
| Avitus Orthopaedics, Inc. | 0 | 0 | 0 | 6 | 6 | 6 | 0 |
| Axiom Education, LLC | 0 | 0 | 0 | 2 | 2 | 2 | 0 |
| Azitra, Inc. | 0 | 6 | 0 | 7 | 7 | 1 | 0 |
| Bactana Corp | 0 | 10 | 0 | 0 | 0 | (10) | 0 |
| Bagel Stop Production Co. (The) | 8 | 4 | 8 | 0 | 12 | 0 | (1) |
| Bauer, Inc | 87 | 3 | 86 | 0 | 86 | (3) | (1) |
| Beacon Industries, Inc. | 119 | 0 | 71 | 0 | 71 | 0 | (48) |
| Better Air North America, LLC | 0 | 2 | 0 | 1 | 1 | (1) | 0 |
| BevBucks, Inc. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beverage Concept, Inc d/b/a Marty's Package Store | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Bioarray Genetics, Inc. | 0 | 0 | 0 | 4 | 4 | 4 | 0 |
| BioHaven Pharmaceuticals | 8 | 15 | 8 | 45 | 53 | 30 | 0 |
| Biorez Inc. | 0 | 17 | 0 | 3 | 3 | (14) | 0 |
| Bob's Discount Furniture | 326 | 125 | 326 | 910 | 1,035 | 0 | 0 |
| Bow's and Bandanas Grooming Salon | 5 | 0 | 5 | 0 | 5 | 0 | 0 |
| Brass City/ J Thurston Fuel | 5 | 2 | 5 | 1 | 6 | (1) | 0 |
| Bridgewater Associates LP | 1,402 | 750 | 1,402 | 225 | 1,627 | (525) | 0 |
| Brownstone Exploration \& Discovery Park, LLC | 101 | 75 | 87 | 0 | 87 | (75) | (14) |
| Brunelli Energy, LLC | 7 | 0 | 7 | 0 | 7 | 0 | 0 |
| Butler \& Bulter, Inc | 2 | 0 | 2 | 3 | 5 | 3 | 0 |


| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C8 Sciences | 4 | 0 | 2 | 0 | 2 | 0 | (2) |
| Cadenza Innovation, Inc. | 6 | 14 | 6 | 20 | 26 | 6 | 0 |
| CafeLearn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cara Therapeutics | 35 | 72 | 34 | 0 | 34 | (72) | (1) |
| Careall, LLC | 45 | 0 | 45 | 0 | 45 | 0 | 0 |
| CaroGen Corporation | 0 | 0 | 0 | 10 | 10 | 10 | 0 |
| CavtheRx | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CBS Manufacturing Company | 35 | 14 | 34 | 0 | 34 | (14) | (1) |
| Cenaxo, LLC | 2 | 4 | 2 | 24 | 26 | 20 | 0 |
| Change, Inc | 200 | 55 | 200 | 0 | 200 | (55) | 0 |
| Chiefofstaff.com, LLC | 3 | 3 | 3 | 1 | 4 | (2) | 0 |
| Christie's Quilting Boutique | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| CiDra Holdings, LLC | 3 | 249 | 3 | 111 | 113 | (139) | 0 |
| CircleLink Health | 2 | 0 | 2 | 1 | 3 | 1 | 0 |
| Clickers, LLC | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| CMW Tax Services | 3 | 0 | 1 | 0 | 1 | 0 | (2) |
| Compassion N Care LLC | 0 | 7 | 0 | 16 | 16 | 9 | 0 |
| Connecticut Center for the Performing Arts | 6 | 150 | 6 | 210 | 216 | 60 | 0 |
| Connecticut Mulch Distributors, Inc. | 14 | 28 | 14 | 30 | 44 | 2 | 0 |
| Connecticut Packaging Materials, Inc. | 17 | 4 | 17 | 2 | 19 | (2) | 0 |
| Connecticut Physical Therapy Specialists, LLC | 0 | 1 | 0 | 4 | 4 | 3 | 0 |
| Connecticut Plywood Corp. | 37 | 2 | 28 | 0 | 28 | (2) | (9) |
| Connecticut Solid Surface, LLC | 23 | 2 | 23 | 27 | 38 | 25 | 0 |
| Continuity Engine, Inc. | 3 | 68 | 3 | 7 | 10 | (62) | 0 |
| Convexity Scientific, LLC | 0 | 10 | 0 | 8 | 8 | (3) | 0 |
| Coollt Systems USA Inc | 0 | 4 | 0 | 1 | 1 | (3) | 0 |
| CopyLeaks Technologies, Ltd. | 0 | 2 | 0 | 1 | 1 | (1) | 0 |
| Cornovus Pharmaceuticals, Inc. | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| CrowdFlik | 2 | 48 | 2 | 0 | 2 | (48) | 0 |
| Curacity | 0 | 15 | 0 | 1 | 1 | (14) | 0 |
| Cybrexa, Inc. | 5 | 15 | 5 | 7 | 12 | (9) | 0 |
| Danielson Adventure Sports, LLC | 2 | 0 | 2 | 0 | 2 | 0 | 0 |
| Davra Networks | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Dayville Property Development, LLC | * | * | * | * | * | * | * |
| dB Diagnostic Systems, Inc. | 0 | 3 | 0 | 0 | 0 | (3) | 0 |
| Dental Arts of Avon, P.C. | 8 | 0 | 6 | 0 | 6 | 0 | (2) |
| Dermatologic Cosmetic Laboratories LTD. | 46 | 5 | 41 | 0 | 41 | (5) | (5) |
| Device42 | 3 | 105 | 3 | 30 | 33 | (75) | 0 |
| Devon Woodhill, LLC | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| DiA Imaging Analysis | 0 | 6 | 0 | 0 | 0 | (6) | 0 |
| Diameter Health, Inc. | 1 | 10 | 1 | 9 | 10 | (1) | 0 |
| Direct Color Systems | 40 | 8 | 40 | 19 | 59 | 11 | 0 |
| DreamPayments | 0 | 20 | 0 | 1 | 1 | (19) | 0 |
| Dura Biotech LLC | 0 | 4 | 0 | 0 | 0 | (4) | 0 |
| East Main Dental, PC | 4 | 1 | 4 | 1 | 5 | 0 | 0 |
| Ebrevia, Inc. | 1 | 0 | 1 | 0 | 1 | 0 | 0 |


| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Edge2Web | 0 | 30 | 0 | 0 | 0 | (30) | 0 |
| Elidah, Inc. | 4 | 0 | 4 | 0 | 4 | 0 | (1) |
| Engage121, Inc. | 4 | 47 | 4 | 25 | 28 | (23) | 0 |
| Enviro Power, LLC | 2 | 3 | 2 | 7 | 9 | 4 | 0 |
| Environmental Energy Services | 13 | 45 | 13 | 3 | 16 | (42) | 0 |
| Epicure, Inc. | 0 | 1 | 0 | 0 | 0 | (1) | 0 |
| EpiEp, Inc. | 5 | 16 | 2 | 0 | 2 | (16) | (3) |
| Epitomyze | 3 | 16 | 3 | 0 | 3 | (16) | 0 |
| Fall Call Solutions | 2 | 14 | 2 | 0 | 2 | (14) | (1) |
| Fedex | 649 | 308 | 649 | 536 | 1,185 | 228 | 0 |
| Fitscript, LLC | 0 | 10 | 0 | 19 | 19 | 9 | 0 |
| Flexi-International Software, Inc. | 44 | 36 | 11 | 0 | 11 | (36) | (33) |
| Foresite | 8 | 5 | 8 | 4 | 12 | (1) | 0 |
| Freshbev LLC | 50 | 250 | 50 | 68 | 118 | (182) | 0 |
| FreshNation | 11 | 50 | 11 | 7 | 18 | (43) | 0 |
| frevvo, Inc. | 8 | 26 | 8 | 6 | 14 | (21) | 0 |
| FuelCell Energy | 184 | 150 | 184 | 232 | 416 | 82 | 0 |
| Garage Media, LLC | 2 | 3 | 2 | 1 | 3 | (2) | 0 |
| GemShelf, Inc. | 2 | 3 | 2 | 0 | 2 | (3) | 0 |
| Genex Turbine Technologies LLC | 12 | 8 | 12 | 22 | 34 | 14 | 0 |
| Giggles \& Grins Child Care Center, LLC | 0 | 4 | 0 | 7 | 7 | 3 | 0 |
| Gilman Brothers Co. | 25 | 0 | 25 | 76 | 101 | 76 | 0 |
| Gleeson Mortuary (The) | 3 | 0 | 3 | 1 | 4 | 1 | 0 |
| Globekeeper, Inc. | 0 | 2 | 0 | 1 | 1 | (1) | 0 |
| GoNation | 11 | 22 | 11 | 4 | 15 | (19) | 0 |
| Goodwin College | 159 | 0 | 159 | 266 | 425 | 266 | 0 |
| Greater Hartford Physical Therapy, PC | 21 | 1 | 19 | 0 | 19 | (1) | (2) |
| Green Buildings Online | 1 | 0 | 0 | 0 | 0 | 0 | (1) |
| Greenworks Lending | 12 | 9 | 9 | 0 | 9 | (9) | (4) |
| Greywall Software LLC | 9 | 0 | 9 | 31 | 40 | 31 | 0 |
| GSPG Holdings, LLC | 4 | 0 | 2 | 0 | 2 | 0 | (2) |
| Harty Press, Inc. (The) | 75 | 0 | 43 | 0 | 43 | 0 | (32) |
| HBN Front Street | * | * | * | * | * | * | * |
| Henkel | 678 | 266 | 678 | 292 | 970 | 26 | 0 |
| Heritage Auto Works, LLC | 1 | 5 | 1 | 0 | 1 | (5) | 0 |
| Hudson Baylor, Corp. | 60 | 35 | 60 | 30 | 90 | (5) | 0 |
| Hy LaBonne and Sons, Inc. | 305 | 0 | 305 | 0 | 191 | 0 | (114) |
| InBox Health Corporation | 2 | 0 | 2 | 10 | 12 | 10 | 0 |
| Industrial Rigging, Inc. | 38 | 0 | 32 | 0 | 32 | 0 | (6) |
| InMedia Digital Solutions | 1 | 0 | 0 | 0 | 0 | 0 | (1) |
| Intelligent Clearing Networks | 5 | 45 | 2 | 0 | 2 | (45) | (3) |
| International Package Store | 1 | 0 | 0 | 0 | 0 | 0 | (1) |
| IQ Telcom | 10 | 0 | 10 | 4 | 14 | 4 | 0 |
| Iridia, Inc. | 0 | 6 | 0 | 1 | 1 | (5) | 0 |
| Isoplexis, Inc. | 5 | 20 | 5 | 38 | 43 | 18 | 0 |
| JL Mainwaring | 4 | 0 | 4 | 1 | 5 | 1 | 0 |

