Report of the Tax Expenditure Review Commission

Massachusetts Tax Expenditure Review Commission

June 2022

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TERC REPORT OVERVIEW

A. Overview

This document is the 2022 Report to the Legislature of the Tax Expenditure Review Commission (referred to herein as "TERC" or the "Commission") filed pursuant to Chapter 14, section 14, of the General Laws.

"Tax expenditures" are defined under Chapter 29 of the General Laws as state tax revenue foregone due to statutory provisions that allow "exemptions, deferrals, deductions from or credits against taxes" imposed on income, businesses, or sales. The Commissioner of Revenue prepares an annual tax expenditure budget estimating the cost of tax expenditures to the Commonwealth in the fiscal year, as directed by section 5B of Chapter 29.

It is the statutory responsibility of the Commission to review the various tax expenditures adopted by the Commonwealth on a five-year cycle and to report biennially to the Legislature on the goals and effectiveness of the expenditures reviewed. The Commission voted to provide annual reports to the Legislature to provide information more promptly. This June 2022 Report is the Commission's second report. It considers a group of tax expenditures that relate to commerce, energy, and research & development. Future reports will review the balance of the state's tax expenditures, as grouped by the Commission, over the balance of its five-year review cycle. For information on current and previous studies of Massachusetts Tax Expenditures, see **Appendix G**.

B. TERC Approach to Implementation of its Statutory Mandate

Statutory Text

The Commission is directed by G.L. c. 14, s. 14(c), as follows:

> (c) The commission shall use best practices and standardized criteria to evaluate: (i) the purpose, intent and goal of each tax expenditure and whether the expenditure is an effective means of accomplishing those ends; (ii) the fiscal impact of each tax expenditure on state and local taxing authorities, including past fiscal impacts and expected future fiscal impacts; (iii) the economic impact of each tax expenditure including, but not limited to, revenue loss compared to economic gain and jobs created, retained or lost as a result of the tax expenditure; (iv) the return on the investment made by the tax expenditure and the extent to which the tax expenditure is a cost effective use of resources; and (v) similar tax expenditures, if any, offered by other states and the impact of the tax expenditure on regional and national economic competitiveness.

C. TERC Observations and Recommendations for the Legislature

As described in **Appendix C**, the Commission developed a standardized evaluation template to enable consistency in its analysis of different tax expenditures. The evaluation template completed for each tax expenditure represents the report of the Commission to the Legislature on its view of the effectiveness of the tax expenditure. Each evaluation is accompanied by a detailed Department of Revenue ("DOR") analysis provided to the Commission in association with its discussion. Taking all the reviewed tax expenditures together, the cumulative distribution of the Commission's ratings for each evaluative statement included in this report is shown in the following chart. For the cumulative distribution of the Commission's ratings for all tax expenditures evaluated to date see **Appendix I**.

June 2022 REPORT	*Strongly Disagree*	*Somewhat Disagree*	*Somewhat Agree*	*Strongly Agree*	*Not Applicable*
We can measure the overall benefit toward achieving the goal(s)	10	20	5	1	0
The TE's benefit justifies its fiscal cost	4	9	16	7	0
The TE is claimed by its intended beneficiaries	2	3	12	19	0
The TE is claimed by a broad group of taxpayers	16	7	6	7	0
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	4	11	20	1	0
The TE is relevant today	4	4	9	19	0
The TE is easily administered	1	2	15	18	0
Business only -The TE is beneficial to smaller businesses	5	3	20	3	5
Individuals only -The TE benefits lower income taxpayers	12	4	9	0	11
TOTALS	**58**	**63**	**112**	**75**	**16**

It is, of course, the province of the Legislature and the Governor to set tax policy for the Commonwealth, including what tax expenditures the Commonwealth should adopt or maintain.[1] The hope of the Commission is to provide information and guidance through its evaluations that the Legislature and Governor may find useful in reviewing which tax expenditures are operating effectively. The Commission understands this to be its legislative purpose.

[1] See Appendix H for recent legislative changes related to Massachusetts tax expenditures.

1. **Particular tax expenditures flagged in evaluation process:** In reviewing the Commission's evaluations with an eye toward considering the effectiveness of each tax expenditure, it may be most useful for the Legislature to focus on tax expenditures that received "strongly disagree" or "somewhat disagree" ratings for any of the following evaluative statements in the template:

    i. The tax expenditure's benefit justifies its fiscal cost.
    ii. The tax expenditure is claimed by its intended beneficiaries.
    iii. The tax expenditure amount claimed by each beneficiary is meaningful as an incentive/benefit.
    iv. The tax expenditure is relevant today.

    Tax expenditures reviewed in the past year that were rated "strongly disagree" or "somewhat disagree" in the indicated categories, and the reasons for those ratings, are described below.

- *3.609 Exemption for Vessels or Barges of 50 Tons or Over. Annual fiscal cost: $0.4 million. This tax expenditure exempts sales of vessels or barges of 50 tons or more from sales tax.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of this tax expenditure justify its fiscal cost; (2) the benefit claimed per taxpayer is meaningful as an incentive; and (3) the tax expenditure is relevant today. In 2017, Massachusetts had a total of 36 firms and 621 employees in the industry of ship and boat building and repairing. Data suggests that only a couple of firms in these two industries currently have shipyards capable of building a barge or vessel of 50 tons or more. All firms in Massachusetts in these two industries are small businesses with most firms employing fewer than 20 people, most likely engaging in only ship or boat repairing or building of significantly smaller vessels. The Legislature may wish to reconsider whether this tax expenditure is relevant.
- *3.112 Exemption for Aircraft & Aircraft Parts. Annual fiscal cost: $23.8 - $25.9 million. This tax expenditure exempts sales of aircraft and aircraft parts from sales tax.* Commission members voted between "strongly disagree" and "somewhat disagree" that the benefits of this tax expenditure justify its fiscal cost. This tax expenditure provides tax benefits to air transportation that are not available to other forms of transportation, such as cars and trucks. When the tax expenditure was originally being considered by the Legislature, smaller local airports lobbied for the exemption of aircraft parts on the grounds that they were losing business to airports in neighboring states with such an exemption, but the adopted version of the tax expenditure exempted sales of both aircraft and aircraft parts.[2] Moreover, the exemption applies both to purchases by commercial carriers using Logan Airport and to transactions involving private aircraft using smaller airports. The Legislature may wish to reconsider the scope of this tax expenditure.

[2] Note that in addition to the sales tax exemption, aircraft are also exempt from the motor vehicle excise , though there may be local property tax associated with planes where registered.

- *1.042 & 1.501 Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain. Annual fiscal cost: $32 - $49.8 million. This tax expenditure provides a special low tax rate for sales of QSBS stock.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of this tax expenditure justify its fiscal cost; (2) the tax expenditure is claimed by its intended beneficiaries; and (3) the benefit claimed per taxpayer is meaningful as an incentive. Gains derived from the sale of certain QSBS are eligible for a 50% income exclusion because of Massachusetts' conformity with section 1202 of the Internal Revenue Code (the "Code") as in effect in 2005.[3] In addition, if it meets certain requirements, QSBS gain that is included in income is taxed at a rate of 3% instead of the generally applicable long-term gain rate of 5%. The Commission identified several concerns with this tax expenditure. First, only approximately 130 taxpayers currently benefit from the expenditure with an average benefit of $246,000 per taxpayer and the beneficiaries tend to be wealthier taxpayers. Second, in light of the existing federal tax expenditure, the Commission questioned the additional impact of the 3% rate on investment incentive. Third, DOR's experience indicates that taxpayers find this tax expenditure confusing because Massachusetts conforms to the federal exclusion to an extent, but then the 3% rate may apply to the remainder of the gain.[4] The Legislature may wish to reconsider this tax expenditure in light of the above concerns.
- *3.109 Exemption for Cement Mixers. Annual fiscal cost: $1.6 million. This tax expenditure exempts sales of cement mixers from sales tax.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of this tax expenditure justify its fiscal cost; (2) the benefit claimed per taxpayer is meaningful as an incentive; and (3) the tax expenditure is relevant today. The Commission is not aware of any other state with a specific sales tax exemption for cement mixers, but cement mixers and repair parts may be exempt in other states machinery used in manufacturing. Commission members concluded that changes in technology and deployment of delivery since the tax expenditure was adopted in 1971 make the exemption less relevant. The Legislature may wish to reconsider relevance and absence of any regional competitiveness concern justifying this tax expenditure.
- *3.421 Exemption for Films. Annual fiscal cost: $0.8 - $3.6 million. This tax expenditure exempts sales or rental of films used for commercial exhibition from sales tax. Commercial exhibition includes showing motion picture films at cinemas or on television stations or at other premises where films are exhibited for commercial purposes.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of this tax expenditure justify its fiscal cost; and (2) the tax expenditure is relevant today. Digitization of content has changed the structure of film distribution in recent years. On the demand side, more films are distributed to audiences through online streaming service providers such as Netflix, Amazon Prime Video, Disney+, which provide home viewers with premium movies and television content across multiple electronic devices and are not eligible for the exemption. The COVID-19 pandemic may have accelerated this trend. On the supply side, digitization of content has enabled film production companies to distribute their own

[3] Note there is a 100% exclusion for federal tax purposes.
[4] In addition, note that there is pending federal legislation (the so-called "Build Back Better" bill) that would make taxpayers earning over $400,000 ineligible for the federal exclusion.

content at lower costs, therefore reducing the demand for services from other film exhibitors. The Legislature may wish to reconsider whether this tax expenditure remains relevant.

- *2.312 Expensing of Certain Expenditures for Alternative Energy Sources & 2.501 Nontaxation of Certain Energy Property. Annual fiscal cost: $0. These tax expenditures are intended to provide income tax benefits to owners of certain alternative energy equipment.* Commission members voted "strongly disagree" for the following statements: (1) the benefits of the tax expenditures justify their fiscal costs; (2) the tax expenditures are claimed by the intended beneficiaries; (3) the benefits claimed per taxpayer are meaningful as an incentive; and (4) the tax expenditures are relevant today. To qualify for the deduction, the statute provides that equipment must meet certain technical standards that are required to be set by a now-defunct state agency – the Bureau of Building Construction. The Bureau of Building Construction was abolished in 1980 and was absorbed by the Division of Capital Asset Management & Maintenance ("DCAMM"). The Bureau of Construction's function in certifying alternative energy property was not specifically delegated to any successor agency. No certification standards, guidelines or regulations have been established by DCAMM or any other Massachusetts agencies for corporations seeking to take the alternative energy property deduction. There is now no certification process in place and no current published guidance in effect. In the absence of that agency or a successor agency to certify the property, no deduction can be claimed. The Commission is not aware of other states that allow a similar deduction for alternative energy equipment. However, it is not uncommon for states to offer income tax credits, sales tax deductions or property tax exemptions for such equipment. Commission members concluded it may not make sense to have a certification process for a deduction. The Legislature may want to reconsider the certification process required for this tax expenditure.
- *1.106 Nontaxation of Capital Gains at Time of Gift. Annual fiscal cost: $23.9 - $37.2 million. This tax expenditure exempts donors of appreciated assets from income tax on capital appreciation.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of the tax expenditure justify their fiscal costs and (2) the benefits claimed per taxpayer is meaningful as an incentive. Massachusetts, unlike the federal government, does not impose a gift tax. The federal gift tax is designed to complement the federal estate tax by discouraging potential bequestors from avoiding the estate tax through gifting. The absence of a state gift tax in Massachusetts may encourage gifting to circumvent estate tax. The Legislature may want to consider whether the state's divergence from the federal law is merited.
- *1.309 & 2.308 Expensing of Research and Development Expenditures in One Year. Annual fiscal cost: $3.4 - $46 million. This tax expenditure allows the expensing of certain research & development costs ("R&D") and is the result of Massachusetts' conformity with the federal Code. It is scheduled to expire in 2022.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits claimed per taxpayer is meaningful as an incentive and (2) the tax expenditure is relevant today. However, those ratings were due solely to the fact that the expenditure is scheduled to expire and was not a statement on the appropriateness of the expenditure itself.
- *3.108 Exemption for Certain Precious Metals. Annual fiscal cost: $7.9 - $10.3 million. This tax expenditure exempts sales of certain coins and precious metals from sales tax.* Commission members voted between "strongly disagree" and "somewhat disagree" that the benefits of this

tax expenditure justify its fiscal cost. Of the 45 states that impose a sales tax, 36 have complete or partial sales tax exemptions on the retail sale of coins and precious metals bullion. There has been pending legislation to repeal the exemption in numerous states, including Minnesota, Pennsylvania, South Carolina, and Washington. The Legislature may want to consider the appropriateness of this tax expenditure in light of the Commission's evaluation and legislative action taken by other states.

- *3.310 Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting. Annual fiscal cost: $6.3-$6.7M. This tax expenditure exempts from sales tax the purchase of materials, tools, fuels and machinery used in radio and television broadcasting.* Commission members voted between "strongly disagree" and "somewhat disagree" for the following statements: (1) the benefits of the tax expenditure justify its fiscal costs; (2) the benefits claimed per taxpayer are meaningful as an incentive; and (3) the tax expenditure is relevant today. Service providers who do not sell taxable retail products are typically required to pay sales tax on their inputs, and it was not clear to Commission members why commercial broadcasters should be treated differently. Moreover, industry changes since the enactment of the legislation appear to create a situation where traditional broadcasters receive a tax benefit whereas newer competitors (e.g., Internet streaming) do not. Finally, the group of beneficiaries for this tax expenditure is small. The Legislature may wish to reconsider whether the tax expenditure is relevant and appropriate.

2. Observations Applying to Multiple Tax Expenditures

The Commission's discussions of particular tax expenditures occasionally led to observations that cut across multiple tax expenditures. The Commission thought it appropriate to point out separately in this report certain of those observations.

State Tax expenditures resulting from conformity to the Federal Code. Commission members discussed tax expenditures that are a result of the state's conformity with the federal code. Many state tax expenditures result from state conformity with the federal code and, in light of the reliance of Massachusetts income and corporate taxes on the Code, the Commission tried to distinguish which tax expenditures should be accepted as part of this conformity and which ones should get separate state evaluations. Commission members agreed to consider the following prior to the review of tax expenditures resulting from the state's conformity with the federal code: (1) the annual revenue loss estimate resulting from the tax expenditure, (2) the number of other states that conform to federal code relative to the tax expenditure, (3) the number of other states that have decoupled from the federal code relative to the tax expenditure. Members agreed that if a tax expenditure fits a given criteria there is lesser likelihood of legislative change. Members agreed that if (1) the tax expenditure has a relatively low annual revenue loss estimate, (2) many other states conform to the federal code resulting in the tax expenditure, and (3) no other state has decoupled from the federal code relative to the tax expenditure than lesser economic analysis may be required for the evaluation of the tax expenditure. Members agreed to update the evaluation template with a checkbox identifying whether the tax expenditure is a result of the state's conformity with the federal code. All tax expenditure evaluation templates in this report reflect this update.

Sunset Dates. 26 tax expenditures were evaluated in the March 2021 report, and 36 tax expenditures are evaluated in this report.[5] Of these 62 tax expenditures, 58, or over 93%, did not have sunset dates while four, or less than 7%, did have sunset dates. Looking at the year of adoption for these tax expenditures, over 80% were adopted during or prior to the 1980s. Members unanimously supported the establishment of sunset dates as an incentive to analyze technological and other changes that may impact the relevance and annual revenue loss associated with tax expenditures.

Alternative Energy Tax Expenditures. The Commission has evaluated all Massachusetts alternative energy tax expenditures. Of these seven tax expenditures, five have been flagged during the evaluation process by the Commission. While the Commission does not question that encouraging development of alternative energy sources though tax expenditures may be appropriate policy for the Commonwealth, the existing assortment of alternative energy tax expenditures were adopted at different times and appear uncoordinated and, at times, dated. The Legislature may wish to revisit its choices for incentivizing alternative energy considering the following:

1.020 & 2.002 Exemption of Income from the Sale, Lease or Transfer of Certain Patents. These tax expenditures were evaluated in the March 2021 Report and were repealed in the Fiscal Year 2022 state budget effective January 1, 2022. These tax expenditures exempted from tax income from the sale or transfer of certain patents, or from the production of royalty or other income from property subject to such patents, for a period of five years. These exemptions required that the patents be issued to or applied for by a Massachusetts resident or a Massachusetts corporation, support energy conservation or alternative energy, and be approved by the Commissioner of Energy Resources. The Commission surmised that these tax expenditures likely were intended to support research into energy conservation and alternative energy but found that the exemptions had never been claimed since enactment in 1979.

1.421 Deduction for Clean-Fuel Vehicles and Certain Refueling. This tax expenditure was evaluated in the March 2021 Report and was flagged during the evaluation process. This deduction is allowed for a portion of the cost of qualifying motor vehicles that use clean-burning fuel placed in service on or before December 31, 2006. The deduction exists in Massachusetts because it was present in the Code as of 1/1/05. The federal deduction was repealed in 2014. It is still carried because Massachusetts conforms to the Internal Revenue Code as it existed in 2005. In essence, this tax expenditure is obsolete, as the state deduction ties to a former federal deduction that is now repealed and, in any case, applied only to vehicles placed in service on or before December 31, 2006.

[5] See **Appendix J** for a list of all tax expenditures evaluated by year.

2.312 Expensing of Certain Expenditures for Alternative Energy Sources & 2.501 Nontaxation of Certain Energy Property. These tax expenditures are evaluated in the June 2022 Report and are flagged during the evaluation process. Members discussed that these tax expenditures are not currently active, although the statutes authorizing them are still in effect, because they require certification by a state agency that no longer exists.

3.405 Exemption for Certain Energy Conservation Equipment. This tax expenditure exempts sales of equipment for a solar, wind or heat pump system used as a primary or auxiliary energy source in a principal residence from sales and use tax. Homeowners who are beneficiaries of this sales tax exemption may also be eligible the 1.601 Renewable Energy Source Credit. The Renewable Energy Source Credit provides homeowners and tenants a credit equal to 15% of the net expenditure for renewable energy source property or $1,000, whichever is less. The credit is limited to certain types of equipment used directly for the production of solar or wind energy for residential properties. These tax expenditures are evaluated in the June 2022 Report. The Commission concluded these tax expenditures are relevant as households switch over to clean energy systems, however it is not clear how affordable the equipment is to lower income households.

Appendix A

Chapter 207
of the
Acts of 2018

Chapter 207
of the Acts of 2018

THE COMMONWEALTH OF MASSACHUSETTS

In the One Hundred and Ninetieth General Court

AN ACT RELATIVE TO THE EXAMINATION OF TAX EXPENDITURES BY THE DEPARTMENT OF REVENUE.

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to establish forthwith the examination of tax expenditures by the department of revenue, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Chapter 14 of the General Laws is hereby amended by adding the following section:-

Section 14. (a) There shall be a tax expenditure commission that shall examine, evaluate and report on the administration, effectiveness and fiscal impact of tax expenditures, as defined in section 1 of chapter 29, and as presented with the governor's proposed budget under paragraph 3 of section 5B of said chapter 29.

(b) The commission shall be comprised of: the commissioner of revenue or the commissioner's designee, who shall serve as chair; the state auditor or the auditor's designee; the state treasurer or the state treasurer's designee; the chair of the house committee on ways and means or the chair's designee; the chair of the senate committee on ways and means or the chair's designee; the house and senate chairs of the joint committee on revenue or their respective designees; the minority leader of the house of representatives or the house minority leader's designee; the minority leader of the senate or the senate minority leader's designee; and 3 members to be appointed by the governor, who shall have expertise in economics or tax policy. The 3 members appointed by the governor shall each serve 4-year terms.

(c) The commission shall use best practices and standardized criteria to evaluate: (i) the purpose, intent and goal of each tax expenditure and whether the expenditure is an effective means of accomplishing those ends; (ii) the fiscal impact of each tax expenditure on state and local taxing authorities, including past fiscal impacts and expected future fiscal impacts; (iii) the economic impact of each tax expenditure including, but not limited to, revenue loss compared to economic gain and jobs created, retained or lost as a result of the tax expenditure; (iv) the return on the investment made by the tax expenditure and the extent to which the tax expenditure is a cost effective use of resources; and (v) similar tax expenditures, if any, offered by other states and the impact of the tax expenditure on regional and national economic competitiveness.

(d) The commission shall establish a schedule to review tax expenditures so that each tax expenditure shall be reviewed at least once every 5 years. The review schedule may group tax expenditures by those benefitting from the tax expenditures, the objectives of the tax expenditures or the policy rationale for the tax expenditures. The commission's review of each tax expenditure shall include the date the tax expenditure was enacted and the statutory or legal citation.

(e) Biennially, not later than March 1, the commission shall file a report of its findings and its recommendations to the clerks of the house of representatives and senate, the chairs of the house and senate committees on ways and means and the chairs of the joint committee on revenue. The report shall include all information required to be reviewed by this section and recommendations. The report shall be made available electronically and prominently displayed on the official website of the department of revenue.

(f) The commission shall have access to information, including aggregate tax return information and related documents maintained by the department of revenue, necessary for the performance of the commission's duties under this section but excluding information provided to the commonwealth by other federal and state tax agencies where such access is prohibited by law; provided, however, that tax returns and related documents shall not include a taxpayer's personal identifying information and such returns and documents shall be confidential and exempt from disclosure as a public record under section 7 of chapter 4 and under chapter 66. The commission, in collaboration with the department of revenue, shall adopt policies and procedures to ensure taxpayer confidentiality.

SECTION 2. This act shall take effect as of July 1, 2018.

House of Representatives, August 2, 2018.

Preamble adopted, Paul DeMato, Speaker.

In Senate, August 2, 2018.

Preamble adopted, Karen E. Spilka, President.

H 4820

House of Representatives, August 2 , 2018.

Bill passed to be re-enacted, Paul J Donato , Speaker.

In Senate, August 2 , 2018.

Bill passed to be re-enacted, Karen E Spilka , President.

August 9 , 2018.

Approved,

at 1 o'clock and 46 minutes, P . M.

Charles D Baker

Governor.