Connecticut Innovations

|  | 0 | ㅋ． | $\pm$ | vo | $\overline{0}$ |  | O | O | 0 | § | O＊ |  | O | － | － | － |  | － | Э | O |  | － | － | 0 | n | 가 | $\bigcirc$ | ㅋ |  |  |  |  |  |  |  |  | $\cdots$ | － | － | － | ㅋ | © |  |  |  | ๑ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | $\bigcirc$ | $\underset{\sim}{n}$ |  | $\stackrel{\infty}{\underset{\sim}{\infty}}$ | 0 | $\checkmark$ | ® | $\checkmark$ | － | $\stackrel{-}{9}$ |  | 카 | 츨 | ล | $\underset{\sim}{n}$ | 守 | $\bigcirc$ | 合 | へ | $\bigcirc$ | $\underset{-1}{0}$ | ล | 0 | $\bigcirc$ | $\stackrel{\rightharpoonup}{\underset{\sim}{n}}$ | － | I | 즌 | － |  |  |  |  | n | $\bigcirc$ | ล | $\bigcirc$ | ล | $\pm$ | $\bigcirc$ | － |  |  | $\bigcirc$ | $\bigcirc$ |
|  | ñ | $\checkmark$ | 0 |  | $\underset{\sim}{A}$ |  | 6 | $\underset{\sim}{7}$ | $\checkmark$ | $\stackrel{\sim}{7}$ | $\cdots$ | ＊ | in | － | $\sim$ | $\square$ | － | $\stackrel{-1}{9}$ | － | － | $\square$ | $\underset{\sim}{N}$ | 6 | $\stackrel{-}{\square}$ | $\bigcirc$ | N | フ | N | $\bigcirc$ | $\stackrel{\sim}{\square}$ |  |  |  |  | N | ＋ | $\infty$ | $\checkmark$ | $\sim$ | ก | $\cdots$ | $\stackrel{\sim}{\sim}$ |  |  | － | $\stackrel{1}{\sim}$ |
|  | $\stackrel{-}{m}$ | － | $\bigcirc$ | の | $0$ | 0 | $\circ$ | － | $\checkmark$ | 0 | － | ＊ | $\bigcirc$ | $\bigcirc$ | $\sim$ | 0 | $\bigcirc$ | 0 | $\bigcirc$ | N | $\bigcirc$ | $\underset{\sim}{\underset{\sim}{2}} \mid$ | $\bigcirc$ | $\stackrel{-}{-1}$ | － | － | \％ | $\bigcirc$ | － | $\bigcirc$ |  |  |  |  | $\bigcirc$ | － | － | － | $\sim$ | $\stackrel{\rightharpoonup}{4}$ | $\bigcirc$ | － |  |  | － | $\bigcirc$ |
|  | N | ナ | 0 | $\sim$ | $\underset{\sim}{*}$ |  | $\sim$ | $\underset{\sim}{n}$ | $\bigcirc$ | $0$ | $\infty$ | ＊ | in | $\bigcirc$ | 0 | $\rightarrow$ | $\underset{\sim}{\sim}$ | 9 | －1 | ¢ | $\rightarrow$ | \|O-뭅 | $\bigcirc$ | － | 0 | N | m | $\sim$ | $\bigcirc$ | $\stackrel{\sim}{\sim}$ |  |  | $\cdots$ |  | へ | － | $\infty$ | － | － | $\cdots$ | 7 | $\stackrel{\sim}{\sim}$ |  |  | $\bigcirc$ | ～ |
|  | $\checkmark$ | $\bigcirc$ | $\underset{\sim}{m}$ | $)_{n}^{\infty}$ | $\stackrel{\infty}{\circ}$ | 0 | 0 | N | O | － | $\cdots$ | ＊ | $\rightarrow$ | 入 | 악 | $\sim$ | 응 | $\bigcirc$ | 9 | － | $\bigcirc$ | $\mid 8$ | $\sim$ | － | － | $\cdots$ | ช | $\cdots$ | N | － |  |  | $\stackrel{\sim}{\square}$ |  | m | － | $\sim$ | － | $\checkmark$ | 안 | － | 入 |  |  | － | $\bigcirc$ |
|  | T | － | $\sim$ | $\sim$ | $\underset{\neg}{ }$ |  | $\sim$ | $\cdots$ | $\bigcirc$ | $N$ | N $\infty$ | ＊ | in | $\bigcirc$ | $\bigcirc$ | $\checkmark$ | $\underset{\sim}{\sim}$ | 9 | 7 | ค | $n$ | $0$ | $\bigcirc$ | － | n | n | m | $\sim$ | － | $\stackrel{ }{ }$ |  |  | $\stackrel{-}{m}$ |  | m | － | の | $\checkmark$ | $\bigcirc$ | $\stackrel{\sim}{N}$ | $\underset{\sim}{7}$ | m |  |  | N | m |
|  |  |  |  |  |  |  |  |  |  | Lanstatus，Inc |  |  |  | LifeStyleCX | LindaCare, Inc. |  |  |  |  |  |  |  |  |  |  |  |  |  | － |  |  |  |  |  |  | 1－2 |  | $\begin{aligned} & u \\ & \underset{y}{u} \\ & u \\ & \underset{\alpha}{\alpha} \\ & u \end{aligned}$ |  |  |  |  |  |  | New England Awards \＆Trophies |  |