Appendix B

Members of the Tax Expenditure Review Commission

Chairperson Kevin W. Brown, Massachusetts Department of Revenue

Suzanne Bump, Massachusetts State Auditor

Sue Perez, Designee, Massachusetts State Treasurer and Receiver General

Professor Michelle Hanlon, Massachusetts Institute of Technology, Appointee, Massachusetts Governor Charlie Baker

Professor Matthew Weinzierl, Harvard Business School, Appointee, Massachusetts Governor Charlie Baker

Representative Mark J. Cusack, Joint Committee on Revenue, House Chairperson

Senator Adam Hinds, Joint Committee on Revenue, Senate Chairperson

Tim Sheridan, Designee, Representative Aaron Michlewitz, Chairperson, House Ways and Means Committee

David Sullivan, Designee, Senator Michael J. Rodrigues, Chairperson, Senate Ways and Means Committee

William Burke, Beacon Hill Institute, Designee, House Minority Leader

Greg Sullivan, Designee, Senator Bruce E. Tarr, Senate Minority Leader

Additional Members-Participants

Cole Doherty-Crestin, TERC Project Manager, Massachusetts Department of Revenue

Appendix C

Template for Review of Tax Expenditures

The review template for each tax expenditure is the vehicle chosen by the Commission to achieve standardized criteria for review of tax expenditures. As a process matter, a draft of the template was completed for each tax expenditure by one or more Commission members assigned by the Chair. The assigned member or members offered a draft rating that was then discussed by all TERC members in a public meeting. The Commission voted on the ratings of each tax expenditure reviewed. For final evaluation rating templates and tax expenditure summaries see **Appendix D.** TERC meeting minutes are attached at **Appendix E.**

In addition to fields for basic background information, the template is structured in three parts: (1) goals; (2) measurement and effectiveness ratings; and (3) a narrative summary of the TERC discussion of each tax expenditure.

1. **Goals:** Few tax expenditures have stated policy goals in their authorizing legislation, and the Commission has been left to infer policy goals in most cases, based upon the structure of the expenditure and its beneficiaries. The template lists both business-related goals, such as job-creation and competitiveness, and non-business goals, often related to individuals, such as relief of poverty and access to opportunity. Some commonly applicable goals are identified, with a space to identify other goals as well. The Commission has found that more than one goal often seems relevant to a single tax expenditure. Identification of goals is a necessary step in examining the effectiveness of a tax expenditure.

2. **Measurement and Effectiveness Ratings:** The second section of the template contains a series of statements, some of which are descriptive and some of which attempt to rate the effectiveness of a tax expenditure in benefitting the policy goal(s) identified for that tax expenditure. Each statement receives a TERC rating on a scale running from "strongly agree" to "strongly disagree."

   The descriptive statements relate to the beneficiaries of the expenditure, identifying the degree to which the tax expenditure is broadly used, and the degree to which it benefits small businesses or low-income taxpayers.

   The effectiveness ratings begin with a statement as to the degree to which the impact of a tax expenditure on achieving its identified goals is measurable. There are then effectiveness statements relating to different aspects of effectiveness: the degree, in the Commission's judgment, to which the benefit of the tax expenditure justifies its cost; the degree to which the tax expenditure is claimed by its intended beneficiaries; the degree to which the incentive that a tax expenditure creates is meaningful to taxpayers claiming the benefit of the expenditure; and the degree to which the tax expenditure remains relevant today. Finally, this section of the template has a statement as to the ease of administration of the tax expenditure.

The effectiveness ratings represent the judgment of the Commission members in light of the information available. Based on the uncertainties expressed by Commission members in discussion of various ratings, differences of one level in an evaluation such as, for example, the difference between a "strongly agree" rating and a "somewhat agree" rating, may not be highly meaningful. However, ratings of "strongly agree" and "strongly disagree" generally represent a consensus on a rating among the TERC members and are meaningful as to the statement. It is notable that, to date, the Commission has successfully operated on a consensus basis; there has not been significant disagreement among Commission members as to particular tax expenditure ratings. To date, all tax expenditure ratings have been approved unanimously by the Commission members.

One of the statutory directives in TERC's enabling legislation directs the Commission to evaluate "the return on the investment made by the tax expenditure and the extent to which the tax expenditure is a cost-effective use of resources." The Commission interprets this directive as an instruction to rate the extent to which the benefit of an expenditure justifies its cost, and TERC has found its cost/benefit evaluative statement to be the most difficult to rate. The rating is particularly problematic, of course, to the extent that the benefit is difficult to measure. However, even though there are prominent tax expenditures such as the Investment Tax Credit or the Research & Development credit where research data on economic impact of comparable federal credits or credits in other states may be available, economic data are seldom sufficient to determine the extent to which a tax expenditure may incent activity that would not otherwise have occurred, as opposed to merely reducing the tax burden for a desired activity, whether or not that activity would have occurred without the tax expenditure. TERC generally concluded that benefits of expenditures justified the costs in situations where the policy goals were reasonably inferred, and the tax expenditure reasonably related to these goals, particularly if the tax expenditure was available in other states.

In many cases the Commission judged interstate competitiveness to be a goal of a business tax expenditure and tax expenditures matching similar tax benefits in other states were often found to be responsive to this goal, thus justifying their cost on this basis. TERC found such tax expenditures to justify their cost even where dynamic analysis of the tax expenditure using the REMI model did not show growth in jobs from a tax expenditure, given the uncertainty in application of such models and the impact of the economic assumptions necessary to such modeling. Information regarding the application of the REMI model is available at **Appendix F.**

3. **Summary Comments:** The final section of the template is a narrative summary of the discussion among the Commission members of the tax expenditure at issue, including any comments or recommendations of the members with respect to the different tax expenditures.

Appendix C

Template for Evaluating Expenditures

Name of Expenditure:	**Annual cost:**	**Year of adoption:**	**Sunset date:**

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	☐	☐	☐
The TE's benefit justifies its fiscal cost	☐	☐	☐	☐
The TE is claimed by its intended beneficiaries	☐	☐	☐	☐
The TE is claimed by a broad group of taxpayers	☐	☐	☐	☐
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	☐	☐
The TE is relevant today	☐	☐	☐	☐
The TE is easily administered	☐	☐	☐	☐
Business only -The TE is beneficial to smaller businesses	☐	☐	☐	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	☐	☐

Comments

Appendix D

Evaluation Rating Templates & Tax Expenditure Summaries

Template for Evaluating Expenditures

Name of Expenditure: 1.042 & 1.501 Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain	**Annual cost:** $32M-$49.8M	**Year of adoption:** 2005 (exclusions); 2011 (preferred rate)	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		X		
The TE's benefit justifies its fiscal cost	X			
The TE is claimed by its intended beneficiaries		X		
The TE is claimed by a broad group of taxpayers	X			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		X		
The TE is relevant today				X
The TE is easily administered	X			
Business only				
-The TE is beneficial to smaller businesses			X	
Individuals only				
-The TE benefits lower income taxpayers	X			

Comments (1.042 & 1.501 Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain)
100% excluded for federal tax purposes so federal tax savings (20% cap gain rate reduced to 0%) is most likely the larger incentive for investors than the MA 50% exclusion at a preferential rate of 3% rather than 5%.
Other states following the Internal Revenue Code also exclude 100% of these gains – these states include NY, CT, ME, VT and RI. CA expressly disallows the federal exclusion and does not provide preferential rates to these gains.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain
TAX EXPENDITURE NUMBER	1.042 and 1.501
TAX EXPENDITURE CATEGORY	Exclusion from Gross Income and Preferential Rate of Taxation
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	Code § 1202; M.G.L. c. 62, §§ 1,4(c)
YEAR ENACTED	Exclusion of gain effective for sales of eligible stock on or after January 1, 2005. Preferred rate effective for sales of stock in eligible corporations formed on or after January 1, 2011.
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $32.0 - $49.8 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	130 (tax year 2018)
AVERAGE TAXPAYER BENEFIT	About $246,000 per taxpayer (tax year 2018).

Description of the Tax Expenditure: Gains derived from the sale of certain "qualified small business stock" ("QSBS") are eligible for a 50% income exclusion because of Massachusetts' conformity with section 1202 of the Internal Revenue Code (the "Code") as in effect in 2005. If it meets certain requirements, QSBS gain that is included in income is taxed at a rate of 3% instead of the generally applicable long-term gain rate of 5%.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.

What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage investment in new small businesses.	**Are there other states with a similar Tax Expenditure?** Many states allow an exclusion for the entire amount of gain on the sale of qualified small business stock, consistent with section 1202 of the Code as currently in effect. These states include New York, Connecticut, Maine, Rhode Island, and Vermont. California is one state that does not allow an exclusion or a preferential rate on such gains. DOR is not aware of any state that applies a preferential rate on such gains.

INTRODUCTION

For federal tax purposes Internal Revenue Code (the "Code") § 1202 allows individuals an income exclusion for gains derived from the sale of qualified small business stock ("QSBS"). Because Massachusetts generally follows the Code as in effect in 2005 for personal income tax purposes, Massachusetts allows an income exclusion for 50% of such gains.

In addition, Massachusetts provides a reduced tax rate for the 50% of such gains that are included in income, if certain additional requirements are met. Specifically, gains on the sale of qualified small business stock are taxed at a reduced rate of 3%, instead of the generally applicable long-term gain rate of 5%, if the stock that is sold (i) was acquired within five years of the corporation's date of incorporation (ii) was held for three years or more prior to the sale, and (iii) was issued by a C corporation or S corporation which (a) is domiciled in Massachusetts, (b) was incorporated on or after January 1, 2011, (c) had less than $50 million in assets at the time of investment, and (d) complies with certain of the "active business" requirements of Code § 1202.

POLICY GOALS

Although the statute is silent on the intent of the expenditure, DOR infers the goal to be the encouragement of investment in new small businesses.

DIRECT COSTS

The revenue loss resulting from the favorable tax treatment of QSBS gain is estimated to be $32.0 - $49.8 million per year during FY19-FY23. See Table 1 below. The estimates in Table 1 are for gains that are eligible for both the 50% exclusion and the reduced tax rate of 3%. For those gains that are eligible for the 50% exclusion but not the reduced tax rate, DOR does not have sufficient data to estimate the cost.

The estimates in Table 1 are based on DOR's personal income tax return data for tax years 2016 to 2019 and DOR's projection of capital gains tax for tax years 2020 to 2023, which are based on the financial and housing market projections from DOR's vendors, *Moody's Analytics* and *IHS Markit*. Given that the internal data, which is based on the actual return information, is in general much more reliable than external data, and capital gains tax is generally difficult to project, DOR is more confident in the estimates for FY19-FY20 than in the estimates for FY21-FY23.

Table 1. Tax Revenue Loss Estimates for Favorable Tax Treatment of Qualified Small Business Stock

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$32.0	$33.9	$49.8	$46.5	$45.7

DIRECT BENEFITS

The primary direct beneficiaries are investors who invest in qualified small businesses. These investors benefit not only from the favorable tax treatment of gains on qualified small business stock, but also faster growth of the qualified small business due to more investment incentivized by favorable tax treatment.

Table 2 below reports the number of tax filers who took advantage of the favorable treatment for QSBS gains for the tax years 2016 through 2019, as well as the total tax savings and average tax savings to them, by the range of realized capital gains they reported.[1]

The total number of tax filers taking advantage of favorable tax treatment for QSBS gains increased over time from 42 filers in tax year 2016 to 165 filers in tax year 2019. Most of these filers have realized capital gains in the $1-$500K range, followed by those with more than $1M realized capital gains, and lastly those in the $501K-$1M range.

Table 2 also shows that total tax savings to those filers have increased over time from $2.8 million in tax year 2016 to $32.1 million in tax year 2019. Most tax savings (more than 80%) went to tax filers with more than $1 million realized capital gains (less than 40% of all filers). Average tax savings show a similar pattern with filers with more than $1 million realized capital gains saving much more tax than other tax filers.

Table 2. Massachusetts Tax Filers Who Claimed Favorable Tax Treatment of QSBS Gain During Tax Years 2016 - 2019

Range of Capital Gains Taxed at 3%	2016			2017			2018			2019**		
	Number of Filers	Total Tax Savings ($000)	Average Tax Savings ($000)	Number of Filers	Total Tax Savings ($000)	Average Tax Savings ($000)	Number of Filers	Total Tax Savings ($000)	Average Tax Savings ($000)	Number of Filers	Total Tax Savings ($000)	Average Tax Savings ($000)
$1-$500K	31	$254	$8	63	$569	$9	63	$519	$8	90	$895	$10
$501K-$1M	*	$105	*	9	$496	$55	20	$1,081	$54	17	$974	$57
Over $1M	*	$2,449	*	15	$4,314	$288	47	$30,439	$648	58	$30,231	$521
Total	42	$2,808	$67	87	$5,380	$62	130	$32,039	$246	165	$32,100	$195

Source: Massachusetts Department of Revenue.
Note: * Due to low filer count, numbers are omitted to maintain the confidentiality of filer data in accordance with DOR guidelines.
** 2019 data are preliminary and subject to change.

[1] As Table 1, Table 2 does not include the QSBS gains that are eligible for the exclusion but not the reduced tax rate due to data limitation.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the favorable tax treatment of realized capital gains from selling qualified small business stock) and direct benefits (to investors of qualified small business stock) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the capital gains tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to investors in qualified small business stock, which is the capital gains tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. Generally, the indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the first impacted businesses. The induced impact (cost or benefit) occurs when an impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[2]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

DOR infers that the goal of this tax expenditure is to encourage investment in new small businesses. Although DOR is not aware of any studies assessing whether favorable state tax treatment of gains from qualified small business stock furthers this goal, studies on the impact of the corresponding federal tax expenditure arrive at different conclusions. Edwards and Todtenhaupt (2020) report that the federal capital gains tax reduction introduced by the 2010 Small Business Jobs Act (SBJA) raised the amount of investment in start-up firms per funding round by about 12%. On the other hand, Viswanathan (2020) argues that "Even if catalyzing investment in small businesses is normatively desirable, the provision [Code § 1202] does little to promote that result." Viswanathan's study also demonstrates that the loss in federal tax revenue due to Code § 1202 is far greater than previously estimated, with the provision almost exclusively benefitting the wealthy. Please note that QSBS investors can benefit from not only the favorable treatment of state capital

[2] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

gains tax, which reduces the effective state capital gains tax rate for QSBS gains from 5% to 2.5% (exclusion only) or 1.5% (exclusion plus lower rate of 3%), but also the 100% exclusion from federal capital gains tax, which reduces the effective federal capital gains tax rate from 20% to 0%. Given that the federal tax saving is much larger than the state tax saving, it is more likely that the investors' decision would mostly be determined by the federal tax policy. The increment incentive provided by the state tax policy may be small.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that follow the Code definition of taxable income will allow the federal exclusion of gain on the sale of qualified small business stock unless their statutes provide otherwise. New York, Connecticut, Maine, Rhode Island, and Vermont allow a full exclusion for such gains on this basis. California is one state that has specifically disallowed the federal exclusion and does not apply a preferential rate to such gains. See California Revenue & Tax Code Section 18152.

References

Edwards, A., & Todtenhaupt, M. (2020). Capital gains taxation and funding for start-ups. *Journal of Financial Economics, 138*, 549-571.

Viswanathan, M. (2020). The Qualified Small Business Stock Exclusion: How Startup Shareholders Get $10 Million (Or More) Tax-Free. *Columbia Law Review Forum, 120*, 29-42

Template for Evaluating Expenditures

Name of Expenditure: 1.106 Exemption for Capital Gains at Time of Gift	**Annual cost:** $23.9M-37.2M	**Year of adoption:** 1921	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Exclusion of capital gains potentially subject to estate tax; simplify income tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		X		
The TE's benefit justifies its fiscal cost		X		
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers	X			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		X		
The TE is relevant today				X
The TE is easily administered			X	
Business only -The TE is beneficial to smaller businesses				
Individuals only -The TE benefits lower income taxpayers	X			

Comments (1.106 Exemption for Capital Gains at Time of Gift)
Massachusetts, unlike the U.S. federal government, does not assess a gift tax on transfers. This asymmetry is important because the absence of a state gift tax makes gifts relatively more attractive under Massachusetts law than under the federal code. To the extent that the federal gift tax is designed to complement the federal estate tax, namely to discourage potential bequestors from avoiding the estate tax through gifting, the state's choice not to assess a gift tax both lowers state revenue and encourages gifting. This choice benefits those making and receiving gifts, but legislators may wish to assess whether the state's divergence from the federal strategy is merited.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Capital Gains at Time of Gift
TAX EXPENDITURE NUMBER	1.106
TAX EXPENDITURE CATEGORY	Deferrals of Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	Code §§ 1001, 1015
YEAR ENACTED	1921
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $23.9 - $37.2 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Ordinarily, for federal income tax purposes, capital gains are taxed at the time appreciated property is transferred to a new owner. However, the tax on capital gains on property transferred by gift is deferred until the new owner sells the property. If the new owner dies holding the gifted property, the tax is never imposed (see Evaluation Summary 1.022). Massachusetts generally follows the federal rules for purposes of determining taxable capital gains. This conformity results in a deferral and potential exclusion of tax on capital gains and therefore constitutes a state tax expenditure.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? The federal rules applicable to capital gains on gifted and inherited property were originally	**Are there other states with a similar Tax Expenditure?** Every state that imposes a personal income tax generally follows the federal income

intended to coordinate the federal income tax with the federal estate and gift taxes. The deferral and potential exclusion of capital gains was intended to prevent the imposition of income tax on transfers that are potentially subject to gift and estate taxes. Massachusetts does not impose a gift tax but does impose an estate tax.	recognition and basis rules applicable to transfers of capital assets.

INTRODUCTION

Massachusetts generally follows the federal income recognition and basis rules applicable to transfers of capital assets. The Massachusetts tax expenditure is a result of this conformity.

In Massachusetts, long-term gains on transfers of capital assets are taxed at the regular income rate of 5% unless otherwise exempt. Short-term gains are taxed at a rate of 12%. Special, less favorable, rates apply to capital gains on the sale of collectibles such as antiques.

For both federal and Massachusetts purposes, the taxable capital gain is the difference between the holder's basis in the property, and its selling price. An owner's basis is generally the amount paid for the capital asset, adjusted for depreciation allowed as a deduction with respect to the asset. Ordinarily, for both federal and Massachusetts purposes, capital gains are taxed at the time of transfer of a capital asset to a new owner. However, if a capital asset is transferred as a gift, no tax is imposed at the time of transfer. Specifically, the transferor is not required to pay tax on the gain. Further, gifts are not considered income to the recipient. Thus, there is no tax on the gain at the time of the transfer. Instead, the new owner takes the gifted assets with the same basis as the transferor. When the new owner sells the asset during his or her lifetime, the gain will be the selling price, less the original owner's lower basis. In this case the income tax on the appreciation of a capital asset will be deferred until the new owner sells the asset. However, if the new owner dies before selling the asset, his or her heirs will take the property with a basis determined by the fair market value of the asset at the time of the new owner's death. Thus, the income tax will never be imposed on the appreciation of a capital asset transferred by gift to a recipient who dies holding the asset.

Based on the foregoing, any income tax that would otherwise be imposed on gain on the sale of gifted capital assets at the time of transfer will be either postponed or will never be imposed at all. Postponing or foregoing the tax that would otherwise have been due at the time of gift is a state tax expenditure.

POLICY GOALS

The federal rules applicable to capital gains on gifted and inherited property were originally intended to coordinate the federal income tax with the federal estate and gift taxes. The deferral and potential exclusion of capital gains was intended to prevent the imposition of income tax on transfers that are potentially subject to gift and estate taxes. Massachusetts does not impose a gift tax but does impose an estate tax. Massachusetts' conformity to the federal rules has the added benefit of simplifying personal income tax compliance and administration.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $23.9 - $37.2 million per year during FY19-FY23 (see the table below). The estimated revenue loss is based on estimates prepared by the federal Joint Committee on Taxation ("JCT")[1] of the impact on federal tax collections of the income deferral and potential exclusion applicable to capital gains on gifted property. The JCT's estimates are shared down to Massachusetts based on the state's share of capital gains as reported on the federal income tax return and adjusted for differences between federal and state fiscal years[2] and tax rates. Given the use of external data and that capital gains are volatile and difficult to forecast, the revenue loss estimates are uncertain. Therefore, the estimates reported in the table below should be used with extreme caution.

Tax Revenue Loss Estimates from Nontaxation of Capital Gains at Gift

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$29.5	$23.9	$37.2	$36.8	$32.7

DIRECT BENEFITS

Transferors and recipients of gifted capital assets are the direct beneficiaries of this tax expenditure. Transferors do not have to pay capital gains tax at the time of transfer of the gifted capital assets. Recipients pay the capital gains tax at a later time when selling the gifted assets or pay no capital gains tax at all if holding the assets until death. DOR does not have information on the total number of beneficiaries of this tax expenditure.[3]

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the nontaxation of capital gains at gift) and direct benefits (to transferors and recipients) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the income tax that would have been

[1] The Joint Committee on Taxation is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. https://www.jct.gov/

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

[3] Some transferors are required to file the federal gift tax return. Data for these transferors and the corresponding recipients and gifts can be found at IRS website: https://www.irs.gov/statistics/soi-tax-stats-gift-tax-statistics. Note that not all gift tax filers give capital assets. Some, for example, may give only cash and therefore are not beneficiaries of this tax expenditure.

collected from the deferred or potentially excluded capital gains, are equal to the direct benefits afforded by the tax expenditure to the transferors and recipients, which is the income tax the original owners of the capital assets would have had to pay to the Commonwealth at the time of gift.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. To measure indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Every state that imposes a personal income tax generally follows the federal income recognition and basis rules applicable to transfers of capital assets.

Template for Evaluating Expenditures

Name of Expenditure: 3.122 Exemption for Aircraft and Aircraft Parts	**Annual cost:** \$23.8M - \$25.9M	**Year of adoption:** 2002	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Encourage the use of local MA airports

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost		x		
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today			x	
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers	x			

Comments (3.122 Exemption for Aircraft and Aircraft Parts)
At the time of its enactment, advocates of this TE presented it as important to the competitiveness of community airports, representing that small aircraft owners would register planes in other states or fly to other states for repairs to avoid tax, depriving the local airports of business. As enacted, the TE appears overbroad with regard to this goal, as it applies to both commercial carriers using Logan Airport and private aircraft using smaller airports, and as the scope of the exemption adopted excludes sales of aircraft from tax as well as excluding repair parts. Additionally, while local airports are intended beneficiaries of this TE, aircraft owners who would owe tax in the absence of the TE are the primary beneficiaries.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Aircraft & Aircraft Parts
TAX EXPENDITURE NUMBER	3.112
TAX EXPENDITURE CATEGORY	Exempt Products/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(uu) and (vv); M.G.L. c. 64I, § 7(d) and (e).
YEAR ENACTED	2002
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $23.8 - $25.9 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Buyers and sellers of aircraft & aircraft parts.
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Airplanes, helicopters, gliders and other aircraft are exempt from sales tax. Parts used exclusively for the repair of aircraft are also exempt.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the expenditure is intended to further interstate and foreign commerce, and to encourage the use of Massachusetts airports.	**Are there other states with a similar Tax Expenditure?** All the New England states, except Vermont, have an exemption for the sale of aircraft and parts. New York also has a similar exemption. New Hampshire does not have a sales tax.

INTRODUCTION

The tax expenditure exempts from sales tax transfers of airplanes, helicopters, gliders and other aircraft. Parts used exclusively for the repair of aircraft are also exempt.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, sales of aircraft and aircraft parts would be subject to sales and use tax. It is possible that the sale for resale exclusion might apply to such sales if the purchaser buys the aircraft or parts to sell to its customers. However, in the absence of the exemption, the sales and use tax would apply to sales of aircraft and aircraft parts. This would be so even if the purchasers use the aircraft and parts in their business operations.