Connecticut Innovations

| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newland, LLC | 2 | 2 | 2 | 7 | 9 | 5 | 0 |
| Next Generation Properties | 4 | 0 | 4 | 0 | 4 | 0 | 0 |
| Niktor, LLC | 20 | 0 | 20 | 0 | 20 | 0 | 0 |
| Norpaco, Inc. | 15 | 5 | 15 | 73 | 88 | 68 | 0 |
| North Haven Commons Development, LF | * | * | * | * | * | * | * |
| Northpage Inc. | 2 | 19 | 2 | 21 | 23 | 2 | 0 |
| Nuovo Pasta, LLC | 86 | 27 | 86 | 36 | 122 | 9 | 0 |
| OD Realty | 94 | 5 | 94 | 16 | 110 | 11 | 0 |
| Odin Text, LLC | 2 | 54 | 2 | 2 | 4 | (53) | 0 |
| Oil Purification Systems | 9 | 38 | 6 | 0 | 6 | (38) | (4) |
| Olympic Taekwodo Academy, Inc | 7 | 3 | 7 | 0 | 7 | (3) | 0 |
| OmniCyte | 0 | 15 | 0 | 2 | 2 | (13) | 0 |
| On Deck, LLC | 2 | 0 | 0 | 0 | 0 | 0 | (2) |
| OncoSynergy, Inc. | 0 | 18 | 0 | 0 | 0 | (18) | 0 |
| One Way Limo | 1 | 3 | 1 | 4 | 5 | 1 | 0 |
| Onsert Media Group | 3 | 5 | 0 | 0 | 0 | (5) | (3) |
| Orthozon Technologies, LLC | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Oxford Perfomance Materials, Inc. | 12 | 7 | 12 | 24 | 36 | 17 | 0 |
| P \& P Auto Repair, Inc | 2 | 1 | 2 | 0 | 2 | (1) | 0 |
| P2 Science, Inc. | 4 | 6 | 4 | 6 | 10 | 0 | 0 |
| Pastanch, LLC | 25 | 7 | 24 | 0 | 24 | (7) | (1) |
| Pa-Ted Spring Company, LLC | 74 | 0 | 13 | 0 | 13 | 0 | (61) |
| Patient Wisdom | 8 | 39 | 8 | 1 | 9 | (38) | 0 |
| Pattern Genomics | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Payveris LLC | 7 | 34 | 7 | 7 | 13 | (28) | 0 |
| PDC International Corp. | 55 | 2 | 55 | 1 | 56 | (1) | 0 |
| Pentation Analytics | 0 | 2 | 0 | 2 | 2 | 0 | 0 |
| Phlatbed | 1 | 34 | 1 | 2 | 3 | (32) | 0 |
| Phoenix Products Company | 36 | 2 | 36 | 6 | 42 | 4 | 0 |
| Pith Products, LLC | 13 | 2 | 13 | 0 | 13 | (2) | (1) |
| Point Pick Up | 2 | 8 | 2 | 0 | 2 | (8) | 0 |
| Polamer Realty, LLC | 72 | 50 | 72 | 166 | 238 | 111 | 0 |
| Porcelen Ltd. CT, LLC | 68 | 100 | 68 | 13 | 81 | (87) | 0 |
| Post n Track | 6 | 30 | 6 | 34 | 40 | 4 | 0 |
| Praxair, Inc. | 532 | 0 | 474 | 0 | 474 | 0 | (58) |
| Precipio Diagnostics, LLC | 9 | 13 | 9 | 10 | 19 | (3) | 0 |
| Project First | 0 | 30 | 0 | 5 | 5 | (26) | 0 |
| Project Ray | 0 | 4 | 0 | 3 | 3 | (1) | 0 |
| ProTech Services, LLC nka Proguard, LLC | 13 | 3 | 10 | 0 | 10 | (3) | (3) |
| QCDX | 0 | 56 | 0 | 3 | 3 | (54) | 0 |
| QENB, LLC | 7 | 0 | 7 | 0 | 7 | 0 | 0 |
| Quadjobs | 6 | 1 | 3 | 0 | 3 | (1) | (3) |
| Queralt, Inc. | 8 | 0 | 1 | 0 | 1 | 0 | (7) |
| Quigler, Inc. | 2 | 6 | 2 | 0 | 2 | (6) | 0 |
| Quinnipiac Endontics (jobs under QENB, LLC) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| R \& D Dynamics Corporation | 47 | 60 | 47 | 2 | 62 | (58) | 0 |