Note that commercial aircraft are subject to local property tax in any city or town in which they are present during the year.[1] The local property tax on commercial aircraft is apportioned based on the number of days the aircraft is present in the city or town.

Non-commercial aircraft are subject to an annual registration fee. Such aircraft are exempt from local property tax if the owner registers and pays the fee.[2]

[1] G.L. c. 59, §18.
[2] See G.L. c. 90, § 49(b).

POLICY GOALS

DOR assumes that the expenditure is intended to further interstate and foreign commerce and to encourage the use of Massachusetts airports.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $23.8 - $25.9 million per year during FY19-FY23. See Table 1 below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Aircraft & Aircraft Parts

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$24.2	$23.8	$24.5	$25.2	$25.9

DIRECT BENEFITS

The Massachusetts consumers and businesses that manufacture, buy, and sell aircraft and aircraft parts are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

Businesses producing/selling aircraft & aircraft parts include businesses in the industry of (1) aircraft manufacturing; (2) aircraft engine and engine parts manufacturing; (3) other aircraft parts and auxiliary equipment manufacturing; (4) search, detection, navigation, guidance, aeronautical, and nautical system, and instrument manufacturing; and (5) aircraft and aeronautical equipment and supplies merchant wholesalers. Table 2 reports the numbers of such businesses in Massachusetts and their annual payroll, sales, and employment in 2017. However, due to confidentiality, some information has been omitted from Table 2 to avoid disclosing data for individual companies.

Out-of-state businesses selling aircraft and aircraft parts to Massachusetts residents and businesses are also direct beneficiaries.

Table 2. Annual Payroll, Sales, and Employment of Businesses Producing/Selling Aircraft and Aircraft Parts in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
336411	Aircraft manufacturing	D	D	D	D	20 to 99 employees
336412	Aircraft engine and engine parts manufacturing	14	15	$807.0	$305.9	3,177
336413	Other aircraft parts and auxiliary equipment manufacturing	D	D	D	$24.2	319
334511	Search, detection, navigation, guidance, aeronautical, and nautical system, and instrument manufacturing	28	30	$2,472.4	$640.9	7,419
4238601	Aircraft and aeronautical equipment and supplies merchant wholesalers	D	D	D	D	0 to 19 employees

Source: The U.S. Census Bureau, 2017 Economic Census.
D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals

According to the Aeronautics Division at the Massachusetts Department of Transportation (MassDOT), there are 1,797 aircrafts registered in Massachusetts in 2021.[3] Although actual purchase dates of the registered aircraft are not known, we can loosely say all the owners of these aircraft are also direct beneficiaries of the sales tax exemption as both buyers of aircraft and potential buyers of aircraft parts.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for aircraft and aircraft parts) and direct benefits (to buyers and sellers of aircraft and aircraft parts) of this

[3] The number of registered aircrafts varies by year. It was 1,980 in 2018, 2,107 in 2019 and 2,046 in 2020.

tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales or use tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of aircraft and aircraft parts, which is the sales or use tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

DOR assumes that the expenditure is intended to further interstate and foreign commerce and to encourage the use of Massachusetts airports. Although we are not aware of any studies measuring how much sales tax exemption for aircrafts and aircraft parts help achieve these goals, there are many studies on the economic impact of airports and aviation industry themselves. For example, the 2019 Massachusetts Statewide Airport Economic Impact Study prepared by the MassDOT Aeronautics Division[5] details how Massachusetts' 39 public-use airports are economically valuable to the Commonwealth by quantifying employment, payroll, and economic output.[6] The study reports that Massachusetts airports generated $24.7 billion in output, $7.2 billion in total payroll, and created 199,237 jobs in 2017. Another study prepared by PricewaterhouseCoopers LLP[7] estimates that general aviation (other than aircraft used for scheduled commercial air

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

[5] Massachusetts Statewide Airport Economic Impact Study Update Executive Summary, January 2019 https://www.mass.gov/economic-impact-study

[6] The study considers the annual impacts associated with on-airport, aviation-related businesses and government organizations, capital improvement projects, military aviation, the spending of visitors who arrive via scheduled commercial service airlines, and the spending of visitors who arrive on privately-owned general aviation aircraft.

[7] https://nbaa.org/wp-content/uploads/advocacy/legislative-and-regulatory-issues/business-aviation-essential/General-Aviation-Contribution-to-the-US-Economy-20200219.pdf

service or operated by the military) in Massachusetts generated $3.6 billion in output, $1.4 billion in labor income, and $2.1 billion in GDP, and created 19,300 jobs in 2018.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

All the New England states with a sales tax, except Vermont, have an exemption for the sale of aircraft and parts. New York also has a similar exemption.

Sales and use taxation of aircraft generally varies across the states. About half of all states have a "fly away exemption" where no sales tax is charged if the plane is removed from the state within a certain timeframe (anywhere from 10-60 days). 9 of these states also have either a full or partial exemption for parts.

27 states have an exemption for aircraft & parts used in commercial operations or interstate commerce.

5 states have no exemption for aircraft but do have either a limited or full exemption for parts.

Template for Evaluating Expenditures

Name of Expenditure: 3.108 Exemption for Certain Precious Metals	**Annual cost:** <$10M	**Year of adoption:** 1987	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: To treat precious metals as investment or financial assets rather than sales of tangible personal property subject to sales tax

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: To treat precious metals as investment or financial assets rather than sales of tangible personal property subject to sales tax

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		X		
The TE's benefit justifies its fiscal cost		X		
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers	X			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			X	
The TE is relevant today			X	
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses	X			
Individuals only -The TE benefits lower income taxpayers	X			

Comments (3.108 Exemption for Certain Precious Metals)
Most states that impose a sales tax have a similar tax exemption. Lack of data on the total number of beneficiaries of this tax expenditure.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Certain Precious Metals
TAX EXPENDITURE NUMBER	3.108
TAX EXPENDITURE CATEGORY	Exempt Products/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(LL)
YEAR ENACTED	1987
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $7.9 - $10.3 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: The tax expenditure provides for a sales tax exemption for transactions with a sale amount of $1,000 or more of certain precious metals. The exempt items are: rare coins of numismatic value; gold or silver bullion or coins; and gold or silver tender of any nation which is traded and sold according to its value as precious metal. Fabricated precious metals that have been processed or manufactured for industrial, professional, or artistic use do not qualify for the exemption.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the policy goal of the tax expenditure is to treat the specified precious metals in the same manner as investments or financial assets rather than as taxable sales of tangible personal property.	**Are there other states with a similar Tax Expenditure?** Of the 45 states that impose a sales tax, 36 have complete or partial sales tax exemptions on the retail sale of coins and precious metals bullion. States with partial exemptions typically require purchases to equal or exceed a stated

	minimum amount in order to qualify. Across states, the minimum amount ranges from a low of \$500 (in Florida) to a high of \$1,500 (in California). One state, Louisiana, imposes an upper limit pursuant to which the sales price must be below \$500 for purchase to qualify for the exemption.

INTRODUCTION

The tax expenditure provides for a sales tax exemption for transactions with a sale amount of $1,000 or more of certain precious metals. The $1,000 exemption applies to the entire transaction; it is not per item. The exempt items are (1) rare coins of numismatic value; (2) gold or silver bullion or coins; and (3) gold or silver tender of any nation which is traded and sold according to its value as precious metal[1]. Note that transfers of intangible assets, such as interests in exchange-traded funds and mutual funds, the price of which is based on the value of precious metals, are not sales of tangible property subject to sales or use tax. Therefore, the cost of this tax expenditure does not include any reduction in revenue resulting from the nontaxation of these intangible transactions.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable. One such exemption is the exemption for transfers of specified precious metals.

Absent the exemption afforded by this tax expenditure, all transfers of precious metals would be subject to sales tax. The exemption prevents the taxation of transfers of specified precious metals where the sale amount of the items transferred in a transaction is $1,000 or more. Investments in financial assets and currency transactions are generally not subject to sales and use taxes. The expenditure places purchases of precious metals and rare coins on a more equal footing with these other items for purposes of the sales tax.

POLICY GOALS

DOR assumes the policy goal of this expenditure is to treat precious metals as investments or financial assets rather than sales of tangible personal property subject to sales tax.

DIRECT COSTS

The total revenue loss due to this sales tax exemption is estimated to be $7.9 - $10.3 million per year during FY19-FY23 (see Table 1 below). The estimates are based on sales of

[1] Fabricated precious metals that have been processed or manufactured for industrial, professional, or artistic use do not qualify for this exemption. Precious metals used for industrial purposes are very likely exempt as a manufacturing input in Massachusetts.

precious metals and numismatic coins sold by the U.S. Mint and sales of numismatic coins by other sellers as estimated by the Professional Numismatists Guild (PNG).[2] DOR used disposable personal income data from the U.S. Bureau of Economic Analysis to apportion total U.S. sales to Massachusetts based on the state's share of national disposable personal income. [3]

Due to the use of external data and data limitations, estimates reported in Table 1 should be used with extreme caution. The U.S. Mint accounts for only a portion of the market for the exempt products (source: the U.S. Mint annual report series). There is a lack of data on the exact size of the market for precious metals. Estimates may significantly underestimate the revenue loss since these numbers do not capture sales of gold and silver by sellers other than the U.S. Mint.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Certain Precious Metals ($ Million)

Product Type / Fiscal Year	2019	2020	2021	2022	2023
Rare coins of numismatic value	$6.8	$6.9	$6.9	$7.1	$7.3
Other Products (*)	$1.1	$2.8	$2.9	$2.9	$3.0
Total (*)	**$7.9**	**$9.7**	**$9.8**	**$10.0**	**$10.3**

(*) Reflect only sales of gold and silver bullion coin by the U.S. Mint; subject to a significant estimation uncertainty.

DIRECT BENEFITS

The Massachusetts residents or businesses who buy or sell the exempt products are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state residents or businesses selling exempt products to Massachusetts residents or businesses are also direct beneficiaries. There is a lack of data on the total number of beneficiaries (market participants) of this tax expenditure.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts

[2] The Professional Numismatists Guild (PNG) estimates that the overall U.S. rare coin market was over $4 billion in 2016, $3.4 billion to $3.8 billion in 2017, and $4 billion in 2018, not including sales by the U.S. Mint or bullion coins, such as gold and silver American Eagles.
[3] We did not adjust for the sales by the U.S. Mint to foreigners due to lack of data.

government spending or increases taxes to finance the sales tax exemption for the exempt products (certain precious metals) and direct benefits (to buyers and sellers of exempt products) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt product, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the first impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect"[4].

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits, there may also be externalities to consider when evaluating this tax expenditure. A negative or positive externality occurs when the production and/or consumption of a good or service exerts a negative or positive effect on a third party independent of the transaction. For example, in order to mint coins and bullion of precious metals, ore must first be extracted from mines. The extraction process for these ores can create dust, land erosion, and possible run-off to local waterways, all of which are detrimental to the environment. By encouraging these activities, this tax expenditure may aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset such negative externalities.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Of the 45 states that impose a sales tax, 36 have complete or partial sales tax exemptions on the retail sale of coins and precious metals bullion. States with partial exemptions typically require purchases to equal or exceed a stated minimum amount in order to qualify. Across states, the minimum amount ranges from a low of $500 (in Florida) to a high of $1,500 (in

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

California). One state, Louisiana, imposes an upper limit pursuant to which the sales price must be below $500 for purchase to qualify for the exemption.

There has recently been a push in several states to adopt an exemption for such sales. Arkansas and Ohio both recently enacted such an exemption, which became effective as of October 1, 2021, in both states. Bills to adopt a coin and precious metal sales tax exemption recently failed in Mississippi and Tennessee, but one remains pending in Hawaii.

As described in a Numismatic News article dated February 19, 2021, there has been pending legislation to repeal the exemption in numerous states, including Minnesota, Pennsylvania, South Carolina, and Washington, which were all stalled in committee for the duration of 2021. In the case of Pennsylvania and South Carolina, these bills reflected broader pushes to repeal state sales tax exemptions.

Template for Evaluating Expenditures

Name of Expenditure: 3.310 Exemption for materials/tools/fuel used in commercial radio & TV broadcasting	**Annual cost:** $6.8 million	**Year of adoption:** 1995 Re-enactment	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost	x			
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		x		
The TE is relevant today		x		
The TE is easily administered		x		
Business only -The TE is beneficial to smaller businesses	x			
Individuals only -The TE benefits lower income taxpayers				

Comments (3.310 Exemption for materials/tools/fuel used in commercial radio & TV broadcasting)
The policy goal of this tax expenditure, other than general support for the commercial broadcasting industry, is unclear. Service providers who do not sell taxable retail products, as is the case with commercial broadcasters, are typically required to pay sales tax on their inputs. Thus, this tax expenditure is not supported by a structural sales tax justification. Moreover, industry changes since the enactment of the legislation appear to create a situation where traditional broadcasters receive tax benefit whereas newer competitors (e.g., Internet streaming) apparently do not. Finally, the group of beneficiaries for this tax expenditure is small. Legislative review of this tax expenditure is recommended.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Materials, Tools, Fuels and Machinery Used in Commercial radio and TV broadcasting
TAX EXPENDITURE NUMBER	3.310
TAX EXPENDITURE CATEGORY	Exempt Component of a Product or Consumed in Production
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(r) and (s)
YEAR ENACTED	1968 (Acts 1967, c. 757, § 1); Repealed in 1990 (Acts 1990, c. 121 §§ 48-49); Reinstated in 1995 (1995 Mass. C. 38 §§ 84, 85).
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $6.8 million during the period FY19 - FY23.
NUMBER OF TAXPAYERS	In 2017, buyers of exempt items included 55 radio broadcasting firms and 35 television broadcasting firms in Massachusetts.
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels and machinery, including replacement parts, used in commercial radio and television broadcasting.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to promote information dissemination and entertainment by supporting the radio and television broadcasting industries.	**Are there other states with a similar Tax Expenditure?** DOR is not aware of any other state with a similar tax expenditure.

INTRODUCTION

The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels and machinery, including replacement parts, used in commercial radio and television broadcasting. Most purchasers of these items are radio and television businesses and contractors acting as agents of these businesses. The expenditure does not require that the purchaser be a particular person or entity, but rather the items purchased are required to be consumed and used in a particular manner.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, sales of materials, tools, fuels, and machinery, including replacement parts, used in commercial radio and television broadcasting would be taxable when purchased. This exemption would apply to traditional broadcasters and to cable broadcasters, but presumably not to Internet streaming or other Internet services

POLICY GOALS

DOR assumes that the tax expenditure is intended to promote information dissemination and entertainment by supporting the radio and television broadcasting industries.

DIRECT COSTS

DOR does not have in-house data on sales of the exempt products. Therefore, estimates as to direct costs and benefits are based on the U.S. Census Bureau's 2017 economic census and data from the company Regional Economic Models, Inc. The revenue loss resulting from this tax expenditure is estimated to be $6.3 – $7.3 million per year during FY19-FY23. See the table below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Materials, Tools, Fuels and Machinery Used in Commercial Radio and TV Broadcasting

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$6.3	$6.5	$6.8	$7.1	$7.3

DIRECT BENEFITS

The Massachusetts businesses that buy or sell materials, tools, fuels, and machinery used in the operation of commercial radio broadcasting or television transmission are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit from the sales tax exemption in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt products to Massachusetts businesses are also direct beneficiaries.

Buyers who directly benefit from this sales tax exemption are mostly radio and television businesses and contractors acting as agents of these businesses. Table 2 below shows annual payroll, sales, and employment statistics for the *Radio and Television Broadcasting Industry* in Massachusetts from the U.S. Census Bureau.

Table 2. Annual Payroll, Sales, and Employment of the Radio and Television Broadcasting Industry in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
5151	Radio and television broadcasting	88	122	$997.0	$295.0	3,928
51511	Radio broadcasting	55	76	$272.7	$91.3	1,444
51512	Television broadcasting	35	46	$724.3	$203.8	2,484

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The 2022 Economic Census has yet to be released.

According to the U.S. Census Bureau, Massachusetts had 88 firms in the radio and television broadcasting industries in 2017. The radio broadcasting industry had 55 firms employing 1,444 people and generated $91.3 million in annual payroll and $272.7 million in annual sales. The television broadcasting industry had 35 firms employing 2,484 people and generated $203.8 million in annual payroll and $724.3 million in annual sales.

Sellers who directly benefit from this sales tax exemption are relatively harder to identify. One beneficiary may be the "*Radio and television broadcasting and wireless communications equipment manufacturin*g" industry (NAICS code 334220). According to the 2017 Economic Census, this industry had 38 firms in Massachusetts employing 6,414 people and generated $559.7 million in annual payroll and $2.4 billion in annual sales. Please note that 1) not all products produced by this industry are exempted by this tax expenditure and 2) out-of-state businesses in this industry could also be direct beneficiaries if they sell exempt products to Massachusetts businesses.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for materials, tools, fuels, and machinery used in commercial radio and television broadcasting) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt products, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[1]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact

[1] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits discussed so far, there may also be positive externalities to consider when evaluating this tax expenditure. A positive externality occurs when the production and/or consumption of a good or service exerts a positive effect on a third party independent of the transaction. For example, radio and television broadcasting firms produce and broadcast comprehensive coverage of news and current affairs, sports, and other entertainments, the benefits of which extend beyond individual consumers. Hence, the society at large could benefit from a thriving radio and television broadcasting sector.

The policy goal of this tax expenditure is assumed to be to promote information dissemination and entertainment and support the radio and television broadcasting industries. Due to the positive externalities mentioned above, the tax expenditure may help achieve this policy goal. Please note, this exemption would apply to traditional broadcasters and to cable broadcasters, but presumably not to Internet streaming or other Internet services.

Digitization of content has changed the structure of radio and television broadcasting in recent years. On the demand side, more content is distributed to audiences through online streaming service providers such as Netflix, Amazon Prime Video, Disney+, which provide home viewers with television content across multiple electronic devices. The COVID-19 pandemic may have accelerated this trend. On the supply side, digitization of content has enabled production companies to distribute their own content at lower costs, therefore reducing the demand for services from other distributors. The exemption has limited current relevance due to an industry shift to streaming service providers.

SIMILAR TAX EXPENDITURE OFFERED BY OTHER STATES

DOR is not aware of any other state with a similar tax expenditure.

Template for Evaluating Expenditures

Name of Expenditure: 1.309 & 2.308 Expensing of Research and Development Expenditures in One Year	**Annual cost:** $3.4 M in FY23	**Year of adoption:** 1986	**Sunset date:** Expires 2022 under Code

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance

☒ Investment

☒ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☐ Access to opportunity

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	x	☐	☐
The TE's benefit justifies its fiscal cost	☐	☐	x	☐
The TE is claimed by its intended beneficiaries	☐	☐	x	☐
The TE is claimed by a broad group of taxpayers	☐	x	☐	☐
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	x	☐	☐
The TE is relevant today	x	☐	☐	☐
The TE is easily administered	☐	☐	☐	x
Business only -The TE is beneficial to smaller businesses	☐	☐	x	☐
Individuals only -The TE benefits lower income taxpayers	x	☐	☐	☐

Comments

The Commission members had difficulty in rating this tax expenditure due to its 2022 federal expiration date. Given this expiration, the tax expenditure appears not to have continuing relevance. However, it is possible that the federal expensing rules for R&D will be renewed by federal legislation, in which case Massachusetts would again allow such expensing as well. The Commission members viewed the state conformity on the federal tax expenditure rules as an appropriate element of the set of state tax expenditures designed to incentivize R&D in the Commonwealth and do not have concerns about the potential renewal of the state tax expenditure in the event that the federal expensing rules may be renewed in future tax periods.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Expensing Research and Experimental Expenditures in One Year
TAX EXPENDITURE NUMBER	1.309 & 2.308
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code § 174
YEAR ENACTED	1986
REPEAL/EXPIRATION DATE	2022
ANNUAL REVENUE IMPACT	For FY2023, $0.2 million (personal income tax), $3.2 million (corporate and business excise tax).
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure:	**Is the purpose defined in the statute?**
Prior to tax year 2022, for federal purposes taxpayers could elect to immediately deduct research and experimental expenditures that they would otherwise have had to capitalize and deduct over a period of 5 years. Starting with tax year 2022 all expenditures for research conducted in the U.S must be capitalized and deducted over 5 years. Expenditures incurred outside the U.S. must be capitalized and deducted over 15 years. Massachusetts generally conforms to the federal rules for deducting research and experimental expenditures. This conformity resulted in a Massachusetts tax expenditure for tax years prior to 2022.	The statute does not explicitly state the purpose of this tax expenditure.

What are the policy goals of the expenditure?	Are there other states with a similar Tax Expenditure?
DOR assumes that the tax expenditure was intended to encourage research and development.	Most states adopt the federal deduction for research and experimental expenditures. States that conform to Internal Revenue Code (“Code”) § 174 as amended will no longer allow the immediate deduction of research and experimental expenditures and will require capitalization of such expenditures starting with tax year 2022. States that follow earlier versions of the Code may continue to allow the immediate deduction of research and experimental expenditures. States that will require capitalization include Connecticut, Maine, New York, Rhode Island, and Vermont. California continues to allow the immediate deduction because it has its own state-specific cost recovery rules.

INTRODUCTION

Prior to tax year 2022, Internal Revenue Code ("Code") § 174 allowed taxpayers to elect to deduct research and experimental expenditures in the year the expenditures were incurred. If the election was not made, Code § 174 required taxpayers to capitalize the expenditures and deduct them over a 5-year period. Therefore, the immediate deduction constituted a federal tax expenditure. Effective for tax year 2022 and thereafter, Code § 174 was revised to require all research and experimental expenditures incurred in the U.S. to be capitalized and deducted over 5 years. Such expenditures incurred outside the U.S. must be capitalized and deducted over 15 years. Research and experimental expenditures are comprised of expenses incurred in an experimental setting for the purpose of discovering information that would develop or improve a product. See Treas. Reg. § 1.174-2.

Massachusetts conforms to Code § 174 as currently in effect for both corporate income tax and personal income tax purposes. This conformity resulted in a deferral of Massachusetts tax for tax years prior to 2022 and constituted a Massachusetts tax expenditure for those years. The expenditure ceases to exist beginning with tax year 2022 because all research and experimental expenditures incurred in those years must be capitalized and deducted over a period of years under Code § 174 as revised.

POLICY GOALS

DOR assumes that the tax expenditure was intended to encourage research and development.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $3.4 - $46 million per year during FY19-FY23. See Table 1 below. By tax type, the revenue loss estimates range from $0.2 million to $1.2 million for personal income tax and $3.2 million to $45.4 million for corporate excise. Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report prepared by the Joint Committee on Taxation (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the federal estimates for the differences between federal and state fiscal year,[2] effective tax rates, and size of tax base.

[1] The JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, the JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/.
[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

Table 1. Revenue Loss Estimates for Expensing Research and Experimental Expenditures in One Year ($ Million)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise Tax	$45.4	$42.5	$32.2	$17.0	$3.2
Personal Income Tax	$0.6	$1.2	$0.8	$0.6	$0.2
Total	$46.0	$43.7	$32.0	$17.6	$3.4

DIRECT BENEFITS

Data from IRS form 4562 is used to capture possible beneficiaries of the tax benefit. After matching IRS form 4562 data and Massachusetts return data, DOR was able to estimate that in 2018, about 600 corporate excise filers and about 50 personal income taxpayers benefited from this expenditure.[3] DOR was able to tabulate the following statistical information on potential corporate beneficiaries using the corporate excise data.[4] Tables 2 through 4 below show the percentage of impacted corporations, and the percentage of tax reported by these impacted corporations by *range of taxable income*, by *range of employees*, and by *industry*.

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Impacted Corporations	% of Total Tax Reported by the Impacted Corporations
<$0	56.2%	5.4%
$0 to $9,999	28.4%	2.9%
$10,000 to $99,999	5.0%	1.1%
$100,000 to $999,999	6.8%	11.4%
$1,000,000 to $9,999,999	3.2%	19.8%
$10,000,000 or more	0.4%	59.4%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562).
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by taxable income range, corporations with negative taxable income have the highest percentage of impacted corporations, at 56.2% (see second column). Corporations in this taxable income range represent 5.4% of the total tax reported by the impacted corporations (see third column). While corporations in the

[3] Please note that the exact number of taxpayers benefiting from this tax expenditure could not be determined due to data limitations.
[4] We were not able to create same tabulations for the personal income tax filers due to data limitations.

taxable income range of $10,000,000 or more have the lowest percentage of impacted corporations, at 0.4% (see second column), they have the highest percentage of total tax reported, at 59.4% (see third column).

Table 3. Impact on Corporate and Business Taxpayers by *Range of Employees*:

Employees Range	% of Impacted Corporations	% of Total Tax Reported by the Impacted Corporations
Less than 5	42.2%	5.6%
5 to 49	28.9%	14.6%
50 to 99	7.3%	2.0%
100 to 199	7.5%	4.1%
200 to 499	5.5%	2.7%
500 or more	8.6%	71.0%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562).
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by range of employees, 71.1% of all impacted corporations have less than 50 employees (42.2% plus 28.9%, see second column), contibuting 20.2% of total tax reported by the impacted corporations (5.6% plus 14.6%, see third column). On the other hand, 8.6% of all impacted corporations have 500 more employees (see second column), representing 71% of total tax reported (see third column).

Table 4. Impact on Corporate and Business Taxpayers by *Industry*:

Industry	% of Impacted Corporations	% of Total Tax Reported by the Impacted Corporations
11 Agriculture, Forestry, Fishing and Hunting	0.2%	0.0%
22 Utilities	0.2%	0.0%
23 Construction	1.2%	0.0%
31-33 Manufacturing	26.4%	33.3%
42 Wholesale Trade	6.8%	5.4%
44-45 Retail Trade	1.8%	0.2%
48-49 Transportation and Warehousing	0.8%	0.9%
51 Information	7.6%	49.0%
52 Finance and Insurance	2.2%	0.5%
53 Real Estate and Rental and Leasing	0.6%	0.0%
54 Professional, Scientific, and Technical Services	42.8%	9.7%
55 Management of Companies and Enterprises	3.6%	0.1%

56 Administrative and Support and Waste Management and Remediation Services	1.2%	0.1%
61 Educational Services	0.4%	0.0%
62 Health Care and Social Assistance	2.2%	0.4%
71 Arts, Entertainment, and Recreation	0.2%	0.0%
72 Accommodation and Food Services	0.2%	0.0%
81 Other Services (except Public Administration)	1.2%	0.0%
Others or unmatched	0.4%	0.2%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562).
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by industry, impacted corporations were concentrated mostly in the following industries: Manufacturing and Professional, Scientific, and Technical Services. These industries account for 69.2% of impacted corporations (26.4% plus 42.8%, see second column) representing 43% of the tax liability (33.3% plus 9.7%, see third column).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs of financing the tax expenditure and the direct benefits resulting from the expenditure. The direct costs are borne by the Commonwealth (in the form of the revenue reduction caused by the tax expenditure) or by residents and businesses (in the form of government spending reductions or tax increases needed to offset that revenue reduction). The direct benefits inure to employees in the form of lower personal income taxes. In this instance, the direct costs to the Commonwealth, namely the corporate, business, and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

There are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy is larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect". [5]

[5] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states adopt the federal research deduction for research and experimental expenditures. States that conform to the Code § 174 as amended will no longer allow the immediate deduction of research and experimental expenditures and will require capitalization of such expenditures starting with tax year 2022. States that follow earlier versions of the Code may continue to allow the immediate deduction of research and experimental expenditures. States that will require capitalization include Connecticut, Maine, New York, Rhode Island, and Vermont. California continues to allow the immediate deduction because it has its own state-specific cost recovery rules.

Template for Evaluating Expenditures

Name of Expenditure: 3.421 Exemption for Films	**Annual cost:** $0.8M-$3.6M	**Year of adoption:** 1967	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Reduce sales taxation of business inputs for movie theaters

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost		x		
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today	x			
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers				

Comments (3.421 Exemption for Films)

This tax expenditure reduces sales tax burden on movie theaters by exempting the theaters' rental of physical film media from tax. As a service provider, a theater would pay sales tax on film rentals as tangible property inputs, absent this TE. The exemption has limited current relevance due to an industry shift to downloading films being exhibited, but it presumably continues to benefit traditional theaters that compete with streaming services which, in turn, do not have a sales tax burden under current law.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Films
TAX EXPENDITURE NUMBER	3.421
TAX EXPENDITURE CATEGORY	Exemptions for Specified Uses of Product/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(m)
YEAR ENACTED	1967
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $0.8 - $3.6 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Motion picture films sold for commercial exhibition are exempt from sales tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the expenditure was intended to exempt one of the key business inputs of exhibitors in order to prevent sales tax from being either built into the charge for movie admission, which itself is explicitly exempt from the sales tax, or driving up the cost of operating a television station or movie theater.	**Are there other states with a similar Tax Expenditure?** Other states with a similar tax expenditure include Connecticut, Georgia, Vermont, and Virginia.

INTRODUCTION

General Laws Chapter 64H, § 6(m) exempts from sales tax motion picture films sold or leased in Massachusetts for commercial exhibition. Commercial exhibition includes showing motion picture films at cinemas or on television stations or at other premises where films are exhibited for commercial purposes.

When the exemption was enacted, film distributors provided physical prints of films to exhibitors. As technology advanced, distributors began to supply film content to exhibitors in digital form on disk drives. These transfers of tangible personal property would have been taxable in the absence of the exemption. Currently, it is common for distributors to provide film content via electronic download. Transfers of products by electronic download (other than prewritten computer software) are not subject to Massachusetts sales tax

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax (e.g. paper, desks, computers, etc., purchased for office use would generally be taxable). The exclusion of sales for resale and the application of certain exemptions prevent the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, businesses that show films would be required to pay sales or use tax when they purchase or rent the films. The sale for resale exclusion does not apply to the businesses' purchases of films because the business is not reselling the film. Rather, it is selling admission tickets to view the film, sales of which are explicitly not subject to sales tax.

POLICY GOALS

DOR assumes that the tax expenditure is intended to exempt exhibitors' business inputs in order to prevent sales tax from either being built into the charge for movie admission, which itself is explicitly exempt from the sales tax, or driving up the cost of operating a television station or movie theater.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $0.8 - $3.6 million per year during FY19-FY23. See Table 1 below. It should be noted that the decline in the expenditure estimates for FY2020 and FY2021 stems from the impact of COVID-19.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Films

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$3.6	$2.3	$0.8	$1.6	$2.9

DOR does not have in-house data to measure sales of the exempt products. The estimates reported above are based on data from the National Association of Theater Owners, the 2017 economic census from the U.S. Census Bureau, Statista, and other sources. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in Table 1 may have significant estimation uncertainty and should be used with caution.

DIRECT BENEFITS

The Massachusetts businesses that buy or sell exempt products/services (motion picture films for commercial exhibition) are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit from the sales tax exemption in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

Sellers of this exempt product are mostly businesses in the industry of "Motion Picture and Video Distribution". Businesses in the industry of "Motion picture and video production" may also distribute films. Table 2 reports statistics for such sellers in Massachusetts. It indicates that Massachusetts had 234 firms (with 237 establishments)[1] in 2017 in the

[1] An establishment is a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments.
A firm is a business organization consisting of one or more domestic establishments in the same geographic area and industry that were specified under common ownership or control. The firm and the establishment

industry of "Motion Picture and Video production" according to the U.S. Census Bureau. These firms employed 1,066 people generating $60.2 million in annual payroll. However, as the number of film distributors in Massachusetts is quite small, U.S. Economic Census confidentiality guidelines prevent the publication of data for the industry of "Motion Picture and Video Distribution". Please note that out-of-state sellers are also direct beneficiaries if they distribute motion picture films to Massachusetts businesses.[2]

Table 2. Annual Payroll, Sales, and Employment of the Industry of Motion Picture and Video Production or Distribution in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
512110	Motion picture and video production	234	237	Q	$60.2	1,066
512120	Motion picture and video distribution	D	D	Q	D	100 to 249 employees

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The 2022 Economic Census has yet to be released.
Q: Revenue not collected at this level of detail for multi-establishment firms.
D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals.

Buyers of this exempt product are mostly Massachusetts businesses in the industry of "Motion Picture and Video Exhibition" and the industry of "Television Broadcasting". Table 3 below indicates that Massachusetts had 51 firms (with 88 establishments) in 2017 in the industry of "Motion Picture and Video Exhibition" according to the U.S. Census Bureau. These firms employed 3,055 people generating $44.2 million in annual payroll and $337.1 million in annual sales. Table 3 also indicates that Massachusetts had 35 firms (with 46 establishments) in 2017 in the industry of "Television Broadcasting", and these firms employed 2,484 people generating $203.8 million in annual payroll and $724.3 million in annual sales. The Cinema Treasures[3] website indicates that there are currently 135 cinemas in operation in Massachusetts. Online streaming services providers such as Netflix, Amazon Prime Video, Disney+, when buying or licensing films from distributors, could conceivably be direct beneficiaries as well, but it is likely that only a small portion of such sales take place in Massachusetts.[4]

are the same for single-establishment firms. For each multi-establishment firm, establishments in the same industry within a geographic area will be counted as one firm; the firm employment and annual payroll are summed from the associated establishments.

[2] According to the 2017 Economic Census, there were 13,812 motion picture and video production firms and 340 motion picture and video distribution firms nationwide.

[3] Cinema Treasures (2021) *Movie Theaters in Massachusetts* http://cinematreasures.org/theaters/united-states/massachusetts

[4] These businesses may be included in the industry of "Internet Publishing and Broadcasting and Web Search Portals" with NAICS code of 519130. However, many firms in this industry may be not buyers of the exempt

Table 3. Annual Payroll, Sales, and Employment of the Industry of Motion Picture and Video Exhibition and the Industry of Television Broadcasting in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
51213	Motion picture and video exhibition	51	88	$337.1	$44.2	3,055
51512	Television Broadcasting	35	46	$724.3	$203.8	2,484

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The 2022 Economic Census has yet to be released.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for the commercial exhibition of motion pictures) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers or sellers of the exempt product, which is the sales tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[5]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt such models given their complexity

product discussed in this report. Some data on online streaming services may be found from other sources, like Statista.

[5] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

and the data limitation. Although it is difficult to measure the total impact of this tax expenditure, there are studies on the economic impact of the movie theater industry[6] or the industry of television and cable broadcasting[7] themselves.

We note that as a result of the COVID-19 pandemic, movie theaters were shut down for several months in calendar year 2020, and when permitted to re-open had to comply with various capacity restrictions. These limits reduced admission and concession sales. The negative revenue impact of COVID-19 on the movie theaters resulted in a decline in the FY2020 and FY2021 tax expenditure estimates.

Digitization of content has changed the structure of film distribution in recent years. On the demand side, more films are distributed to audiences through online streaming service providers such as Netflix, Amazon Prime Video, Disney+, which provide home viewers with premium movies and television content across multiple electronic devices. The COVID-19 pandemic may have accelerated this trend. On the supply side, digitization of content has enabled film production companies to distribute their own content at lower costs, therefore reducing the demand for services from other film distributors.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Other states with specific exemptions for sales of films for commercial exhibition include Connecticut, Georgia, Vermont, and Virginia.

[6] https://www.boxofficepro.com/wp-content/uploads/2021/08/NATO-Econ-Impact-Final-Report-2021-August-16th.pdf

[7] https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1021&context=nerc_pub

Template for Evaluating Expenditures

Name of Expenditure: 3.109 Exemption for Cement Mixers	**Annual cost:** $1.6M-$1.7M	**Year of adoption:** 1971	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply): unsure

Business:
- ☐ Job creation & maintenance
- ☒ Investment
- ☐ Competitiveness/Strategic
- ☐ Health/Environment/Social Justice
- ☒ Other: To ensure the tax is imposed only on finished products

Individual:
- ☐ Relief of poverty
- ☐ Progressivity/assistance to low earners
- ☐ Access to opportunity
- ☐ Health/Environment/Social Justice
- ☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost		x		
The TE is claimed by its intended beneficiaries		x		
The TE is claimed by a broad group of taxpayers		x		
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		x		
The TE is relevant today		x		
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers				

Comments (3.109 Exemption for Cement Mixers)

The tax expenditure exempts concrete mixing units mounted on the back of trucks from the sales and use tax. Spare parts for such units are also exempt. However, the truck chassis is subject to sales and use tax. Absent the exemption afforded by this tax expenditure, suppliers of concrete would be required to pay sales or use tax when they purchase concrete mixing units mounted (or to be mounted) on trucks. 35 states, including the other New England states with a sales tax, generally exempt cement mixers as manufacturing equipment or machinery. However, no other state has a statutory exemption specifically exempting cement mixers. DOR does not have in-house data to measure sales of the exempt products. The estimates are based on data from the U.S. Census Bureau, market research firms such as IMARC Group and Fact.MR, and other sources. Due to the use of external data and the limitations of these data for estimating this tax expenditure, the estimates may have a high estimation uncertainty and should be used with caution.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Cement Mixers
TAX EXPENDITURE NUMBER	3.109
TAX EXPENDITURE CATEGORY	Exempt Products/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(y)
YEAR ENACTED	1971
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $1.6 million during FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Concrete mixing units mounted on the back of trucks are exempt from sales tax. Spare parts for such units are also exempt. The truck chassis is subject to sales tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to spur economic development through construction projects, and to ensure that tax is imposed only on finished products, rather than multiple times on companies during construction.	**Are there other states with a similar Tax Expenditure?** No New England state has a similar statutory exemption (New Hampshire does not have a sales tax). However, cement mixers and repair parts may be exempt in other states as machinery used in manufacturing. New York, for example, does not have a statutory exemption for cement mixers, but the mixers are exempt as manufacturing machinery. In addition, because of a tax court ruling, concrete mixer trucks (including the chassis) may also qualify for the exemption in New York.

INTRODUCTION

The tax expenditure exempts concrete mixing units mounted on the back of trucks from the sales and use tax. Spare parts for such units are also exempt. However, the truck chassis is subject to sales and use tax.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sale tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax (e.g., paper, desks, or computers, etc., purchased for office use would generally be taxable.) The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, suppliers of concrete would be required to pay sales or use tax when they purchase concrete mixing units mounted (or to be mounted) on trucks. The sale for resale exclusion does not apply to the supplier's purchases of cement mixing units or the truck chassis because the supplier is not reselling either item. The truck chassis is subject to sales or use tax because it is being sold at retail and no exclusion or exemption applies. This is so even though the truck chassis represents a business input of the purchaser.

POLICY GOALS

DOR assumes that the policy goal of this expenditure is to spur economic development through construction projects. It also furthers the general policy goal evident in other expenditures of taxing only finished products, and not the components that make those products.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $1.6 - $1.7 million per year during FY19-FY23. See Table 1 below.[1]

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Cement Mixers

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$1.6	$1.6	$1.6	$1.7	$1.7

DIRECT BENEFITS

The Massachusetts businesses that produce, buy, and sell the exempt product are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt product to Massachusetts businesses are also direct beneficiaries.

Buyers of this exempt product are mostly, if not all, businesses in the construction industry. Table 2 below indicates that Massachusetts had 19,181 construction firms in 2017 according to the US Census Bureau.[2] These firms employed 140,470 people generating $10,415.7 million in annual payroll and $51,184.4 million in annual sales. The last row of the table also shows the relative size of the Massachusetts construction industry to that of the nation in terms of different variables.

Table 2. Annual Payroll, Sales, and Employment of the Construction Industry in Massachusetts and Nationwide

Area Name	2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
United States (US)	23	Construction	701,329	715,364	$1,994,166.0	$398,815.5	6,647,047
Massachusetts (MA)	23	Construction	19,181	19,250	$51,184.4	$10,415.7	140,470
% MA/US			2.7%	2.7%	2.6%	2.6%	2.1%

[1] DOR does not have in-house data to measure sales of the exempt products. The estimates reported in Table 1 are based on data from the U.S. Census Bureau, market research firms such as IMARC Group and Fact.MR, and other sources. Due to the use of external data and the limitations of these data for estimating this tax expenditure, the estimates may have a high estimation uncertainty and should be used with caution.

[2] Note that, DOR does not have an estimate of the number of construction firms that would actually buy the exempt products.

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The 2022 Economic Census has yet to be released.

Table 3 below reports data from the 2018 Statistics of U.S. Businesses (SUSB) for firms in the construction industry by employment size. The table shows that the majority of firms in the industry are small businesses with over ninety percent employing less than 20 people each (more than 93% or 18,265 divided by 19,608).

Table 3. Annual Payroll and Employment of Construction Industry by Enterprise Employment Size in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Enterprise Size	Number of Firms	Number of Establishments	Annual Payroll ($Millions)	Number of Employees
23	**Construction**	**Total**	**19,608**	**19,680**	**$11,385**	**144,846**
23	Construction	<5 employees	13,960	13,960	$1,240	21,356
23	Construction	<20 employees	18,265	18,266	$3,660	59,132
23	Construction	<500 employees	19,503	19,524	$9,400	124,975
23	Construction	500+ employees	105	156	$1,986	19,871

DOR does not have data on producers and retailers of the exempt product. The 2017 economic census indicates that there were 41 establishments producing concrete mixers in the U.S.[3], generating $329.8 million in annual sales. Given that the global cement mixer market reached a value of US $13 billion in 2020[4], the market share of U.S. made cement mixers is relatively small.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for the exempt product (concrete mixing units or replacement parts mounted on truck chassis) and direct benefits (to buyers and sellers of exempt product) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt product, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the

[3] Product with 2017 NAPCS collection code of “2012775003”.
[4] https://www.imarcgroup.com/cement-mixer-market.

chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[5]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits, there may also be externalities to consider when evaluating this tax expenditure. A negative or positive externality occurs when the production and/or consumption of a good or service exerts a negative or positive effect on a third party independent of the transaction. For example, water, sand, gravel (or crushed stone), and the binder of cement combine to produce concrete. To acquire these aggregates involves quarrying, which in turn create large amounts of dust, and the kilns that are used in the process that ultimately produces cement require significant amounts of energy as they need to reach a temperature of approximately 1,500 degrees centigrade[6]. A by-product of this process is large amounts of carbon dioxide (CO_2). By encouraging these activities, this tax expenditure will aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset the impact. On the other hand, by encouraging the construction of infrastructure, such as roads, bridges, airports, and other products that are often viewed as "public goods", this exemption generates positive externalities.

If a business must pay sales tax on concrete mixers and parts, then that tax becomes part of the cost of the construction projects. The business must then collect sales tax on its own products, if taxable, based on higher price that compensates for higher capital cost (higher cost of plants, infrastructure), with the result that a tax is being charged on a price that already contains taxes. This tax pyramiding invariably results in some industries being taxed more heavily than others, which violates the principle of neutrality and causes economic distortions. From the standpoint of avoiding tax pyramiding, this tax expenditure meets the policy goal.

[5] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf
[6] Rogers, L., (December 17, 2018). 'Climate change: The massive CO2 emitter you may not know about. *BBC News, Science*. https://www.bbc.com/news/science-environment-46455844

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

No other state has a statutory exemption specifically exempting cement mixers.

However, 35 states, including the other New England states with a sales tax, generally exempt cement mixers as manufacturing equipment or machinery. Generally, most of these states also have an exemption for parts for manufacturing equipment and machinery.

4 states (including New York) also exempt the truck chassis.

Template for Evaluating Expenditures

Name of Expenditure: 3.609 Exemption for Vessels or Barges of 50 Tons or Over	**Annual cost:** Average annual tax loss of $0.34 million during FY19 to FY23	**Year of adoption:** 1967, amended 1968	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic (Not effective)
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)			x	
The TE's benefit justifies its fiscal cost		x		
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		x		
The TE is relevant today	x			
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers				

Comments (3.609 Exemption for Vessels or Barges of 50 Tons or Over)
The tax expenditure exempts from sales tax transfers of vessels or barges of 50 tons burden or over when constructed in-state and sold by the builder. Sales of smaller vessels are generally subject to sales tax. The TERC strongly disagrees that this tax expenditure is claimed by a broad group of taxpayers. In 2017, Massachusetts had a total of 36 firms and 621 employees in the industry of ship and boat building and repairing. Data suggests that probably only a couple of firms in these two industries currently have shipyards capable of building a barge or vessel of 50 tons burden or more. All firms in these two industries are small businesses with most firms employing less than 20 people and most likely engage in only ship or boat repairing or building of significantly smaller vessels. The TERC strongly disagrees that this tax expenditure is relevant today.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Vessels or Barges of 50 Tons or Over
TAX EXPENDITURE NUMBER	3.609
TAX EXPENDITURE CATEGORY	Miscellaneous Sales and Use Tax Exemptions
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(o)
YEAR ENACTED	1967, amended 1968
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $0.34 million during FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Vessels or barges of 50 tons burden or over are exempt from sales tax when constructed in-state and sold by the builder.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the expenditure is intended to promote the shipbuilding industry in Massachusetts and foster competitiveness by eliminating sales tax on certain vessels and barges constructed in Massachusetts.	**Are there other states with a similar Tax Expenditure?** With regard to neighboring states, Connecticut has an exemption for vessels sold for out of state use. Rhode Island has a general exemption for the sale of all boats & vessels. Maine and Vermont do not have a similar exemption. New York has an exemption for the sale of commercial vessels engaged in interstate or foreign commerce. New Hampshire does not have a sales tax. Other states' rules are described in the body of the report.