Connecticut Innovations

| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R4 Technologies, LLC | 43 | 169 | 43 | 1 | 44 | (168) | 0 |
| Rallybio | 0 | 7 | 0 | 4 | 4 | (3) | 0 |
| Rapid Oxygen Company | 4 | 31 | 0 | 0 | 0 | (31) | (4) |
| ReadyDock, Inc. | 0 | 0 | 0 | 5 | 5 | 5 | 0 |
| Realtime Immersion Inc. | 0 | 15 | 0 | 2 | 2 | (13) | 0 |
| RenetX Bio | 3 | 17 | 3 | 2 | 5 | (16) | 0 |
| Richael, Inc. | 1 | 1 | 1 | 0 | 1 | (1) | 0 |
| Richards Machine Tool Co., Inc | 12 | 0 | 12 | 0 | 12 | 0 | 0 |
| Richland, LLC | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Rolando's, LLC | 12 | 0 | 6 | 0 | 6 | 0 | (6) |
| Rose Brothers, LLC | 8 | 0 | 0 | 0 | 0 | 0 | (8) |
| Ruckus Media Group Inc. | 1 | 0 | 1 | 1 | 2 | 1 | 0 |
| Salt \& Pepper, LLC | 9 | 0 | 9 | 0 | 6 | 0 | (3) |
| Schulze Manufacturing, Inc. | 4 | 0 | 0 | 0 | 0 | 0 | (4) |
| Science Park Development Corp. | * | * | * | * | * | * | * |
| Sea Greens Farms | 3 | 197 | 2 | 0 | 2 | (197) | (1) |
| SecBI | 0 | 9 | 0 | 1 | 1 | (8) | 0 |
| SeeClickFix | 20 | 62 | 20 | 11 | 31 | (51) | 0 |
| Sensible Solutions CT Health Insurance LLC | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Shoplandia, Inc. | 4 | 0 | 4 | 1 | 5 | 1 | 0 |
| Shoreline Biome | 0 | 5 | 0 | 8 | 8 | 3 | 0 |
| Sirona Medical Technologies Inc. | 0 | 4 | 0 | 1 | 1 | (3) | 0 |
| Slooh | 1 | 9 | 1 | 6 | 7 | (4) | 0 |
| Smartequip, Inc. | 4 | 208 | 4 | 54 | 57 | (155) | 0 |
| SmartPay NewCo | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Solidify, Inc. | 1 | 1 | 1 | 9 | 10 | 8 | 0 |
| Source Defense | 0 | 6 | 0 | 0 | 0 | (6) | 0 |
| Specialty Printing | 133 | 10 | 133 | 17 | 150 | 7 | 0 |
| Sponsorcraft Limited (Hubbub) | 0 | 30 | 0 | 2 | 2 | (28) | 0 |
| Spothook | 0 | 14 | 0 | 0 | 0 | (14) | 0 |
| Standard Mattress Company | 82 | 0 | 60 | 0 | 60 | 0 | (22) |
| Stone Fabricators, LLC | 32 | 10 | 31 | 0 | 31 | (10) | (1) |
| Streamdata.io Inc. | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Studio 3 Salon | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Summit Street Medical LLC | 0 | 0 | 0 | 2 | 2 | 2 | 0 |
| SunnyCor Incorporated | 10 | 3 | 10 | 6 | 16 | 3 | 0 |
| Supreme-Lake Mfg., Inc. | 130 | 0 | 84 | 0 | 84 | 0 | (46) |
| Sustainable Real Estate Solutions, Inc. | 1 | 31 | 1 | 15 | 16 | (16) | 0 |
| Tamara Green | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Tangen Biosciences LLC | 0 | 0 | 0 | 12 | 12 | 12 | 0 |
| Tantalus Systems, Inc. | 1 | 9 | 1 | 1 | 2 | (8) | 0 |
| Technical Industries, Inc. | 7 | 6 | 7 | 15 | 22 | 9 | 0 |
| TerraGreen, LLC | 12 | 3 | 12 | 5 | 17 | 2 | 0 |
| The Big Willow | 6 | 0 | 6 | 3 | 9 | 3 | 0 |
| The Cook and The Bear | 32 | 2 | 26 | 0 | 26 | (2) | (6) |
| The Evenson Agency | 4 | 0 | 4 | 0 | 4 | 0 | 0 |

Connecticut Innovations
Employment Information FYE 6/30/18

| Company Name | Jobs at Application | Jobs to be Created | Actual Jobs Retained | Actual Jobs Created | Current Jobs at 6/30/18 | Jobs to be Created vs. <br> Actual Jobs Created | Jobs at Application vs. Actual Jobs Retained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The Lee Company | 989 | 25 | 989 | 47 | 1,036 | 22 | 0 |
| The Mellick Group | 2 | 2 | 2 | 0 | 2 | (2) | 0 |
| The Office Work, Inc | 21 | 6 | 21 | 3 | 24 | (3) | 0 |
| Thetis Pharmaceuticals, LLC | 1 | 4 | 1 | 4 | 5 | (1) | 0 |
| Thomas C. Bresch Sales | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Torigen Pharmaceuticals | 0 | 8 | 0 | 5 | 5 | (3) | 0 |
| Trader Joe's | 557 | 675 | 557 | 148 | 705 | (527) | 0 |
| Transaction Methods, Inc. | 3 | 144 | 1 | 0 | 1 | (144) | (2) |
| Trebel | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Tristar Alliance | 3 | 1 | 3 | 0 | 3 | (1) | 0 |
| TruOptik Data Corp | 0 | 0 | 0 | 14 | 14 | 14 | 0 |
| Turbine Technologies, Inc. | 70 | 6 | 70 | 4 | 74 | (2) | 0 |
| Turf Products, LLC | 61 | 20 | 53 | 0 | 53 | (20) | (8) |
| Two Roads Brewing Company LLC | 0 | 45 | 0 | 130 | 130 | 85 | 0 |
| UniMetal Surface Finishing, LLC | 118 | 8 | 118 | 16 | 134 | 8 | 0 |
| Unisoft Medical Corporation | 0 | 14 | 0 | 0 | 0 | (14) | 0 |
| University of Hartford | 979 | 0 | 979 | 290 | 1,269 | 290 | 0 |
| Vacayo | 0 | 4 | 0 | 0 | 0 | (4) | 0 |
| Valley Press Publishing | 21 | 0 | 21 | 0 | 21 | 0 | 0 |
| Vega Dental, LLC | 5 | 1 | 4 | 0 | 4 | (1) | (1) |
| Vesselon, Inc. | 2 | 5 | 2 | 0 | 2 | (5) | 0 |
| Vision Electric, Inc | 17 | 0 | 10 | 0 | 10 | 0 | (7) |
| Vouchr | 0 | 17 | 0 | 0 | 0 | (17) | 0 |
| We Care Computers, LLC | 4 | 1 | 4 | 3 | 7 | 2 | 0 |
| Welden Hardware | 4 | 5 | 4 | 4 | 4 | (5) | 0 |
| Wellinks Inc. | 4 | 1 | 0 | 0 | 0 | (1) | (4) |
| West Hartford Landscaping | 15 | 0 | 15 | 0 | 15 | 0 | 0 |
| William Guinan, MD | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Winnick Realty, LLC | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| World Fulfilment, LLC | 27 | 5 | 7 | 0 | 7 | (5) | (20) |

## Section 3

Gross Revenue Information FYE 6/30/18

| Company | Revenue |
| :---: | :---: |
| Company 1 | 0 |
| Company 2 | 0 |
| Company 3 | 0 |
| Company 4 | 0 |
| Company 5 | 0 |
| Company 6 | 0 |
| Company 7 | 0 |
| Company 8 | 0 |
| Company 9 | 0 |
| Company 10 | 0 |
| Company 11 | 0 |
| Company 12 | 0 |
| Company 13 | 0 |
| Company 14 | 0 |
| Company 15 | 0 |
| Company 16 | 0 |
| Company 17 | 0 |
| Company 18 | 0 |
| Company 19 | 0 |
| Company 20 | 0 |
| Company 21 | 0 |
| Company 22 | 0 |
| Company 23 | 0 |
| Company 24 | 0 |
| Company 25 | 0 |
| Company 26 | 0 |
| Company 27 | 0 |
| Company 28 | 0 |
| Company 29 | 0 |
| Company 30 | 0 |
| Company 31 | 0 |
| Company 32 | 0 |
| Company 33 | 0 |
| Company 34 | 0 |
| Company 35 | 0 |
| Company 36 | 0 |
| Company 37 | 0 |
| Company 38 | 0 |
| Company 39 | 0 |
| Company 40 | 0 |
| Company 41 | 0 |
| Company 42 | 0 |
| Company 43 | 0 |
| Company 44 | 0 |
| Company 45 | 0 |
| Company 46 | 0 |
| Company 47 | 0 |
| Company 48 | 0 |
| Company 49 | 0 |
| Company 50 | 0 |
| Company 51 | 0 |
| Company 52 | 0 |
| Company 53 | 0 |
| Company 54 | 0 |
| Company 55 | 0 |
| Company 56 | 0 |
| Company 57 | 0 |
| Company 58 | 0 |
| Company 59 | 0 |
| Company 60 | 0 |
| Company 61 | 0 |
| Company 62 | 0 |
| Company 63 | 0 |
| Company 64 | 0 |

Gross Revenue Information FYE 6/30/18

| Company | Revenue |
| :---: | :---: |
| Company 65 | 0 |
| Company 66 | 0 |
| Achillion Pharmaceuticals | 0 |
| biohaven pharmaceuticals | 0 |
| Company 294 | 0 |
| Company 297 | 0 |
| Company 67 | 18 |
| Company 68 | 188 |
| Company 69 | 1,500 |
| Company 70 | 1,600 |
| Company 71 | 5,000 |
| Company 72 | 8,700 |
| Company 73 | 10,000 |
| Company 74 | 11,913 |
| Company 75 | 12,298 |
| Company 76 | 12,990 |
| Company 77 | 13,017 |
| Company 78 | 13,200 |
| Company 79 | 20,000 |
| Company 80 | 26,145 |
| Company 81 | 30,000 |
| Company 82 | 36,000 |
| Company 83 | 38,400 |
| Company 84 | 40,000 |
| Company 85 | 43,820 |
| Company 86 | 50,000 |
| Company 87 | 56,000 |
| Company 88 | 59,069 |
| Company 89 | 64,000 |
| Company 90 | 65,000 |
| Company 91 | 65,000 |
| Company 92 | 65,000 |
| Company 93 | 67,212 |
| Company 94 | 75,000 |
| Company 95 | 80,000 |
| Company 96 | 86,167 |
| Company 97 | 101,058 |
| Company 98 | 110,674 |
| Company 99 | 120,000 |
| Company 100 | 125,000 |
| Company 101 | 125,000 |
| Company 102 | 126,039 |
| Company 103 | 134,107 |
| Company 104 | 145,695 |
| Company 105 | 150,000 |
| Company 106 | 155,000 |
| Company 107 | 161,900 |
| Company 108 | 194,776 |
| Company 109 | 200,000 |
| Company 110 | 204,000 |
| Company 111 | 230,242 |
| Company 112 | 250,000 |
| Company 113 | 255,888 |
| Company 114 | 259,712 |
| Company 115 | 275,000 |
| Company 116 | 284,268 |
| Company 117 | 297,600 |
| Company 118 | 306,030 |
| Company 119 | 308,301 |
| Company 120 | 310,804 |
| Company 121 | 314,884 |
| Company 122 | 324,972 |
| Company 123 | 325,000 |
| Company 124 | 327,755 |