INTRODUCTION

The tax expenditure exempts from sales tax transfers of vessels or barges of 50 tons burden or over when constructed in-state and sold by the builder. Sales of smaller vessels are generally subject to sales tax.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, Massachusetts ship builders would be required to collect sales or use tax when they build vessels or barges of 50 tons burden and sell them at retail. It is possible that the sale for resale exclusion might apply to such sales if the purchaser buys the vessel or barge to sell to its customers. However, in the absence of the exemption, the sales and use tax would apply to sales of vessels that purchasers will use themselves. This is so even if the purchasers use the vessels in their business operations.

POLICY GOALS

DOR assumes that the expenditure is intended to promote the shipbuilding industry in Massachusetts and foster competitiveness with other states with a similar expenditure by eliminating sales tax on certain vessels and barges constructed in Massachusetts.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $0.2 - $0.4 million per year during FY19-FY23. See Table 1 below. The estimates reported in Table 1 are based on shipbuilding industry data from the U.S. Census Bureau and other external sources.[1] Due to the use of external data and the limitations of these data for estimating this tax expenditure, the estimates may have significant estimation uncertainty and should be used with caution.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Vessels or Barges of 50 Tons Burden or Over

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$0.4	$0.2	$0.3	$0.4	$0.4

DIRECT BENEFITS

The builders/sellers and buyers of the exempt products (barges and vessels of 50 tons burden or over) are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax price" while builders/sellers benefit from the sales tax exemption in the form of receiving a higher "before tax price". The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

According to the U.S. Census Bureau, in 2017, Massachusetts had 11 firms in the industry of ship building and repairing. These firms employed 381 people generating $22.8 million in annual payroll and $76.9 million in annual sales. In the same year, Massachusetts had 25 firms in the industry of boat building, employing 240 people and generating $12.6 million in annual payroll and $60.9 million in annual sales. See Table 2 below.

[1] Data: http://shipbuildinghistory.com/, https://gladding-hearn.com/, https://www.fairhavenshipyard.com/.
Additional background information on maritime and shipbuilding industry: https://www.maritime.dot.gov/sites/marad.dot.gov/files/2021-06/Economic%20Contributions%20of%20U.S.%20Shipbuilding%20and%20Repairing%20Industry.pdf, https://fish-news.com/,(*Commercial Fisheries News*), https://www.nps.gov/nr/travel/maritime/ships.htm

Table 2. Annual Payroll, Sales, and Employment of the Industry of Ship and Boat Building in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
33661	Ship and boat building	36	36	$137.8	$35.4	621
336611	Ship building and repairing	11	11	$76.9	$22.8	381
336612	Boat building	25	25	$60.9	$12.6	240

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The next version will be 2022 Economic Census.

Table 3 reports data from the 2018 County Business Patterns for firms in the two industries mentioned above by employment size. The table shows that all firms in these two industries are small businesses with most firms employing less than 20 people.[2] Table 3 and information from other sources suggests that probably only a couple of firms in these two industries currently have shipyards capable of building a barge or vessel of 50 tons burden or more.[3] Most other firms likely engage in only ship or boat repairing or building of significantly smaller vessels.

Table 3. Annual Payroll and Employment of the Industry of Ship Building and Repairing and the Industry of Boat Building by Enterprise Employment Size in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Enterprise Size	Number of Firms	Number of Establishments	Annual Payroll ($Millions)	Number of Employees
336611	Ship building and repairing	Total	11	11	$23.3	390
336611	Ship building and repairing	<5 employees	4	4	$0.5	14
336611	Ship building and repairing	<20 employees	7	7	$2.6	50
336611	Ship building and repairing	<500 employees	11	11	$23.3	390

[2] According to the small business size standard developed by the U.S. Small Business Administration (SBA): https://www.sba.gov/sites/default/files/2019-08/SBA%20Table%20of%20Size%20Standards_Effective%20Aug%2019%2C%202019_Rev.pdf. A business (including its subsidiaries and affiliates) may be classified as a small business for SBA and federal contracting programs if the business employs not more than 1,250 people for the industry of 336611 or not more than 1,000 for the industry of 336612.

[3] Such as http://shipbuildinghistory.com/

336612	Boat building	Total	26	26	$14.7	290
336612	Boat building	<5 employees	11	11	$0.9	21
336612	Boat building	5-9 employees	10	10	$3.6	71
336612	Boat building	10-19 employees	4	4	$3.4	64
336612	Boat building	<20 employees	25	25	$8.0	156
336612	Boat building	<500 employees	26	26	$14.7	290

Source: The U.S. Census Bureau, 2018 County Business Patterns.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for sale of barges or vessels of 50 tons burden or over) and direct benefits (to buyers and builders/sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and builder/sellers of barges or vessels of 50 tons burden or over, which is the sales tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits, there may be negative externalities to consider when evaluating this tax expenditure. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, a shipyard involved in the building of large

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

vessels may cause noise and air pollution during the building process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

The tax expenditure almost certainly helps improve the state's business tax climate and helps maintain or increase the state's competitiveness. It is difficult to quantify how much this tax expenditure encourages the building of barges and ships of 50 tons burden or over in Massachusetts and spurs economic development in the state.[5] Currently, the ship and boat building industry in Massachusetts is relatively small compared to the entire country when measured by sales (0.4%), annual payroll (0.4%) and employment (0.5%).

Table 4. The Industry of Ship and Boat Building in Massachusetts as a percentage of the industry in U.S.

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue	Annual Payroll	Number of Employees
33661	Ship and boat building	2.6%	2.3%	0.4%	0.4%	0.5%
336611	Ship building and repairing	1.9%	1.6%	0.3%	0.4%	0.4%
336612	Boat building	3.1%	2.9%	0.6%	0.8%	0.7%

Source: Calculated by the Massachusetts Department of Revenue (DOR) using data from the 2017 Economic Census, U.S. Census Bureau.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

With regard to neighboring states, Connecticut has an exemption for vessels sold for out of state use, Rhode Island has a general exemption for the sale of all boats & vessels. Maine and Vermont do not have a similar exemption. New York has an exemption for commercial vessels engaged in interstate or foreign commerce. New Hampshire does not have a sales tax.

9 states – Alabama, California, Louisiana, Michigan, Minnesota, Mississippi, South Carolina, Texas and Wisconsin – have an exemption based on tonnage like Massachusetts, with the exempt tonnage ranging between 5 and 1000 tons. Louisiana, Mississippi and South Carolina each have an exemption for 50 ton or more vessels and barges. Wisconsin's

[5] Although we are not aware of any studies measuring how much this tax expenditure encourages the building of barges and ships of 50 tons burden or over in Massachusetts, there are many studies on the economic impact of the ship and boat building industry itself, see, for example, a report prepared by the U.S. Department of Transportation, Maritime Administration: https://www.maritime.dot.gov/sites/marad.dot.gov/files/2021-06/Economic%20Contributions%20of%20U.S.%20Shipbuilding%20and%20Repairing%20Industry.pdf

exemption is for vessels and barges of 50 tons or more when sold primarily for interstate or foreign commerce.

Georgia has an exemption for vessels sold for out of state use. Hawaii has a use tax exemption for the purchase of vessels used for interstate or foreign commerce.

7 states - Florida, Maryland, New Jersey, North Carolina, Ohio, Virginia and Washington – have a general exemption for the sale of vessels used for interstate or foreign commerce.

Template for Evaluating Expenditures

Name of Expenditure: 2.312 Expensing of Alternative Energy Units	**Annual cost:** None	**Year of adoption:** 1976	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☐ Competitiveness/Strategic
☒ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost	x			
The TE is claimed by its intended beneficiaries	x			
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	x			
The TE is relevant today			x	
The TE is easily administered		x		
Business only -The TE is beneficial to smaller businesses	x			
Individuals only -The TE benefits lower income taxpayers				

Comments (2.312 Expensing of Alternative Energy Units)
To qualify for the deduction, the statute provides that equipment must meet certain technical standards that are required to be set by a now-defunct state agency – the Bureau of Building Construction. The Bureau of Building Construction was abolished in 1980 and was absorbed by the Division of Capital Asset Management & Maintenance ("DCAMM"). There is now no certification process in place and no current published guidance in effect. In the absence of that agency or a successor agency to certify the property, no exemption can be allowed. Members discussed that the tax expenditure is not currently active, although the statute authorizing it is still in effect, because the deduction requires certification by a state agency that no longer exists.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Expensing of Alternative Energy Units
TAX EXPENDITURE NUMBER	2.312
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax
LEGAL REFERENCE	M.G.L. c. 63, § 38H
YEAR ENACTED	1976
REPEAL/EXPIRATION DATE	Not currently in effect
ANNUAL REVENUE IMPACT	None
NUMBER OF TAXPAYERS	None
AVERAGE TAXPAYER BENEFIT	Not applicable

Description of the Tax Expenditure: A corporation is permitted by statute to elect to take an immediate deduction for the cost of certain solar or wind power equipment located in Massachusetts and used exclusively in the corporation's business. Such costs otherwise must be capitalized and depreciated. The deduction is not currently claimed due to the availability of other incentives for such equipment and the absence of information about eligibility (see discussion below).	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure. However, we infer that it was enacted to encourage Massachusetts businesses that are taxable under chapter 63 to use alternative energy sources.
What are the policy goals of the expenditure? DOR assumes the goal to be the encouragement of investment in alternative energy equipment by allowing an immediate deduction of the cost of such equipment instead of requiring the equipment to be capitalized and deducted over a period of years.	**Are there other states with a similar Tax Expenditure?** Generally, no. However, many states offer other types of incentives to purchase and install alternative energy equipment (see discussion below).

INTRODUCTION

Massachusetts General Laws chapter 63, § 38H, adopted in 1976, allows a corporation to deduct "expenditures paid or incurred during the taxable year with respect to the installation of any solar or wind powered climatic control unit and any solar or wind powered water heating unit, or any other type of unit or system powered thereby." Without this provision, such costs would have to be capitalized and depreciated. To qualify for the deduction, the equipment must be located in Massachusetts and used exclusively in the trade or business of the corporation. The statute provides that equipment must meet certain technical standards that are required to be set by a now-defunct state agency – the Bureau of Building Construction.

In the past, a corporation was required to submit technical documentation regarding the equipment to the Bureau of Building Construction for certification of the deduction. The Bureau of Building Construction was abolished in 1980 and was absorbed by the Division of Capital Planning and Operations ("DCPO"), which was subsequently renamed the Division of Capital Asset Management & Maintenance ("DCAMM"). There is now no certification process in place and no current published guidance in effect.

DOR has received few inquiries regarding the deduction. One of the reasons for this may be that there are other tax benefits available to corporations with respect to alternative energy equipment that are generally more favorable, such as expensing under Internal Revenue Code §§ 179, 179D and depreciation under Code §§ 167, 168. Further, as noted, no state agency is currently responsible for issuing certification standards, guidelines or regulations defining eligible equipment or corporations seeking to take the § 38H deduction.

POLICY GOALS

We infer that the deduction was intended to encourage investment in alternative energy equipment by allowing an immediate deduction of the cost of such equipment instead of requiring the equipment to be capitalized and deducted over a period of years.

DIRECT COSTS

Given that no deduction has been claimed due to the reason mentioned above, the direct costs have been zero.

DIRECT BENEFITS

Given that no deduction has been claimed due to the reason mentioned above, no actual benefits have accumulated.

EVALUATION: COMPARING COSTS AND BENEFITS

Both costs and benefits for this tax expenditure are currently zero.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

DOR is not aware of other states that allow a similar deduction for alternative energy equipment. However, it is not uncommon for states to offer income tax credits, sales tax deductions or property tax exemptions for such equipment.

Template for Evaluating Expenditures

Name of Expenditure: 2.501 Nontaxation of Certain Energy Property	**Annual cost:** None	**Year of adoption:** 1976	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☒ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	X			
The TE's benefit justifies its fiscal cost	X			
The TE is claimed by its intended beneficiaries	X			
The TE is claimed by a broad group of taxpayers	X			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	X			
The TE is relevant today	X			
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses	X			
Individuals only -The TE benefits lower income taxpayers				

Comments (2.501 Nontaxation of Certain Energy Property)
This tax expenditure has not been active since 1980, when the legislature abolished the agency that had been responsible for administering it, the Bureau Construction, and created the Division of Capital Asset Management & Maintenance ("DCAMM"). The Bureau of Construction's function in certifying alternative energy property was not specifically delegated to any successor agency. No certification standards, guidelines or regulations have been established by DCAMM or any other Massachusetts agencies for corporations seeking to take the alternative energy property deduction.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Nontaxation of Certain Energy Property
TAX EXPENDITURE NUMBER	2.501
TAX EXPENDITURE CATEGORY	Exclusions from Property Component
TAX TYPE	Corporate & Business Excise Tax
LEGAL REFERENCE	M.G.L. c. 63, § 38H
YEAR ENACTED	1976
REPEAL/EXPIRATION DATE	Not currently in effect
ANNUAL REVENUE IMPACT	None
NUMBER OF TAXPAYERS	None
AVERAGE TAXPAYER BENEFIT	Not applicable

Description of the Tax Expenditure: An exemption from the tangible property measure of the corporate excise is provided for certain tangible property that is used in the production of alternative energy.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR presumes that the expenditure is intended to encourage investment in alternative energy equipment.	**Are there other states with a similar Tax Expenditure?** Relatively few states impose a state level tax on tangible property. Of those states, none allow a specific exemption for alternative energy property.

INTRODUCTION

This tax expenditure allows a corporate excise deduction for certain alternative energy property. It is not currently active, although the statute authorizing it is still in effect, because the deduction requires certification by a state agency that no longer exists. In the absence of that agency or a successor agency to certify the property, no exemption can be allowed. These circumstances are further explained below.

In addition to a tax on net income, the Massachusetts corporate excise also imposes a tax on net worth or tangible personal property. The tax on tangible personal property applies if the book value of the taxpayer's tangible personal property located in Massachusetts and not subject to local taxation is ten percent or more of the taxpayer's total assets (with certain adjustments). If this is the case, the non-income measure of the corporate excise is based on the book value of the corporation's tangible property located in Massachusetts and is not subject to local tax.

The statute provides for a deduction from tangible property subject to the excise for "expenditures paid or incurred during the taxable year with respect to the installation of any solar or wind powered climatic control unit and any solar or wind powered water heating unit or any other type unit or system powered thereby." The statute further provides that the exemption is limited to equipment "for which the manufacturer's British thermal unit impact statement has been submitted to the director of the bureau of building construction and which have been certified by said director as complying with applicable provisions of regulations and standards issued by him pursuant to law."

Historically, the Bureau of Building Construction was responsible for setting construction standards in Massachusetts. In 1980, it was absorbed by the Division of Capital Planning and Operations ("DCPO"), now the Division of Capital Asset Management & Maintenance ("DCAMM"). The Bureau of Construction's function in certifying alternative energy property was not specifically delegated to any successor agency. No certification standards, guidelines or regulations have been established by DCAMM or any other Massachusetts agencies for corporations seeking to take the alternative energy property deduction.

As a result of these circumstances this tax expenditure is not active.

POLICY GOALS

DOR assumes the goal of the expenditure is to encourage investment in alternative energy equipment.

DIRECT COSTS

Given that no deduction has been claimed due to the reason mentioned above, the direct costs have been zero.

DIRECT BENEFITS

Given that no deduction has been claimed due to the reason mentioned above, no actual benefits have accumulated.

EVALUATION: COMPARING COSTS AND BENEFITS

Both costs and benefits for this tax expenditure are currently zero.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Relatively few states impose a state-level tax on tangible property. Of these states, none allow an exemption for alternative energy property.

Template for Evaluating Expenditures

Name of Expenditure: 1.103 Exemption of Earnings on Stock Bonus Plans, Pensions or Profit-Sharing Trusts	**Annual cost:** $1.3 billion in FY23	**Year of adoption:** 1973	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:
- ☐ Job creation & maintenance
- ☐ Investment
- ☐ Competitiveness/Strategic
- ☐ Health/Environment/Social Justice
- ☐ Other:

Individual:
- ☐ Relief of poverty
- ☐ Progressivity/assistance to low earners
- ☐ Access to opportunity
- ☐ Health/Environment/Social Justice
- ☒ Other: Retirement saving

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers			x	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses		x		
Individuals only -The TE benefits lower income taxpayers			x	

Comments (1.103 Exemption of Earnings on Stock Bonus Plans, Pensions or Profit-Sharing Trusts)
According to the DOR summary, no state departs from the federal treatment of these plans, which allow employers to build up retirement funds tax-free on behalf of their employees. The accrued income is taxed by Massachusetts upon realization if the retiree resides in Massachusetts but not if otherwise.

The deferral is temporary to the extent that employees remain in Massachusetts after retirement as those employees will be subject to Massachusetts personal income tax on their retirement income. However, the deferral is permanent for employees who retire outside the Commonwealth as states are generally prohibited from taxing nonresidents on their income from retirement plans. Revenue loss estimates may be understated due to permanent deferrals caused by employees retiring out of state.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption of Earnings on Stock Bonus Plans, Pensions or Profit-Sharing Trusts
TAX EXPENDITURE NUMBER	1.103
TAX EXPENDITURE CATEGORY	Deferrals of Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	M.G.L. c. 62, § 5(b)
YEAR ENACTED	1973
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Annual Tax loss of $786.0- $1,333.1 million per year during FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Employee stock bonus plans, employee pension plans and employee profit-sharing plans are exempt from the Massachusetts personal income tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the policy goal is to promote the growth of assets in retirement funds by allowing investment income to accumulate tax-free until distribution. Conformity with federal definitions also simplifies tax compliance and administration by allowing the same general definitions to be used for Massachusetts and federal purposes.	**Are there other states with a similar Tax Expenditure?** No state taxes the income of employee stock bonus plans, employee pension plans or employee profit-sharing plans.

INTRODUCTION

Employee stock bonus plans, employee pension plans and employee profit-sharing plans are retirement vehicles exempt from the Massachusetts personal income tax under M.G.L. c. 62, § 5(b). Such plans typically are organized as trusts, which are generally subject to the personal income tax. See M.G.L. c. 62, § 10. Without the statutory exemption, the plans would be required to pay personal income tax on their investment income.

Stock bonus plans receive shares of an employer's stock at the employer's discretion. The plans hold the stock and accumulate dividends. Dividends and gain from the sale of stock can be used to fund retirement distributions to eligible employees.

Pension plans include any type of retirement plan that accepts contributions from employers or employees. Pension plans invest the contributions and use the amounts contributed and investment returns to fund employee retirement distributions. 401(k) and similar plans fall into this category.

Profit-sharing plans are a type of pension plan that receives contributions only from employers – not employees. The plan invests the contributions to fund employee retirement.

The expenditure allows amounts contributed to these plans to grow free of Massachusetts tax until they are distributed to retirees. The distributions are then treated as taxable income to the employees.

The Internal Revenue Code (the "Code") contains a similar exemption in Section 401(a). Eligibility for the Massachusetts exemption is tied to the eligibility rules for the federal exemption in that the definitions of stock bonus plans, pension plans and profit-sharing plans are based on the corresponding federal definitions. However, apart from the use of the federal definitions, M.G.L. c. 62, § 5(b) stands as an independent provision of state law.

The exemption of stock bonus plans, pension plans and profit-sharing plans from the personal income tax results in a deferral of state tax on income earned by the plans. The deferral is temporary to the extent that employees remain in Massachusetts after retirement as those employees will be subject to Massachusetts personal income tax on their retirement income. However, the deferral is permanent for employees who retire outside the Commonwealth as states are generally prohibited from taxing nonresidents on their income from retirement plans. See 4 USCA § 114. The deferral constitutes a Massachusetts tax expenditure.

POLICY GOALS

DOR assumes that the policy goal is to promote the growth of assets in retirement funds by allowing investment income to accumulate tax-free until distribution. Conformity with federal definitions also simplifies tax compliance and administration by allowing the same general definitions to be used for Massachusetts and federal purposes.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $786.0- $1,333.1 million per year during FY19-FY23 (see the table below).

Tax Revenue Loss Estimates for Exemption of Earnings on Stock Bonus Plans, Pensions or Profit-Sharing Trusts

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$786.0	$901.4	$1,025.3	$1,173.6	$1,333.1

Massachusetts' revenue loss estimates are based on estimates prepared by the federal Joint Committee on Taxation ("JCT")[1] of the analogous federal exemption. The JCT reports the impact on federal tax collections resulting from the income tax deferral applicable to earnings on employee stock bonus plans, employee pension plans and employee profit-sharing plans. The JCT's estimates are shared down to Massachusetts based on the state's share of national wages and salaries. Given the use of external data and the fact that market gains are volatile and difficult to forecast, the revenue loss estimates are uncertain. Revenue loss estimates may be understated due to permanent deferrals caused by employees retiring out of state. Estimates reported in the table above should be used with extreme caution.

DIRECT BENEFITS

Employees working for employers who offer one or more of these plans are the direct beneficiaries of this tax expenditure. Employees pay no income tax on contributions and a plan pays no income tax on interest, dividends, and capital gains earned by the assets held by the plan. Employees pay income tax only when receiving distributions. DOR does not have information on the total number of beneficiaries of this tax expenditure.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts

[1] The Joint Committee on Taxation is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. https://www.jct.gov/

government spending or increases taxes to finance the deferred taxation of income) and direct benefits (to employees) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely loss from the deferral of income tax, are equal to the direct benefits afforded by the tax expenditure to the employees, which benefit from deferred tax payments on earnings from these plans.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. To measure indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

No state taxes the income of employee stock bonus plans, employee pension plans or employee profit sharing plans.

Template for Evaluating Expenditures

Name of Expenditure: 2.703 Exemption for Regulated Investment Companies	**Annual cost:** $400M – $502M	**Year of adoption:** 1992	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Avoid taxing mutual fund income at entity and shareholder level

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		X		
The TE's benefit justifies its fiscal cost				X
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers			X	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			X	
The TE is relevant today				X
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses		X		
Individuals only -The TE benefits lower income taxpayers	X			

Comments (2.703 Exemption for Regulated Investment Companies)
The TE allows for the avoidance of double taxation for RICs. It could be easy for an RIC to leave for another low-tax state if the TE were eliminated.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Regulated Investment Companies
TAX EXPENDITURE NUMBER	2.703
TAX EXPENDITURE CATEGORY	Entity Exempt from Taxation
TAX TYPE	Corporate & Business Excise Tax
LEGAL REFERENCE	M.G.L. c. 63, § 68C(8); MG.L. c. 63, § 30
YEAR ENACTED	July 1, 1992 (1992 Acts c. 133, § 398)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	$400 million to $502 million annually.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Regulated Investment Companies (RICs), also known as mutual funds, are investment vehicles that are eligible for favored tax treatment for federal tax purposes. Specifically, unlike most ordinary corporations, RICs may deduct dividends they pay to their shareholders for federal tax purposes. See Internal Revenue Code (the "Code") § 851. Massachusetts does not conform to the federal tax treatment of RICs, but in Massachusetts RICs are fully exempt from both the income and non-income measures of the corporate excise.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to promote the mutual fund industry and encourage investment, and to avoid taxing mutual fund income at both the entity and shareholder levels.	**Are there other states with a similar Tax Expenditure?** Most states that impose a corporate income tax follow the federal tax treatment of RICs (i.e., they allow a deduction for dividends paid). These states include California,

	Connecticut, Maine, New Hampshire, New York, and Vermont. Rhode Island imposes a low-rate gross receipts tax on RIC income. A minority of states exempt RICs from their corporate taxes completely. In addition to Massachusetts, these states include Delaware, New Jersey, and Texas. Finally, a few states tax RICs in the same manner as ordinary corporations.

INTRODUCTION

Regulated Investment Companies (RICs) are specialized corporations that serve as investment vehicles. RICs hold securities, receive earnings from those securities and pay out virtually all of their earnings to shareholders. They hire service providers for investment advice and administrative services. RICs are typically established by financial services corporations that sponsor the RIC, provide the RIC's corporate management, and market shares of the RIC to the investing public. The RIC's management decides whom to hire to provide investment advice and administrative services to the RIC. The service providers hired are frequently subsidiaries or affiliates of the financial services corporation that established the RIC. The RIC itself has no employees and no property other than the securities it holds and its own books and records. Federal tax and securities law imposes limitations on the type of assets RICs can hold and requires RICs to distribute at least 90% of their income as dividends to shareholders.

Federal tax law allows RICs a deduction for dividends paid, which is generally not available to other corporations. See Internal Revenue Code (the "Code") § 852(b). The Massachusetts exemption for RICs is a statutory provision that employs the federal definition of a RIC but is not otherwise tied to the federal deduction.

The Massachusetts corporate excise imposes a tax on a corporation's apportioned net income and a tax on the corporation's apportioned net worth or tangible property located in Massachusetts. See MG.L. c. 63, § 39. RICs are exempt from both taxes because they are not taxable corporations pursuant to MG.L. c. 63, § 68C(8). This exclusion constitutes a tax expenditure in Massachusetts because, absent the exclusion, RICs would be subject to the corporate excise.

POLICY GOALS

DOR assumes that the tax expenditure is intended to promote the mutual fund industry and encourage investment. RICs provide a convenient way to invest for small investors and others that want to avoid the time and expense involved with picking individual stocks and maintaining brokerage accounts. Note that RIC shareholders pay tax on the dividends they receive from RICs. The tax expenditure eliminates the tax at the RIC level, reducing the cost of operations for the RIC and improving investor returns. Such cost reduction also encourages financial firms to locate and expand in Massachusetts.

DIRECT COSTS

The estimated revenue loss (i.e., tax revenue the state could potentially collect if this tax expenditure were eliminated) from this tax expenditure is highly theoretical. The reason for this is that RICs could be formed and moved or relocated very easily and such revenue losses may never materialize. More specifically, if Massachusetts were to tax RICs as corporations, it is highly likely that the RICs in Massachusetts would move to low- or no-tax jurisdictions and significantly reduce their Massachusetts tax liability.

To estimate the hypothetical revenue loss impact of this tax expenditure, DOR examined IRS data based on RIC tax filings for tax years 2008 through 2018, and Massachusetts data based on informational returns filed with DOR by RICs for tax years 2017 and 2018.

Apportioned net income: In the absence of the tax expenditure RICs would be subject to the net income measure of the corporate excise and allowed a deduction for dividends paid. The aforementioned IRS and DOR data indicate a potential revenue gain from the tax on net income in the range of $10,000 to $1.6 million annually.

Apportioned net worth or tangible property located in Massachusetts: In the absence of the tax expenditure RICs would be subject to the net worth or property measure of the excise. The aforementioned data indicate a potential revenue gain from the tax on net worth or tangible property located in Massachusetts in the range of $400 million to $500 million annually.

Since these estimates should be considered hypothetical, they should be used with caution. As indicated above, if this tax expenditure were eliminated and net worth tax were nominally imposed on RICs, it is highly likely that these companies would move to low- or no-tax jurisdictions to avoid the Massachusetts tax liability.

DIRECT BENEFITS

RICs can avoid double taxation through this tax expenditure. The direct beneficiaries of the tax expenditure include RIC sponsors and shareholders.

Although not subject to the corporate excise, RICs file informational returns with DOR. DOR annually receives about 4,000 such returns. These returns have very limited data on RIC income, which were not useful, but about 200-300 of these returns come with schedules that have balance sheet data. By using these balance sheet data, DOR was able to calculate a net worth distribution (see the table below). The table shows that, in 2018, roughly 23% of RIC filers reported more than $1 billion net worth each. These filers represented 79% of the total net worth of all RIC filers.

2018 RIC Net Worth Distribution by Net Worth Range (*)

Net Worth Range	Count	Amount
Less Than $50M	28%	1%
$50M But Less Than $100M	10%	1%
$100M But Less Than $500M	29%	9%
$500M But Less Than $1B	11%	11%
$1B But Less Than $5B	21%	54%
$5B and Above	2%	25%
	100%	100%

(*) Estimated using 2018 MA Informational returns filed by RICs

Attached publication by Investment Company Institute (ICI), *2021 Investment Company FACT BOOK: A Review of Trends and Activities in the Investment Company Industry*, provides aggregate data on investment company industry in the U.S, which RICs are part of. Data include, but not limited to, industry employment by state, household financial assets held in investment companies, number of investment companies by type and by year, investment company total net assets by type and by year, mutual fund ordinary dividend distributions, etc.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the exemption of RICs from corporate excise tax) and direct benefits (to RIC sponsors or shareholders) of this tax expenditure. Given that the direct costs of this tax expenditure may be minimal considering taxpayers' likely behavioral responses were the tax expenditure to be repealed (see discussion in the section of "direct costs" above), direct benefits likely far exceed direct costs.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. Generally, the indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the first impacted businesses. The induced impact (cost or benefit) occurs when an impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[1]

[1] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance. However, given that the direct benefits may far exceed direct costs, the total benefits, including indirect and induced benefits, may also far exceed the total costs, including indirect and induced costs.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states that impose a corporate income tax follow the federal tax treatment of RICs (i.e., they allow a deduction for dividends paid, but earnings retained by the RIC are still taxable). These states include California, Connecticut, Maine, New Hampshire, New York, and Vermont. Rhode Island imposes a low-rate gross receipts tax on RIC income. Massachusetts is in the minority of states that exempt RICs from their corporate taxes completely. These states also include Delaware, New Jersey, and Texas. Finally, a few states tax RICs in the same manner as ordinary corporations.

References

Internal Revenue Service. (2017). *Statistics of Income: 2017 Corporation Income Tax Returns Line Item Estimates .* Department of the Treasury . Retrieved from https://www.irs.gov/pub/irs-pdf/p5108.pdf.

Investment Company Institute. (2021). *2021 Investment Company FACT BOOK: A Review of Trends and Activities in the Investment Company Industry.* Retrieved from https://www.ici.org/system/files/2021-05/2021_factbook.pdf

Template for Evaluating Expenditures

Name of Expenditure: 3.410 Sales Tax Exemption for Containers	**Annual cost:** $130.8M - $148.9M	**Year of adoption:** 1967; amended 1981	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance

☐ Investment

☒ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☒ Other: Avoid tax pyramiding and/or placing tax burden on exempt goods

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☐ Access to opportunity

☐ Health/Environment/Social Justice

☒ Other: Avoid tax pyramiding and/or placing tax burden on exempt goods

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers				x
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers			x	

Comments (3.410 Sales Tax Exemption for Containers)
In general, this tax expenditure plays a structural role in limiting sales tax on business inputs (i.e., business purchases of containers for products sold) and in avoidance of tax burden on exempt goods (i.e., business purchases of containers used to hold exempt goods). The statute extends to sales of returnable containers sold with contents or resold for refilling.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Containers
TAX EXPENDITURE NUMBER	3.410
TAX EXPENDITURE CATEGORY	Exemptions for Specified Uses of Product/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(q)
YEAR ENACTED	Originally enacted in 1967 (St. 1967, c. 757 § 1); amended in 1981 to add the sale of empty returnable containers (St. 1981, c. 571 § 1).
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $130.8 - $148.9 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Buyers and sellers of exempt containers.
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Sales of several types of containers are exempt from sales tax. Sales eligible for the exemption include sales of empty containers to be filled and resold, containers the contents of which are exempt from the sales tax, and returnable containers when sold with the contents or resold for refilling.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to reduce the sales tax burden on purchases of items sold in containers where the object of the transaction is to purchase the contents of such containers. In these transactions, the container is used to provide a service, such as transportation and containment of the contents, and service	**Are there other states with a similar Tax Expenditure?** Most other neighboring states offer a similar sales and use tax exemption for containers.

transactions are generally exempt from sales tax.	

INTRODUCTION

The tax expenditure exempts from tax sales of a number of different types of containers: (1) empty returnable and nonreturnable containers sold to vendors who fill the container with contents and then sell the filled containers (for example – a paper bag purchased to hold cleaning supplies which will then be sold as a unit; a box that a vendor purchases for purposes of enclosing a television for sale); (2) containers filled with contents that are exempt from the sales tax (for example – a carton of milk; a glass jar filled with jam); and (3) returnable containers when sold with the contents or resold for refilling (for example – a propane gas tank, whether sold full or empty with the intention of being filled). For purposes of the exemption, a returnable container is a container customarily returned by the buyer of the contents for reuse. The exemption also applies to the sale of bags containing feed for livestock and poultry. M.G.L. c. 64H, § 6(q). Note that the container exemption may overlap with certain other exemptions. For example, the milk carton or jam jar referenced above may also qualify for the exemption for ingredient and component parts of tangible personal property to be sold. See M.G.L. c. 64H, § 6(r).

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax (e.g. paper, desks, computers, etc., purchased for office use would generally be taxable). The exclusion of sales for resale and the application of certain exemptions prevent the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

The tax expenditure for containers may be viewed as one of the structural provisions of the sales tax that limits the tax impact on business inputs and/or on retail products that separately are exempt from tax. Absent the exemption afforded by this tax expenditure, businesses that sell goods would be required to pay sales or use tax when they purchase containers with which to fill their goods. The sale for resale exclusion does not apply to the businesses' purchases of containers because the business is not reselling the container; it is using the container as a means to sell its goods.

POLICY GOALS

DOR assumes the goal of the tax expenditure is to reduce the sales tax burden on certain sales where the ultimate purpose of the transaction is to purchase the contents of the container, rather than the container itself, which would otherwise be taxable. In these transactions, the container is used to provide a service, such as transportation and containment of the contents, and service transactions are generally exempt from sales tax.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $130.8 - $148.9 million per year during FY19-FY23 (see Table 1 below). The estimates in Table 1 are based on the U.S. Census Bureau's Annual Survey of Manufactures data[1], and estimates of a similar tax expenditure in Rhode Island compiled by the Rhode Island Department of Revenue. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in Table 1 may have a high estimation uncertainty and should be used with caution.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Containers

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$132.8	$131.0	$130.8	$140.5	$148.9

DIRECT BENEFITS

The Massachusetts consumers and businesses that produce, buy, and sell the exempt containers are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt containers to Massachusetts consumers and businesses are also direct beneficiaries.

DOR is not aware of any data that identifies direct beneficiaries or provides measures for the exempt sales of containers. However, businesses in the industries, listed in Table 2 below, are likely producers of exempt containers.

[1] DOR used national industry sales data for the manufacturing industries that likely produce containers.

Table 2. Container Manufacturing Industries[2]

NAICS	NAICS Description
321920	Wood Container and Pallet Manufacturing
322211	Corrugated and solid fiber boxes Manufacturing
322212	Folding paperboard boxes Manufacturing
322219	Other Paperboard Container Manufacturing
322220	Paper bag and coated and treated paper manufacturing
326111	Plastics bag and Pouch manufacturing
326112	Plastics packaging film and sheet (including laminated) manufacturing
326113	Unlaminated plastics film and sheet (except packaging) manufacturing
326121	Unlaminated plastics profile shape manufacturing
326122	Plastics pipe and pipe fitting manufacturing
326130	Laminated plastics plate, sheet (except packaging), and shape manufacturing
326140	Polystyrene foam product manufacturing
326150	Urethane and other foam product (except polystyrene) manufacturing
326160	Plastics bottle manufacturing
326199	All other plastics product manufacturing
327213	Glass container manufacturing
332431	Metal can manufacturing
332439	Other Metal Container Manufacturing

Source: 2019 Annual Survey of Manufactures, U.S. Census Bureau

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for containers) and direct benefits (to buyers and sellers of exempt containers) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt containers, which is the sales tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. Generally, the indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when an impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or

[2] Table 2 lists the manufacturing industries DOR identified as industries that produce containers, whether exempt from sales tax or not. The list may be not exhaustive. In addition, the listed industries may produce products other than containers.

increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[3]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt such models given their complexity and the data limitation present in this instance.

Besides the economic costs and benefits, there may also be negative externalities to consider when evaluating this tax expenditure. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, manufacturing plants producing inputs for making containers, such as paper, plastic, wood, etc., may cause noise and air/water pollution during the manufacturing process. By encouraging manufacturing activities, this tax expenditure may aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset the impact. DOR was not able to find any directly relevant research quantifying potential impact of such externalities.

If a business must pay sales tax on containers to be filled with its own products, then that tax becomes part of the price the business charges its own customers. When making sales of taxable products, the business must collect tax based on that price, resulting in tax being imposed twice on the same container. This tax pyramiding invariably results in some industries being taxed more heavily than others, which violates the principle of neutrality and causes economic distortions. By exempting certain containers, this tax expenditure helps avoid tax pyramiding.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

All of the states neighboring Massachusetts that impose a sales and use tax offer an exemption for containers, though their approaches differ. Some of these states exempt containers in a manner similar to the Massachusetts exemption (Connecticut, Rhode Island), other states provide an exemption for sales of containers to be used for packaging, shipping, and transportation (New York, Vermont), and others are a combination thereof (Maine, New Jersey).

Connecticut provides a sales tax exemption for containers that is very similar to the Massachusetts exemption. Under Conn. Gen. Stat. § 12-412(14), (1) empty nonreturnable

[3] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

containers and returnable dairy product containers to customers who fill and resell the containers; (2) containers the contents of which are exempt from tax; and (3) returnable containers when sold with the contents or when resold for refilling. The Connecticut statute defines “returnable containers” in the same manner as Massachusetts and also exempts the sale of bags containing feed for livestock and poultry. Conn. Gen. Stat. § 12-412(14).

Maine provides a narrower exemption that adopts only the third prong of the Massachusetts exemption, exempting only the sale of returnable containers when sold with the contents or when resold for refilling. 36 M.R.S. § 1760. 12. However, sales of containers for use by entities engaged in the business of packing or shipping tangible personal property are also exempt from tax. 36 M.R.S. § 1760.12-A.

In New Jersey, the sales or use of nonreturnable containers and reusable milk containers are exempt from tax when they are used incidentally to the delivery of any tangible personal property. N.J. Rev. Stat. § 54:32B-8.15. Containers used in a “farming enterprise” are also exempt from tax.

In New York, containers, and components thereof, for use and consumption by a vendor in packaging or packing tangible personal property for sale are exempt from tax. NY CLS Tax § 1115(a)(19).

Rhode Island exempts sales of (1) empty nonreturnable containers, including boxes, paper bags, and wrapping materials that are biodegradable and all bags and wrapping materials utilized in the medical and healing arts, to customers who fill and resell the containers; (2) containers the contents of which are exempt from tax; (3) returnable containers when sold with the contents or when resold for refilling; and (4) empty keg and barrel containers, whether returnable or not, when sold to alcoholic beverage producers who place the alcoholic beverages in the containers. R.I. Gen. Laws § 44-18-30(4). Rhode Island defines the term “returnable containers” in the same manner as Massachusetts.

Vermont exempts containers for use in packing, packaging, or shipping tangible personal property by a manufacturer or distributor from tax. Vt. Stat. Ann. 32 § 9741(16).

Template for Evaluating Expenditures

Name of Expenditure: 3.606 Sales Tax Exemption for Trade-in Allowances	**Annual cost:** $106.9-$134.7M	**Year of adoption:** 1967	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Encourages the trade-in of used motor vehicles and the purchase of new motor vehicles more frequently

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Preventing pyramiding of tax by taxing only the excess of purchase price over the amount credited for the trade-in

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	X	☐	☐
The TE's benefit justifies its fiscal cost	☐	X	☐	☐
The TE is claimed by its intended beneficiaries	☐	☐	☐	X
The TE is claimed by a broad group of taxpayers	☐	☐	☐	X
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	X	☐
The TE is relevant today	☐	☐	☐	X
The TE is easily administered	☐	☐	X	☐
Business only -The TE is beneficial to smaller businesses	☐	X	☐	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	X	☐

Comments (3.606 Sales Tax Exemption for Trade-in Allowances)
The tax expenditure provides for a reduction in the sales price on which tax is charged for motor vehicles and trailers bought in a trade-in transaction. For such sales, the amount subject to sales tax is the excess of the price of the newly purchased vehicle over the amount credited for the trade-in. Absent the exemption afforded by this tax expenditure, there would be no reduction in the sales price on which tax is charged of a motor vehicle bought in a trade-in transaction. All the New England states, other than New Hampshire (which does not have a sales tax), impose a sales tax on the sale of motor vehicles and have a similar trade-in allowance. Of the 45 states with a sales tax, 35 of them have an exemption for trade-in allowances for motor vehicles and trailers. A detriment the legislature may want to consider is whether this exemption encourages vehicle purchases rather than mass transit.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Trade-in Allowances for Motor Vehicles and Trailers
TAX EXPENDITURE NUMBER	3.606
TAX EXPENDITURE CATEGORY	Miscellaneous Sales and Use Tax Exemptions
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L c. 64H, § 26, c. 64I, § 27
YEAR ENACTED	1967
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $106.9 - $134.7 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Buyers and sellers of motor vehicles and trailers at the retail level.
AVERAGE TAXPAYER BENEFIT	$38 per Massachusetts Household in FY19.

Description of the Tax Expenditure: In most cases, motor vehicles and trailers bought from a dealer in a trade-in transaction are subject to tax only on the excess of the purchase price over the amount credited for the trade-in, rather than on the full purchase price.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? To facilitate the trade-in of motor vehicles and the purchase of newly purchased motor vehicles and to promote fairness by taxing only the excess of purchase price over the amount credited for the trade-in.	**Are there other states with a similar Tax Expenditure?** All the New England states, other than New Hampshire (which does not have a sales tax), impose a sales tax on the sale of motor vehicles and have a similar trade-in allowance. Of the 45 states with a sales tax, 35 of them have an exemption for trade-in allowances for motor vehicles and trailers.

INTRODUCTION

The tax expenditure provides for a reduction in the sales price on which tax is charged for motor vehicles and trailers bought in a trade-in transaction. For such sales, the amount subject to sales tax is the excess of the price of the newly purchased vehicle over the amount credited for the trade-in.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, there would be no reduction in the sales price on which tax is charged of a motor vehicle bought in a trade-in transaction. Generally, for sales tax purposes, trade-in allowances are limited to motor vehicles and boats and are not applicable to other types of retail sales.

POLICY GOALS

To facilitate the trade-in of motor vehicles and promote fairness by imposing tax only on the excess of the price of the newly purchased vehicle over the amount credited for the trade-in. The trade-in allowance authorized under this expenditure benefits both car buyers and dealers by reducing transaction costs where a used car is traded in, essentially encouraging these types of auto transactions.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $106.9 - $134.7 million per year during FY19-FY23. See Table 1 below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Trade-in Allowances for Motor Vehicles and Trailers

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$121.8	$106.9	$129.7	$134.2	$134.7

Under the current law, Massachusetts motor vehicle sales tax collections are deposited into the MBTA fund, MSBA fund and the Commonwealth Transportation Fund (CTF). Sales tax exemption for trade-in allowances reduces motor vehicle sales tax collections and therefore money deposited into the aforementioned three funds, and in turn reduces spending and economic activities supported by these funds. For example, there may be less investment in MBTA infrastructure, less construction or repair of school buildings, and less investment in promoting public transportation and maintaining transportation infrastructure, such as maintaining roads. Reduced spending or investment in these areas could result in a lower quality of transportation infrastructure and public education, traffic congestion, etc. [1]

DIRECT BENEFITS

Massachusetts consumers and businesses that buy or sell motor vehicles and trailers at the retail level are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax price" while sellers benefit in the form of receiving a higher "before tax price". The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

Businesses selling motor vehicles and trailers at the retail level include new and used car dealers, recreational vehicle dealers, and motorcycle, ATV, and all other motor vehicle dealers. Table 2 reports the numbers of such dealers in Massachusetts and their annual payrolls, sales, and employment in 2017. Note that Table 2 also contains data for parts

[1] Traffic congestion can be defined as "the demand for road space exceeds road supply" according to INRIX (INRIX_2019_20152111.pdf (ilmessaggero.it)), a data analytics company that studies how people move around the world. The American Transportation Research Institute estimates that congestion costs the U.S. freight sector $74.5 billion annually, $68.1 billion of which occurs in urban areas (ATRI-Cost-of-Congestion-to-the-Trucking-Industry-2018-Update-10-2018.pdf (truckingresearch.org)). Besides congestion, less spending or investment in transportation may partially contribute to structurally deficient bridges, traffic accidents, worse rural and urban interstate pavement condition, and so on.

dealers, (last two rows– automotive parts and accessories stores, and tire dealers). These dealers are not direct beneficiaries of this sales tax exemption, but they indirectly benefit from increased motor vehicle sales.

Out-of-state businesses selling motor vehicles and trailers to Massachusetts residents and businesses are also direct beneficiaries.

Table 2. Annual Payroll, Sales, and Employment of Motor Vehicle and Parts Dealers in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
441110	New car dealers	383	475	$20,136.9	$1,380.6	24,008
441120	Used car dealers	536	556	$2,168.6	$133.0	2,905
441210	Recreational vehicle dealers	26	27	$169.9	$17.2	400
441228	Motorcycle, ATV, and all other motor vehicle dealers	76	78	$242.0	$28.4	678
441310	Automotive parts and accessories stores	290	600	$1,029.2	$178.0	6,181
441320	Tire dealers	137	302	$556.3	$113.0	2,814
Total		1,448	2,038	$24,302.9	$1,850.2	36,986

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The next version will be 2022 Economic Census.