Connecticut Innovations
Section 3
Gross Revenue Information FYE 6/30/18

| Company | Revenue |
| :---: | :---: |
| Company 125 | 335,481 |
| Company 126 | 342,421 |
| Company 127 | 351,000 |
| Company 128 | 360,000 |
| Company 129 | 362,500 |
| Company 130 | 384,000 |
| Company 131 | 385,000 |
| Company 132 | 387,884 |
| Company 133 | 390,000 |
| Company 134 | 395,064 |
| Company 135 | 440,341 |
| Company 136 | 446,144 |
| Company 137 | 450,000 |
| Company 138 | 473,000 |
| Company 139 | 475,385 |
| Company 140 | 500,000 |
| Company 141 | 516,248 |
| Company 142 | 518,555 |
| Company 143 | 585,000 |
| Company 144 | 600,000 |
| Company 145 | 633,331 |
| Company 146 | 642,000 |
| Company 147 | 645,915 |
| Company 148 | 660,325 |
| Company 149 | 662,667 |
| Company 150 | 674,000 |
| Company 151 | 695,469 |
| Company 152 | 700,000 |
| Company 153 | 718,567 |
| Company 154 | 725,000 |
| Company 155 | 748,000 |
| Company 156 | 766,139 |
| Company 157 | 773,743 |
| Company 158 | 790,000 |
| Company 159 | 816,547 |
| Company 160 | 843,725 |
| Cara Therapeutics | 911,000 |
| Company 161 | 950,000 |
| Company 162 | 974,366 |
| Company 163 | 991,736 |
| Company 164 | 1,000,000 |
| Company 165 | 1,033,286 |
| Company 166 | 1,049,688 |
| Company 167 | 1,050,000 |
| Company 168 | 1,056,623 |
| Company 169 | 1,084,134 |
| Company 170 | 1,108,394 |
| Company 171 | 1,188,352 |
| Company 172 | 1,176,336 |
| Company 173 | 1,266,225 |
| Company 174 | 1,271,070 |
| Company 175 | 1,277,933 |
| Company 176 | 1,371,000 |
| Company 177 | 1,400,000 |
| Company 178 | 1,406,000 |
| Company 179 | 1,500,000 |
| Company 180 | 1,500,000 |
| Company 181 | 1,553,885 |
| Company 182 | 1,575,700 |
| Company 183 | 1,600,000 |
| Company 184 | 1,637,045 |
| Company 185 | 1,683,218 |
| Precipio Diagnostics, LLC | 1,724,000 |
| Company 186 | 1,731,924 |

Connecticut Innovations
Section 3
Gross Revenue Information FYE 6/30/18

| Company | Revenue |
| :---: | :---: |
| Company 187 | 1,734,807 |
| Company 188 | 1,800,000 |
| Company 189 | 1,808,333 |
| Company 190 | 1,864,108 |
| Company 191 | 1,890,371 |
| Company 192 | 1,929,735 |
| Company 193 | 2,071,308 |
| Company 194 | 2,072,929 |
| Company 195 | 2,128,690 |
| Company 196 | 2,277,466 |
| Company 197 | 2,300,000 |
| Company 198 | 2,381,529 |
| Company 199 | 2,575,000 |
| Company 200 | 2,597,392 |
| Company 201 | 2,600,000 |
| Company 202 | 2,600,000 |
| Company 203 | 2,649,880 |
| Company 204 | 2,868,801 |
| Company 205 | 2,872,000 |
| Company 206 | 2,895,641 |
| Company 207 | 3,000,000 |
| Company 208 | 3,100,000 |
| Company 209 | 3,100,000 |
| Company 210 | 3,241,625 |
| Company 211 | 3,597,257 |
| Company 212 | 3,605,704 |
| Company 213 | 3,677,794 |
| Company 214 | 4,048,727 |
| Company 215 | 4,300,000 |
| Company 216 | 4,500,000 |
| Company 217 | 4,500,000 |
| Company 218 | 4,729,000 |
| Company 219 | 4,779,456 |
| Company 220 | 4,876,319 |
| Company 221 | 4,902,776 |
| Company 222 | 4,927,000 |
| Company 223 | 4,975,000 |
| Company 224 | 5,085,000 |
| Company 225 | 5,177,338 |
| Company 226 | 5,300,000 |
| Company 227 | 5,404,685 |
| Company 228 | 5,500,000 |
| Company 229 | 5,600,000 |
| Company 230 | 5,633,000 |
| Company 231 | 5,750,188 |
| Company 232 | 5,800,000 |
| Company 233 | 5,962,452 |
| Company 234 | 6,000,000 |
| Company 235 | 6,168,558 |
| Company 236 | 6,200,000 |
| Company 237 | 6,317,000 |
| Company 238 | 6,367,466 |
| Company 239 | 6,428,349 |
| Company 240 | 6,678,240 |
| Company 241 | 7,308,351 |
| Company 242 | 7,326,000 |
| Company 243 | 7,600,000 |
| Company 244 | 7,630,000 |
| Company 245 | 8,534,543 |
| Company 246 | 8,776,130 |
| Company 247 | 9,516,761 |

Connecticut Innovations
Section 3
Gross Revenue Information FYE 6/30/18

| Company | Revenue |
| :---: | :---: |
| Company 248 | 10,073,029 |
| Company 249 | 10,500,000 |
| Company 250 | 10,900,000 |
| Company 251 | 10,933,481 |
| Company 252 | 11,000,000 |
| Company 253 | 11,100,000 |
| Company 254 | 11,112,842 |
| Company 255 | 11,300,000 |
| Company 256 | 11,499,475 |
| Company 257 | 11,948,024 |
| Company 258 | 12,000,000 |
| Company 259 | 12,057,000 |
| Company 260 | 13,106,984 |
| Company 261 | 13,931,158 |
| Company 262 | 14,700,000 |
| Company 263 | 15,213,927 |
| Company 264 | 15,482,000 |
| Company 265 | 15,703,424 |
| Company 266 | 16,429,000 |
| Company 267 | 16,545,445 |
| Company 268 | 16,717,153 |
| Company 269 | 17,000,000 |
| Company 270 | 18,585,067 |
| Company 271 | 19,500,000 |
| Company 272 | 19,604,015 |
| Company 273 | 20,335,031 |
| Company 274 | 20,693,512 |
| Company 275 | 24,500,000 |
| Company 276 | 26,000,000 |
| Company 277 | 26,169,000 |
| Company 278 | 26,800,701 |
| Company 279 | 32,146,204 |
| Company 280 | 32,700,000 |
| Company 281 | 33,122,000 |
| Company 282 | 33,496,410 |
| Melinta Pharmaceuticals | 33,864,000 |
| Company 283 | 34,555,061 |
| Company 284 | 36,336,658 |
| Company 285 | 38,902,002 |
| Company 286 | 41,000,000 |
| Company 287 | 46,000,000 |
| Company 288 | 73,427,000 |
| Company 289 | 163,100,000 |
| Company 290 | 164,400,000 |
| Company 291 | 236,533,475 |
| Company 292 | 306,901,021 |
| Company 293 | 405,477,100 |
| Company 294 | 11,400,000,000 |
| Company 295 | 15,932,800,000 |
| Company 296 | 18,400,000,000 |
| Company 297 | * |
| Amazon.com dedc, LLC | <178,000,000,000 |
| Company 298 | >\$1,000,000 |