For simplicity, we assume that the entire tax savings due to the sales tax exemption are passed on to buyers. Based on this assumption, Table 3 reports the distribution of estimated tax savings in FY19 among households in different income ranges. The table is based primarily on the 2019 Consumer Expenditure Survey data published by the U.S. Bureau of Labor Statistics and data from other sources such as Moody's Analytics and the U.S. Census Bureau. The Consumer Expenditure Survey reports average annual expenditures on "vehicle purchase" and number of households by different income groups. Please note that, although motor vehicles and trailers are purchased by both consumers (households) and businesses or other types of customers, the distribution of tax savings reported in Table 3 is for consumers (households) only.

According to Table 3, the average tax saving from the exemption is estimated to be $38.32 per Massachusetts household in FY19, varying from $14.02 for households with annual income of less than $15,000, to $78.46 for households with annual income of at least $200,000. 19.42% of all tax savings is attributed to households with annual income of

$100,000 to $149,999, while 4.38% is attributed to households with annual income of less than $15,000. The tax savings reduced the households' effective tax rate (the ratio of tax to income) by 0.05 percentage points on average. This reduction varied from 0.02 percentage point for households with annual income of at least $200,000 to 0.19 percentage points for households with annual income of less than $15,000. On average, households with annual income of less than $15,000 spent a much higher percentage of their income on purchases of motor vehicles and trailers than other income groups.

Table 3. Estimated Distribution of Tax Savings to MA Households by Income Level in FY19

Annual Income Range	Number of MA Households (Millions)	Tax Savings (Millions)	Average Tax Savings ($)	Tax Savings Distribution	Change in Households' Effective Tax Rate
Less than $15,000	0.322	$4.51	$14.02	4.38%	-0.19%
$15,000 to $29,999	0.403	$7.36	$18.24	7.15%	-0.08%
$30,000 to $39,999	0.264	$6.28	$23.79	6.10%	-0.07%
$40,000 to $49,999	0.228	$6.13	$26.93	5.96%	-0.06%
$50,000 to $69,999	0.355	$13.56	$38.19	13.17%	-0.06%
$70,000 to $99,999	0.388	$17.54	$45.14	17.03%	-0.05%
$100,000 to $149,999	0.370	$20.00	$54.00	19.42%	-0.04%
$150,000 to $199,999	0.168	$12.83	$76.41	12.46%	-0.04%
$200,000 to more	0.188	$14.76	$78.46	14.34%	-0.02%
Total	2.687	$102.97	$38.32	100.00%	-0.05%

Note: Numbers in the table are estimated by Massachusetts Department of Revenue.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending due to a reduction in amounts collected from motor vehicle sales tax) and direct benefits (to buyers and sellers of motor vehicles and trailers at the retail level) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of motor vehicles and trailers, which is the sales tax they would have had to pay, collect, and remit to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[2]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

While hard to measure, there may also be social benefits to the tax expenditure. The sales tax exemption for trade-in allowances for motor vehicles could be seen as promoting fairness by recognizing that sales tax was paid on the vehicle being traded in. An exemption for trade-in allowances might also encourage the purchase of new vehicles to replace old inefficient vehicles, which could result in reduced air pollution.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

All the New England states, other than New Hampshire, impose a sales tax on the sale of motor vehicles and have a similar trade-in allowance. New Hampshire does not have a sales tax. 15 states, including the 5 states with no sales tax, and the District of Columbia, do not have an exemption for a trade-in allowance for motor vehicles.

The 35 states, including Massachusetts, that do provide a trade-in allowance generally calculate the tax on the sales price of a new or used motor vehicle, less credit for the trade-in when sold through a dealer. Some states do limit the amount of the allowance, for example, in Kentucky the trade-in credit cannot reduce the sales price of the vehicle by more than 50%, or the 50% value is used to calculate tax due and Michigan's trade-in credit is the lesser of $6,000 or the agreed-upon value of the trade-in.

For more details on this tax expenditure in other states, please refer to https://floridarevenue.com/taxes/tips/documents/TIP-123344_TIP_20A01-15_FINAL_RLL.pdf

[2] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Template for Evaluating Expenditures

Name of Expenditure: 3.304 Exemption for materials, tools, fuel, and machinery used in furnishing of power	**Annual cost:** $47.2-$60.1 million	**Year of adoption:** 1968	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Avoid pass-through cost to utility customers

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers			x	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers			x	

Comments (3.304 Exemption for materials, tools, fuel, and machinery used in furnishing of power)
While this TE directly benefits a limited number of utility/taxpayers, it indirectly benefits a much larger number of utility ratepayers, both individual and businesses. Because utility expenses are reliably passed on to customers through the utility rate-making process, the rating above takes utility customers into account and rates the tax expenditure as impacting a broad group of taxpayers.

To the extent that electricity, steam or gas service may be taxable to certain commercial customers, the TE exempting utility inputs from sales tax limits pyramiding of tax (similar to, and in some cases overlapping with, the tax expenditure for manufacturing inputs).

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Materials, Tools, Fuels and Machinery Used in Furnishing Power
TAX EXPENDITURE NUMBER	3.304
TAX EXPENDITURE CATEGORY	Exempt Component of a Product or Consumed in Production
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(r) and (s)
YEAR ENACTED	1968 (Acts 1967, c. 757, § 1)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $47.2-$60.1 million annually for FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels, and machinery, including replacement parts, used in furnishing gas, water, steam, or electricity to consumers through mains, lines, or pipes.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to support the provision of gas, water, steam, and electricity to consumers, and to avoid the cost of taxes on inputs being passed on to the ultimate consumers.	**Are there other states with a similar Tax Expenditure?** Most states adopt a full or partial exemption for materials and equipment used to furnish water, gas, steam, or electricity to consumers.

INTRODUCTION

The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels, and machinery, including replacement parts, used in furnishing gas, water, steam, or electricity to consumers through mains, lines, or pipes, as long as such items are consumed or directly used in furnishing the water or power. Most purchasers of these items are utility businesses and contractors acting as agents of utilities. The exemption of these items reduces utilities' costs of providing water and power and prevents the tax from being incorporated in charges to customers. The exemption does not require that the purchaser be a particular person or entity, but rather the items purchased are required to be consumed and used in a particular manner.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, sales of materials, tools, fuels, and machinery, including replacement parts, used in furnishing gas, water, steam, or electricity to consumers would be taxable when purchased by utility businesses or contractors acting as agents of utilities. If imposed, the sales and use tax would likely be passed on to consumers in the form of higher energy prices. However, under the general manufacturing exemption in G.L. c. 64H, s. 6(r) and (s) for sales of materials, tools, fuels, and machinery used in an industrial plant in the actual manufacture of tangible personal property (TPP) to be sold, some equipment and consumables used in generating power would be exempt even without this expenditure. Steam, gas and electricity are viewed as TPP for sales tax purposes and the materials and equipment used to produce them are viewed as exempt manufacturing inputs. Note that the manufacturing exemption would apply only to items directly used to generate power. It would not apply to items used to deliver water or power to users (such as wires, pipes, and poles).

POLICY GOALS

DOR assumes that the tax expenditure is intended to support the provision of gas, water, steam, and electricity to consumers.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $47.2-$60.1 million per year during FY19-FY23.[1] See the table below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Materials, Tools, Fuels and Machinery Used in Furnishing Power

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$57.2	$47.2	$52.2	$60.1	$55.2

Please note that some utilities are owned by state or local governments. According to M.G.L. c. 64H, § 6(d), sales to the Commonwealth, its agencies and political subdivisions are exempt from sales tax. Thus, there is an overlap between this tax expenditure and the tax expenditure resulting from sales to the Commonwealth, its agencies and political subdivisions. DOR does not have an analysis on the extent of the overlap estimate.

Please note that the general manufacturing exemption (in G.L. c. 64H, s. 6(r) and (s)) mentioned above was evaluated last year by the Tax Expenditure Review Commission (TERC).[2] The estimates provided in that report do not cover businesses in the "utility" industry. However, because of the overlap of the general manufacturing exemption and the exemption for furnishing water and power, a portion of the revenue loss estimates reported in the above table might be reclassified as the revenue loss estimates for the general manufacturing exemption. DOR does not have an analysis on the extent of the overlap.

[1] DOR does not have in-house data to measure sales of the exempt products. The estimates reported in Table 1 are based on data from various external sources, including the 2017 economic census data from the U.S. Census Bureau, input-output account data from the U.S. Bureau of Economic Analysis, data from the U.S. Energy Information Administration, data from the Massachusetts Water Resources Authority, etc. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in Table 1 may have significant estimation uncertainty and should be used with caution.
[2] Please see tax expenditure 3.302 - Exemption for Materials, Tools, Fuels and Machinery Used in Manufacturing in the March 2021 TERC report posted on DOR website: https://www.mass.gov/doc/terc-march-2021-final-report/download.re

DIRECT BENEFITS

The buyers and sellers of the exempt products (materials, tools, fuels, and machinery used in furnishing water or power) are the direct beneficiaries of the sales tax exemption. Buyers (mostly Massachusetts utility businesses and contractors acting as agents of utilities) benefit from the sales tax exemption in the form of paying a lower "after tax" price for their equipment. Sellers (suppliers of materials, tools, fuels, and machinery to Massachusetts utilities engaged in furnishing power to consumers through mains, lines, and pipes) benefit from the sales tax exemption in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out of state sellers can also benefit from this sales tax exemption.

Buyers who directly benefit from this sales tax exemption are mostly Massachusetts businesses in the industry of "Utilities", including businesses engage in "electric power generation, transmission, and distribution"; "natural gas distribution"; and "water, sewerage, and other systems". Table 2 below shows annual payroll, sales, and employment statistics for the industry of "utilities" in Massachusetts and in U. S. from the U.S. Census Bureau.

Table 2. Annual Payroll, Sales, and Employment of the Industry of Utilities in the United States and in Massachusetts

2017 NAICS Code	Geographic Area Name	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($millions)	Annual Payroll ($millions)	Number of Employees
2211	United States	Electric power generation, transmission and distribution	1,856	11,496	$461,919.2	$56,541.3	519,615
2211	Massachusetts	Electric power generation, transmission and distribution	60	170	Q	$961.2	9,266
2212	United States	Natural gas distribution	421	2,550	$100,586.3	$8,155.4	91,747
2212	Massachusetts	Natural gas distribution	15	61	Q	$270.5	3,071
2213	United States	Water, sewage and other systems	3,670	4,867	$14,594.9	$2,970.2	49,986
2213	Massachusetts	Water, sewage and other systems	30	61	Q	$62.8	947

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The 2022 Economic Census has yet to be released.

Q: Revenue not collected at this level of detail for multi-establishment firms

According to the U.S. Census Bureau, in 2017, Massachusetts had 60 firms in the industry of "Electric power generation, transmission, and distribution". These firms employed 9,266 people generating $961.2 million in annual payroll. The U.S. Census Bureau did not collect annual sales data for Massachusetts. According to the same database, Massachusetts had 15 firms in the industry of "Natural gas distribution". These firms employed 3,071 people generating $270.5 million in annual payroll. Finally, as reported in Table 2, Massachusetts had 30 firms in the industry of "Water, sewage, and other systems". These firms employed 947 people generating $62.8 million in annual payroll.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for materials, tools, fuels, and machinery used in furnishing power) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt products, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as (i) consumers of water or power in the form of lower or higher prices or (ii) the households of the business's employees in the form of lower or higher income. Households then, in turn, reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[3]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits discussed so far, there may also be negative externalities to consider when evaluating this tax expenditure. A negative externality

[3] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. According to the U.S. Environmental Protection Agency, nearly all parts of the electricity system can affect the environment, and the size of these impacts will depend on how and where the electricity is generated and delivered. In general, the environmental effects can include air and water pollution, solid waste, use of land and water resources, etc.[4]

Similarly, burning natural gas emits carbon dioxide. Constant introduction of carbon dioxide into atmosphere will lead to climate change and global warming. In addition, some of the potential problems associate with natural gas pipelines and infrastructure include destruction of thousands of acres of vital habitat, forest, and pristine lands. Loss of the valuable water and air filtering that forests provide.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states adopt a full or partial exemption for materials and equipment used to furnish water, gas, steam, or electricity to consumers. California, Connecticut, New Jersey, Pennsylvania, and West Virginia have exemptions, similar to the Massachusetts exemption, for items used in furnishing water and power. Maine, Minnesota, New York, Rhode Island, and Vermont apply their manufacturing exemptions to materials and equipment used to produce water and power. The exemption in these states may not apply to items used to deliver water or power to users. Some states, including Nebraska, Florida, and Indiana, exempt fuel used to furnish water and power, but tax other purchases by utilities.

[4] https://www.epa.gov/energy/about-us-electricity-system-and-its-impact-environment

Template for Evaluating Expenditures

Name of Expenditure: 1.018 Exemption of Meals and Lodging Provided at Work	**Annual cost:** ~$50 million	**Year of adoption:** 1954/1973	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Conforming with federal code

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Simplicity of filing

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	x	☐	☐
The TE's benefit justifies its fiscal cost	☐	☐	☐	x
The TE is claimed by its intended beneficiaries	☐	☐	☐	x
The TE is claimed by a broad group of taxpayers	☐	☐	☐	x
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	x	☐
The TE is relevant today	☐	☐	☐	x
The TE is easily administered	☐	☐	☐	x
Business only -The TE is beneficial to smaller businesses	☐	☐	x	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	x	☐

Comments (1.018 Exemption of Meals and Lodging Provided at Work)
No state decouples from this part of the federal code, as this provision simplifies tax filing for individuals and business operations for employers. As it is reported through employers, there is limited data on which individuals' benefit.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exclusion from Employee Income of Meals and Lodging Furnished for the Convenience of the Employer
TAX EXPENDITURE NUMBER	1.018
TAX EXPENDITURE CATEGORY	Exclusions from Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	M.G.L. c. 62, § 2(a)
YEAR ENACTED	M.G.L. c. 62, § 2 was enacted in 1973 but the exclusion stems from Code § 119 (1954).
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $20.7 - $50.3 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: This tax expenditure provides employees with an income exclusion for the value of meals and lodging provided by their employers for the employers' business purposes. Massachusetts conforms to the exclusion set out in the Internal Revenue Code (the "Code"), which results in a state tax expenditure.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to promote business efficiency by allowing employees to eat or sleep at or near their work locations without incurring a tax liability for the value of employer-provided meals or lodging.	**Are there other states with a similar Tax Expenditure?** States that adopt the definition of income under the Code follow the federal exclusion rules for meals and lodging provided to employees for the convenience of the employer unless they specifically decouple. DOR is not aware of any states that have decoupled from the federal exclusion.

INTRODUCTION

Under the Internal Revenue Code (the "Code"), gross income generally includes the fair market value of all compensation received by employees from their employers, whether received in the form of money, goods or services. However, Code § 119 provides employees with an income exclusion for the value of meals and lodging provided by their employers for the employers' business purposes. Massachusetts conforms to the federal income exclusion set out in the Code, as amended and in effect as of January 1, 2005, for purposes of defining Massachusetts gross income. This results in a state tax expenditure.

To qualify for the exclusion, the meals and lodging must be furnished on the business premises of the employer. Recognized business purposes for providing on-premises meals or lodging include (i) a lack of nearby eating facilities (so that providing on-premises meals results in time savings), (ii) a need for employees to be available to respond to emergencies, (iii) a need to respond to peak customer demand during a meal period, (iv) enhancement of employee security (so that workers can eat or reside in a safe location), and (v) protection of confidential information (so that employees can be on the premises to prevent unauthorized access to documents and records). See Treas. Reg. § 119-1. In the case of lodging, the employee must be required to accept such lodging as a condition of employment in order to qualify for the exclusion.

POLICY GOALS

DOR assumes that the tax expenditure is intended to promote business efficiency, by allowing employees to eat or sleep at or near their work locations without incurring a tax liability for the value of employer-provided meals or lodging. In addition, the income exclusion simplifies wage reporting for employers.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated annually as part of the Tax Expenditure Budget ("TEB"). The estimated revenue loss is based on estimates provided by the Joint Committee on Taxation ("JCT") on the impact of federal tax collections due to this income exclusion. [1] The JCT's estimates are shared down to Massachusetts based on the state's share of national nonfarm employment. Shared down estimates are adjusted for differences between federal and state fiscal years and tax rates. [2]

[1] The Joint Committee on Taxation is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. https://www.jct.gov/

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

The revenue loss resulting from this tax expenditure is estimated to be \$20.7 - \$50.3 million per year during FY19 - FY23. See the table below.

Tax Revenue Loss Estimates for Exclusion from Employee Income of Meals and Lodging Furnished for the Convenience of the Employer

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss (\$Million)	\$20.7	\$46.1	\$49.5	\$48.5	\$50.3

DIRECT BENEFITS

The direct benefits of this tax expenditure are in the form of income tax savings to employees. Employees are not required to report the value of meals and lodging provided by employers on their tax returns. Thus, there is insufficient data to determine how many taxpayers benefit from this tax expenditure and how benefits distribute among various industries or income levels. Income tax savings due to this tax expenditure are estimated to be \$50.3 million in FY23.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs of financing the tax expenditure and the direct benefits resulting from the expenditure. The direct costs are borne by the Commonwealth (in the form of the revenue reduction caused by the tax expenditure) or by residents and businesses (in the form of government spending reductions or tax increases needed to offset that revenue reduction). The direct benefits inure to employees in the form of lower personal income taxes. In this instance, the direct costs to the Commonwealth, namely the income tax that would have been collected from the excluded meals and lodging, are equal to the direct benefits afforded by the tax expenditure to the employees, which is the income tax the employees would have had to pay to the Commonwealth.

There are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy is larger than the initial direct impacts. This phenomenon is called the “Multiplier Effect”.[3]

[3] For an illustration of “Multiplier Effect”, see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that adopt the definition of income under the Code follow the federal exclusion rules for meals and lodging provided to employees for the convenience of the employer unless they specifically decouple. DOR is not aware of any states that have decoupled from the federal exclusion.

Template for Evaluating Expenditures

Name of Expenditure: 3.601 Exemption for Casual or Isolated Sales	**Annual cost:** $34.6-$39.2 million	**Year of adoption:** 1968	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance

☐ Investment

☐ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☒ Other: Limits sales tax to transactions by businesses regularly engaged in making sales at retail

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☐ Access to opportunity

☐ Health/Environment/Social Justice

☒ Other: Limits sales tax to transactions by individuals regularly engaged in making sales at retail

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers				x
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers			x	

Comments (3.601 Exemption for Casual or Isolated Sales)

This tax expenditure exists to better target the sales tax to apply to retail sales in the ordinary course of business by businesses and individuals. Among the states having a sales tax, Alaska, Colorado, Delaware, Oklahoma and Wyoming are the only states that do not provide specific exemptions for occasional sales (with the exception of occasional sales by charitable organizations). This tax expenditure is complicated to effectively administer. Growth of sales by individuals on Craigslist, Facebook Marketplace, and Ebay present challenges of enforcement. Starting October 1, 2019, there are new Massachusetts sales and use tax collection requirements that apply to out-of-state “remote” sellers and marketplace facilitators (“marketplaces”). Remote sellers must collect tax on sales of tangible personal property or services into Massachusetts when they have Massachusetts sales that exceed $100,000 in a calendar year. Marketplaces must collect tax on behalf of third parties (“marketplace sellers”) selling on the marketplace when the marketplace’s total Massachusetts sales (including those facilitated on behalf of marketplace sellers and those made directly by the marketplace on its own behalf) exceed $100,000 in a calendar year. Due to this statutory change, casual/isolated sales no longer include sales through marketplaces, reducing the overall revenue loss associated with this tax expenditure.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Casual or Isolated Sales
TAX EXPENDITURE NUMBER	3.601
TAX EXPENDITURE CATEGORY	Miscellaneous Exemptions
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(c) and M.G.L. c. 64I, § 7(b).
YEAR ENACTED	1968 (Acts 1967, c. 757 § 1)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $34.6-39.2 million during FY19 - FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure:	**Is the purpose defined in the statute?**
Certain sales made outside a seller's regular course of business are exempt from the Massachusetts sales and use tax. Such sales are referred to as "casual and isolated" sales and include: (i) non-recurring sales by schools, churches, and other non-profits for fundraising purposes (such as a church bizarre); (ii) non-recurring sales by individuals (such as a garage sale); (iii) non-recurring sales by businesses of used business equipment and fixtures (such as a store selling its used cash registers); and (iv) bulk sales of assets when an entire business is sold to new owners. Sales of motor vehicles, trailers, boats, or airplanes do not qualify for this exemption, unless they are between family members.	The statute does not explicitly state the purpose of this tax expenditure.

What are the policy goals of the expenditure?	**Are there other states with a similar Tax Expenditure?**
DOR assumes that the goal of the tax expenditure is to promote sales and use tax efficiency by reducing the compliance burden on sellers that are not in a trade or business or that make sales outside their usual course of business.	Most states that impose sales and use tax have an exemption for sales outside the seller's regular course of business. States that have an exemption similar to Massachusetts' include California, Connecticut, Rhode Island, and Vermont. These states do not allow the exemption for sales of motor vehicles, trailers, boats, or airplanes. Maine has an exemption that applies to all items, including motor vehicles, trailers, boats, and airplanes. New York does not have an exemption for sales outside the regular course of business.

INTRODUCTION

Certain sales made outside the regular course of business are exempt from the Massachusetts sales and use tax. The sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). Retail sales are taxable unless an exemption applies. M.G.L. § 6(c) provides an exemption for "[c]asual and isolated sales by a vendor who is not regularly engaged in the business of making sales at retail…" Sales of motor vehicles, trailers, boats, or airplanes do not qualify for the exemption, unless such sales are between family members.

The applicable regulation sets out various examples of casual and isolated sales at 830 CMR 64H.6.5(7). The main categories of such sales include: (i) non-recurring sales by schools, churches, and other non-profits for fundraising purposes (such as a church bazaar); (ii) non-recurring sales by individuals (such as a garage sale); (iii) non-recurring sales by businesses of used business equipment and fixtures (such as a store selling its used cash registers); and (iv) bulk sales of assets when an entire business is sold to new owners. Tangible personal property sold in exempt casual and isolated sales is also exempt from use tax. See M.G.L. c. 64I, § 7.

Starting October 1, 2019, there are new Massachusetts sales and use tax collection requirements that apply to out-of-state "remote" sellers and marketplace facilitators ("marketplaces"). Remote sellers must collect tax on sales of tangible personal property or services into Massachusetts when they have Massachusetts sales that exceed $100,000 in a calendar year. Marketplaces must collect tax on behalf of third parties ("marketplace sellers") selling on the marketplace when the marketplace's total Massachusetts sales (including those facilitated on behalf of marketplace sellers and those made directly by the marketplace on its own behalf) exceed $100,000 in a calendar year. Due to this statutory change, casual/isolated sales no longer include sales through marketplaces, reducing the overall revenue loss associated with this tax expenditure.

If not for the casual and isolated sales exemption sellers would be required to report and pay tax on their sales, regardless of how frequently they make sales or whether a particular sale is outside the seller's normal course of business. Thus, the exemption spares taxpayers and the DOR from the burden of administering sales and use tax on what would likely be a very high number of low value transactions. The revenue forgone as a result of the exemption constitutes a Massachusetts tax expenditure.