## Section 4




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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


Connecticut Innovations
Wage Rate Information FYE 6/30/18


Connecticut Innovations
Wage Rate Information FYE 6/30/18

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

# Connecticut Innovations 2017 and 2018 Highlighted Activity 

## Connecticut Innovations Programs

## Eli Whitney Fund (Eli):

For early-stage technology companies, our flagship fund makes initial equity-based investments of up to $\$ 1.5$ million and continues to support the company as it grows. To help ensure success, our experienced deal team provides ongoing strategic support.

## Connecticut Bioscience Fund (CBIF):

CI offers equity, loans and grants through the bioscience fund for entrepreneurs, researchers or clinicians who are working at a startup, nonprofit or university. Candidates must have a bioscience healthcare breakthrough that can be commercialized.

## Pre-seed Fund:

Entrepreneurs who are growing early-stage, high-tech companies can receive loans of up to $\$ 150,000$ to obtain the resources they need to grow. Requires a $50 \%$ match from private sources.

## Seed Fund:

For entrepreneurs who are building Connecticut-based emerging technology companies, this fund provides initial investments of up to $\$ 1$ million structured as equity (preferred stock) or convertible debt. (For companies at the pre-Series A stage of development.)

## Connecticut Innovations Programs

## Venture Debt Fund:

Growth-stage technology companies that have an existing product and are well positioned to increase revenue and add jobs for expansion.

## Direct Loans:

Enhance your capital base with a direct loan from CI. Existing portfolio companies in the hightech industry can receive up to $\$ 5$ million; loans may be provided as a component of an existing and/or proposed bank loan.

## Angel Investor Tax Credit:

The Angel Investor Tax Credit is a program that benefits angel investors and qualified businesses in the State of Connecticut. The program allows angel investors who invest at least $\$ 25,000$ in a Connecticut startup business to receive an income tax credit equaling 25 percent of their investment.

## Total Venture Lead Generation Continues to Be Strong

Total Leads

- 708-2018
- 646-2017
$38 \%$ increase in out-of-country leads



## Venture Investments: FY 17 \& FY 18 (includes Eli, CBIF and Pre-seed Funds)

FY18

- CI Invested \$40.8M in 159 transactions
- Companies - 76
- Total Raised - \$190.8M
- Cl Capital Leveraged - \$150M
\$15.4M invested in 31 new companies
- \$40.8M invested in existing and new portfolio companies:
- CBIF - \$24.7M
- Eli-\$16.1M
- Total jobs in portfolio - 1,646
- Valuation of portfolio - \$128.4M

FY17

- CI Invested \$38.4M in 116 transactions
- Companies - 74
- Total Raised - \$408M
- CI Capital Leveraged - \$370M
$>\$ 16.8 \mathrm{M}$ invested in 27 new companies
- $\$ 38.4 \mathrm{M}$ invested in existing and new portfolio companies:
- CBIF - \$13.9M
- Eli - \$24.5M
- Total jobs in portfolio - 1,537
- Valuation of portfolio - \$98.7M


## Connecticut Bioscience Innovation Fund (CBIF) Supports Fast-Growing Early-Stage Bioscience Companies

FY18

- Funded:
\$ 24.7M
- Leveraged: \$107.9M
- Companies: 26
- New: 16
- Jobs in portfolio: 276

FY17

- Funded: \$ 13.9M
- Leveraged: \$103.6M
- Companies: 20
- New: 12
- Jobs in portfolio: 117

Note: CBIF results are a subset of the total venture activity


[^3]
## Pre-seed Fund

## FY18

- Funded: \$2.8M
- Leveraged: \$6.5M
- Companies: 22
- New: 17
- Jobs in portfolio: 133


## FY17

- Funded: \$1.5M
- Leveraged: \$2.1M
- Companies: 16
- New: 10
- Jobs in portfolio: 102

Note: Pre-seed results are a subset of the total venture activity
connecticut
innovations


## Venture Assets Under Management (includes Eli, CBIF and Pre-seed Funds)

## FY18

Total Valuation - \$128.4M

- CBIF - \$24.6M


## FY17

Total Valuation - $\$ 98.7 \mathrm{M}$

- CBIF - \$9.5M



## Cl Ventures' Total Porffolio Companies


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innovations

## Angel Investor Tax Credit Program Highlights

Program guidelines:

- Maximum investment: \$12M per year
- Maximum tax credit: \$3M per year
- Angels can invest from $\$ 25,000$ to $\$ 1,000,000$ over life of program
- Company can receive up to $\$ 2,000,000$ under program

Program inception to date:

- 125 companies received angel funds
- 535 angels participated in the program
- \$72M: Total amount invested by angels


[^0]:    Source: DECD
    Note: A company may have had more than one audit completed if it has more than one contract. Duplicate jobs retained, created and jobs per audit have been removed from this analysis across contracts and programs.
    Note: This table includes audits completed on or before 6/30/2018. Audits completed after that date will be included in the FY 2019 Annual Report.

[^1]:    Source: DECD

[^2]:    105
    Department of Economic and Community Development 2018 Annual Report

[^3]:    - Assets Under Management
    - Investments Funded

    Grants, Academic and Strategic
    -Total CBIF Companies