POLICY GOALS

DOR assumes that the goal of the tax expenditure is to promote sales and use tax efficiency by reducing the compliance burden on sellers that are not in a trade or business or that make sales outside their usual course of business.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $34.6 - $39.2 million per year during FY19-FY23.[1] See the table below.

Tax Revenue Loss Estimates for Casual and Isolated Sales Tax Exemption

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$34.6	$35.2	$36.6	$38.0	$39.2

DIRECT BENEFITS

The Massachusetts taxpayers that buy or sell exempt products (items sold in casual or isolated sales) are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit from the sales tax exemption in the form of receiving a higher "before tax" price. In addition, sellers benefit from making these sales without the administrative burden associated with registering for and collecting sales and use tax. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for casual and isolated sales) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt products, which is the

[1] DOR does not have any in-house data on causal and isolated sales. DOR's revenue loss estimates are based on limited external data on sales by charitable organizations and garage sales. However, this data does not include many other categories of exempt sales. The use of limited data may significantly underestimate the revenue loss of this tax expenditure. To mitigate the estimation uncertainty, DOR produced two additional sets of estimates by adjusting the estimates for similar tax expenditures reported by Maine and Minnesota based on the relative size of nominal GDP. The estimates reported in Table above are the average of these three sets of estimates. Due to use of external data, estimation uncertainty remains to be a factor. Therefore, the revenue loss estimates should be used with caution.

sales tax the buyers would have had to pay to the Commonwealth. Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits discussed so far, there may also be positive externalities to consider when evaluating this tax expenditure. A positive externality occurs when the production and/or consumption of a good or service exerts a positive effect on a third party independent of the transaction. This expenditure results in a positive externality because it incentivizes the sale of used items, which may reduce the demand for new goods and therefore pollution associated with the manufacturing of such new goods, especially for textiles. In addition, resale of used items may reduce solid waste if the used items would otherwise be disposed.

Please note that this tax expenditure has a specific purpose. The goal is to promote sales and use tax efficiency by reducing the compliance burden on sellers that are not in a trade or business or that make sales outside their usual course of business. From this standpoint, this tax expenditure meets the policy goal.

SIMILAR TAX EXPENDITURE OFFERED BY OTHER STATES

Most states that impose sales and use tax have an exemption for sales outside the seller's regular course of business. States that have an exemption similar to Massachusetts' include California, Connecticut, Rhode Island, and Vermont. These states do not allow the exemption for sales of motor vehicles, trailers, boats, or airplanes. Maine has an exemption that applies to all items, including motor vehicles, trailers, boats, and airplanes. New York does not have an exemption for sales outside the regular course of business.

Template for Evaluating Expenditures

Name of Expenditure: 1.202 Deduction of Capital Losses Against Interest and Dividend Income	**Annual cost:** $14.1M	**Year of adoption:** 2002	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	X			
The TE's benefit justifies its fiscal cost			X	
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers		X		
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		X		
The TE is relevant today			X	
The TE is easily administered			X	
Business only -The TE is beneficial to smaller businesses				
Individuals only -The TE benefits lower income taxpayers	X			

Comments (1.202 Deduction of Capital Losses Against Interest and Dividend Income)
The deduction for capital losses has varied throughout the history of the income tax. When the modern federal income tax was adopted in 1913, capital losses were deductible only against capital gains from a trade or business of the taxpayer. Over the next several years, the deduction was expanded first in 1916 to allow net capital losses to offset all capital gains and then in 1921 to allow capital losses to offset any kind of income. However, Congress perceived that the realization of capital losses is within the control of the taxpayer and can be used to manipulate the taxpayer's overall tax bill. Congress adopted various measures at different times to try to prevent this. In 1942 Congress adopted a variation of the current rule allowing net capital losses to be deducted against a limited amount of ordinary income. At the time the limitation was $1,000. The $1,000 limitation remained in effect until it was raised to $3,000 starting with 1987 tax years. The $1,000 federal limitation was in place when Massachusetts adopted its modern income tax in 1971. The Massachusetts Constitution was amended to specifically allow for an income tax starting in 1916. After 1916, the Legislature adopted a new, uncodified, income tax statute every year. We did not review each statute, but it appears that capital losses were deductible only against capital gains between 1916 and 1971, when the personal income tax was codified. When the Legislature codified the personal income tax it allowed net capital losses to be applied to reduce up to $1,000 of interest and dividend income. Note that this rule followed the federal limitation amount then in effect but was more restrictive than the federal rule in that it did not allow net capital loss to be deducted against ordinary income. The $1,000 deduction was briefly repealed between from 1996 to 2002. In 2002 the Legislature restored the deduction (again allowed only to offset interest and dividend income) and increased the limit to $2,000.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Deduction of Capital Losses Against Interest and Dividend Income
TAX EXPENDITURE NUMBER	1.202
TAX EXPENDITURE CATEGORY	Deductions from Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	M.G.L. c. 62, § 2(c)(2)
YEAR ENACTED	M.G.L. c. 62, § 2(c)(2) was enacted in its current form in 2002 and is based on prior provisions enacted in 1973.
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Accelerated tax loss averaged $14.1 million per year during FY19 to FY23.
NUMBER OF TAXPAYERS	Approximately 282,000 annually.
AVERAGE TAXPAYER BENEFIT	Accelerated tax saving of $48 per benefiting household.

Description of the Tax Expenditure: Taxpayers may deduct up to $2,000 of net capital loss against interest and dividend income.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage investment by allowing investors to offset a limited amount of interest and dividends with capital losses, thereby increasing the amount of capital loss that can be deducted in the year of the loss.	**Are there other states with a similar Tax Expenditure?** States that base their income tax on federal adjusted gross income generally conform to the federal deduction allowing up to $3,000 of capital loss to offset ordinary income. Such states include California, Connecticut, Maine, New York, Rhode Island, and Vermont.

INTRODUCTION

Generally, for both Massachusetts and federal income tax purposes, capital losses can be deducted only against capital gains. Losses in excess of gains may be carried forward and deducted from gains in subsequent taxable years. However, this tax expenditure allows a Massachusetts personal income tax deduction of up to $2,000 of capital losses against interest and dividend income. See M.G.L. c. 62, § 2(c)(2). There is a similar Internal Revenue Code (Code) provision that allows a deduction of up to $3,000 of net capital loss against ordinary income (which for federal purposes includes interest and dividend income). See Code § 1211. However, Massachusetts does not follow that Code provision and, instead, adopts its own deduction.

In effect, the tax expenditure provides an accelerated deduction for net capital loss of up to $2,000 per return. Without the acceleration, the loss would not be deductible until a later year in which the taxpayer has sufficient capital gain to offset. The acceleration of the deduction of capital losses constitutes a Massachusetts tax expenditure.

A key difference between the state and federal tax rates should be noted. At the federal level, long term capital gains (those held more than one year) are generally taxed at a lower rate than that applied to dividend and interest income.[1] As a result, at the federal level, by using long term capital losses to offset dividend and interest income, a filer's tax liability will be reduced by more than if the loss had been used to offset capital gains. Generally, when possible, filers benefit from being able to offset income taxed at a higher rate. However, at the state level, both long term capital gains and dividend and interest income are taxed at the same rate. As a result, at the state level, using a long-term capital loss to offset either of these income types will reduce the filer's tax liability by the same amount.

On the other hand, at the federal level, short term capital gains (those held for one year or less) and dividend and interest income are taxed at the same rate.[2] However, at the state level, short term capital gains are taxed at a higher rate (12%) than the 5% rate for dividend and interest income. Therefore, by using short term capital loss to offset dividend and interest income in current year, a taxpayer reduces current year's tax liability in an amount smaller than the amount of decrease in tax liability if the capital loss is applied in future years.

[1] Except qualified dividends, which are taxed at the same rate as long term capital gains.
[2] See footnote 1.

POLICY GOALS

DOR assumes that the tax expenditure is intended to encourage investment by allowing investors to offset a limited amount of interest and dividends with net capital losses, thereby increasing the amount of capital loss that can be deducted in the year of the loss.

DIRECT COSTS

Filers report the amount of capital loss deduction against interest and dividends on their returns. This allows a direct calculation of the amount of accelerated deductions resulting from this tax expenditure. Filers' estimated tax savings in the year they apply the capital loss to interest and dividend income (revenue loss to the State) range from $13.9 to $14.5 million per year during FY19-FY23. See the table below.

Estimated Revenue Loss to State in the Year the Capital Losses Are Applied Against Dividend and Interest

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$13.9	$14.0	$14.1	$14.3	$14.5

Please note that:

1. Filers are generally able to carry capital losses forward to offset capital gains in future years. This means that, even without this expenditure, filers could potentially use some or all of their capital losses to offset gains, but in a later year than they would with this expenditure. So, revenue loss figures above could have eventually occurred even without this deduction; the difference is that it would have been spread over an unknown number of years in the future. Without knowing the timing and scope of this delay, it is not possible to further refine the revenue loss estimates above.
2. As mentioned in the introduction, for long term capital loss, applying it against interest and dividend income in current year will result in the same amount of tax liability decrease if the taxpayer applied it against long term capital gains in future years because the rate of tax on interest and dividends is the same as the rate imposed on long-term capital gain. But for short term capital loss, applying it against interest and dividend income in current year will result in a smaller decrease in tax liability than if the taxpayer applies it against short term capital gains in future years because the rate imposed on short-term capital gains is higher.

DIRECT BENEFITS

Filers' direct benefits are equal to the revenue loss to the state. As noted in the "Direct Costs" section, the direct benefits to Massachusetts investors in current year are in the form of an estimated $14.5 million in annual tax savings (revenue loss to the State) in FY23.

In tax year 2018, because of this expenditure, more than 282,000 taxpayers were able to apply capital losses against interest and dividend income for a total $273 million in deductions.

The deduction of capital loss against interest and dividends in the current year rather than waiting until the taxpayer has capital gains to offset in the future results in an interest-free "loan" in the amount of the taxpayer's tax savings. The duration of the "loan" depends on how long the taxpayer would have had to wait to directly deduct their capital loss against a future capital gain.

EVALUATION: COMPARING COSTS AND BENEFITS

As previously mentioned, the direct costs of this tax expenditure are equal to the direct benefits received by the filers. Furthermore, there may be indirect and induced costs and benefits associated with this deduction. To measure indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that base their income tax on federal adjusted gross income generally conform to the federal deduction allowing up to $3,000 of capital loss to offset ordinary income. Such states include California, Connecticut, Maine, New York, Rhode Island, and Vermont.

Template for Evaluating Expenditures

Name of Expenditure: 3.405 Exemption for Certain Energy Conservation Equipment	**Annual cost:** $6.2M-$8.9M	**Year of adoption:** 1977	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☒ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	☐	x	☐
The TE's benefit justifies its fiscal cost	☐	☐	☐	x
The TE is claimed by its intended beneficiaries	☐	☐	☐	x
The TE is claimed by a broad group of taxpayers	☐	x	☐	☐
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	x	☐
The TE is relevant today	☐	☐	☐	x
The TE is easily administered	☐	☐	☐	x
Business only -The TE is beneficial to smaller businesses	x	☐	☐	☐
Individuals only -The TE benefits lower income taxpayers	☐	x	☐	☐

Comments (3.405 Exemption for Certain Energy Conservation Equipment)
The TE is becoming more relevant as households switch over to clean energy systems. However, it is not clear how affordable the equipment is to lower income households.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Certain Energy Conservation Equipment
TAX EXPENDITURE NUMBER	3.405
TAX EXPENDITURE CATEGORY	Exemptions for Specified Uses of Products/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(dd)
YEAR ENACTED	1977
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of \$6.2 - \$8.9 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Buyers and sellers of exempt products.
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Equipment for a solar, wind or heat pump system used as a primary or auxiliary energy source in a principal residence is exempt from sales and use tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes the goal of the expenditure is to encourage energy conservation in residential homes in Massachusetts.	**Are there other states with a similar Tax Expenditure?** New York has a similar exemption for residential renewable energy equipment. More than twenty other states have exemptions for solar equipment, while nearly twenty have exemptions for wind equipment. Several also have exemptions for heat pump systems.

INTRODUCTION

The tax expenditure provides for an exemption from the sales and use tax for equipment directly relating to any solar, wind-powered or heat pump system used as a primary or auxiliary energy source in an individual's principal residence.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, various equipment used for solar, wind or heat pump systems would be taxable when purchased by an individual for home use.

Massachusetts also offers a solar and wind tax credit to personal income tax filers (tax expenditure 1.601 - Renewable Energy Source Credit). Homeowners who install a renewable energy source property and take the credit could also be beneficiaries of this sales tax exemption since they may purchase equipment of solar and wind energy that is exempt from sales tax. Note that the solar and wind tax credit does not apply to expenses on heat pumps and not all homes installed with renewable energy source property are eligible for this credit. This expenditure was evaluated in last year's evaluation cycle by the Tax Expenditure Review Commission (TERC).[1]

[1] Please see tax expenditure 1.601 (Renewable Energy Source Credit) in the March 2021 TERC report posted on DOR website: https://www.mass.gov/doc/terc-march-2021-final-report/download.

POLICY GOALS

DOR assumes the goal of the expenditure is to encourage energy conservation in residential homes in Massachusetts.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $6.2 - $8.9 million per year during FY19-FY23. See Table 1 below.[2]

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Certain Energy Conservation Equipment

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$6.4	$6.2	$7.6	$8.2	$8.9

DIRECT BENEFITS

The Massachusetts consumers and businesses that buy or sell the exempt product are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt product to Massachusetts consumers are also direct beneficiaries.

Upon request, Massachusetts Department of Energy Resources (DOER) provided the number of households who use clean energy by year and type of clean energy (see Table 2 below). As of 2020, 101,815 households used solar energy and 2,376 households used heat pumps. The table also shows that, over time, more and more households are switching to clean energy. Although Table 2 is based on DOER's incentive program data, according to DOER the numbers in the table represent the majority of, if not all, buyers of the exempt product.

[2] DOR does not have in-house data to measure sales of the exempt products. The estimates reported in Table 1 are based on data from the Massachusetts Department of Energy Resources (see Table 2) and cost data available online, such as HVACDirect.com and https://www.homeadvisor.com. Due to the use of external data and the limitations of these data for estimating this tax expenditure, the estimates may have a high estimation uncertainty and should be used with caution.

Table 2. Possible Beneficiaries of the Exemption by Year and Type of Clean Energy

Number of households in Massachusetts who use Clean Energy				
Year	2017	2018	2019	2020
Annual Total				
Solar energy	73,370	83,877	91,063	101,815
Wind energy	N/A	N/A	N/A	N/A
Heat pump	643	1,196	1,959	2,376
Increase in Annual Total				
Solar energy		10,507	7,186	10,752
Wind energy		N/A	N/A	N/A
Heat pump		553	763	417

Source: Renewable and Alternative Energy Division, Massachusetts Department of Energy Resources.

As mentioned above, sellers who sell the exempt product to Massachusetts consumers also benefit from this sales tax exemption. However, DOR is unable to compile data on such sellers at this time due to the lack of relevant data.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for the exempt product (certain energy conservation equipment) and direct benefits (to buyers and sellers of exempt product) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt product, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[3]

[3] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

By encouraging the use of clean energy, this expenditure seeks to support a cleaner environment, curb climate change, and enhance public health, which would generate positive externalities.[4] Such positive externalities are often difficult to quantify.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

New York offers an exemption for residential solar energy systems equipment. NY Tax Law § 1115(ee).

Other New England states offer exemptions for renewable energy equipment, but do not specify that the equipment be used in residential properties, as Massachusetts does. Connecticut exempts sales of sales of solar energy electricity generating systems, as well as machinery, equipment, tools, materials, supplies, and fuel used in renewable energy and clean energy technology industries.

Maine exempts solar energy equipment and sales of tangible personal property to qualified community wind power generators.

Rhode Island exempts renewable energy products, including heat pumps and equipment used in solar and wind energy systems.

Vermont exempts tangible personal property to be incorporated into a hot water heating system that converts solar energy into thermal energy used to heat water.

In total, more than twenty states have exemptions for solar equipment, while nearly twenty have exemptions for wind equipment. Several also have exemptions for heat pump systems.

[4] A positive externality occurs when the production and/or consumption of a good or service exerts a positive effect on a third party independent of the transaction. A cleaner environment will benefit each member of society.

Template for Evaluating Expenditures

Name of Expenditure: 3.411 Exemption for Certain Sales by Typographers, Compositors and Color Separators	**Annual cost:** $3.1M-$3.4M	**Year of adoption:** 1979	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other: Support for the printing and publishing industry

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today			x	
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers	x			

Comments (3.411 Exemption for Certain Sales by Typographers, Compositors and Color Separators)
Neighboring states such as Connecticut and Maine have a similar tax expenditure. The printing is associated with the production of volatile organic compounds, which can cause air and soil pollution.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Certain Sales by Typographers, Compositors and Color Separators
TAX EXPENDITURE NUMBER	3.411
TAX EXPENDITURE CATEGORY	Exemptions for Specified Uses of Products/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(gg)
YEAR ENACTED	1979
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $3.1 - $3.4 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Sales by typographers, compositors or color separators of composed type, film positives and negatives and reproduction proofs, or the fabrication or transfer of such items to a printer, publisher, or manufacturer of folding boxes, for use in printing are exempt from sales tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes the goal of the expenditure is to encourage and support the printing and publishing industry.	**Are there other states with a similar Tax Expenditure?** Connecticut, Maine, and California have similar exemptions. Other states exempt tangible personal property purchased by typographers, compositors, and color separators.

INTRODUCTION

The tax expenditure provides for an exemption from the sales tax for sales by typographers, compositors or color separators of composed type, film positives and negatives and reproduction proofs, or the fabrication or transfer of such items to a printer, publisher, or manufacturer of folding boxes, for use in printing. This exemption appears to have been enacted following *Houghton Mifflin Co. v. State Tax Com.*, 373 Mass. 772 (1977), in which the Massachusetts Supreme Judicial Court held that a company's purchases of type composition from various typesetters and compositors were retail sales subject to tax, rather than service transactions that are generally exempt.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, various consumables used in printing would be taxable when purchased by a printer, publisher, or certain manufacturers of folding boxes.

POLICY GOALS

DOR assumes the goal of the expenditure is to encourage and support the printing and publishing industry.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be \$3.1 - \$3.4 million per year during FY19-FY23. See Table 1 below.[1]

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Certain Sales by Typographers, Compositors, and Color Separators

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss (\$Million)	\$3.1	\$3.2	\$3.2	\$3.3	\$3.4

DIRECT BENEFITS

The Massachusetts businesses that buy or sell exempt products (composed type, film positives and negatives and reproduction proofs, etc.) are the direct beneficiaries of this sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit from the sales tax exemption in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt product to Massachusetts businesses are also direct beneficiaries.

Buyers who directly benefit from this sales tax exemption are mostly printing businesses in Massachusetts. According to the U.S. Census Bureau, in 2017, Massachusetts had 503 firms in the industry of printing. These firms employed 8,457 people generating \$442.2 million in annual payroll and \$1,656.9 million in annual sales. The size of printing industry in Massachusetts is about 2% of that in the U.S. as measured by various variables. See Table 2 below.

Table 2. Annual Payroll, Sales, and Employment of the Printing Industry in Massachusetts and U.S.

Geographic Area Name	2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue (\$Millions)	Annual Payroll (\$Millions)	Number of Employees
Massachusetts (MA)	32311	Printing	503	523	\$1,656.9	\$442.2	8,457
United States (US)	32311	Printing	22,560	23,891	\$79,665.4	\$19,794.8	407,223
% MA/US			2.2%	2.2%	2.1%	2.2%	2.1%

[1] DOR does not have in-house data to measure sales of the exempt products. The estimates reported above are based on data from the U.S. Bureau of Labor Statistics and the 2017 economic census from the U.S. Census Bureau. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in Table 1 may have significant estimation uncertainty and should be used with caution.

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The 2022 Economic Census has yet to be released.

Sales by typographers, compositors and color separators are mostly captured in the sales of the "support activities for printing" industry (NAICS 32312). According to the U.S. Census Bureau, in 2017, Massachusetts had 31 firms in this industry. These firms employed 664 people, generating $37.6 million in annual payroll and $111.1 million in annual sales. Nationally, there were 1,279 firms in the "support activities for printing" industry. These firms employed 22,725 people, generating $1,078.9 million in annual payroll and $3,085.3 million in annual sales. The size of "support activities for printing" industry in Massachusetts varies from 2.3% to 3.6% of that in the U.S. as measured by various variables. See Table 3 below. Please note that both in state and out of state sellers benefit from this exemption.

Table 3. Annual Payroll, Sales, and Employment of the "Support Activities for Printing" Industry in Massachusetts and U.S.

Geographic Area Name	2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
Massachusetts (MA)	32312	Support activities for printing	31	32	$111.1	$37.6	664
United States (US)	32312	Support activities for printing	1,279	1,371	$3,085.3	$1,078.9	22,725
% MA/US			2.4%	2.3%	3.6%	3.5%	2.9%

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The 2022 Economic Census has yet to be released.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for sale of typographers, compositors or color separators of composed type, film positives and negatives and reproduction proofs, or transfers of such items to a printer, publisher, or manufacturer of folding boxes for use in printing) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt items, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[2]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits, there may also be negative externalities to consider when evaluation this tax expenditure. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, the printing industry may produce significant amounts of volatile organic compounds (VOCs) along with heavy metals from ink which may cause air and soil pollution. By indirectly encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

The tax expenditure may help improve the state's business tax climate and maintain or increase the state's competitiveness. It is difficult to quantify how much this tax expenditure spurs economic development and encourages sales by typographers, compositors, and color separators in Massachusetts.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Connecticut and California have similar tax expenditures.

Connecticut offers an exemption for sales of typesetting, color separation, finished copy with type proofs and artwork or similar content mounted for photomechanical reproduction. Conn. Gen. Stat. § 12-412(72).

California exempts (a) the fabrication or transfer by a typographer of composed type or reproduction proofs thereof for use in the preparation of printed matter, and (b) the fabrication or transfer of such reproduction proofs or impressed mats when the fabrication

[2] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

is for, and the transfer is to, a printer or publisher for use in printing. Cal. Rev. & Tax. Code § 6010.3

Other New England states offer exemptions for tangible personal property purchased by, rather than sold by, typographers, compositors, and color separators.

Rhode Island exempts property consumed in the process of manufacturing tangible personal property for resale; the Supreme Court of Rhode Island has held that color separations and acetate sheets are included in this exemption because they are "consumed" in the process of manufacturing fabricating copper rollers and silk screens. R.I. Gen. Laws § 44-18-30(7); *American Textile Artists Assocs. v. Clark*, 534 A.2d 875 (1987).

Finally, New York offers a more limited exemption, which applies to mechanicals, layouts, artwork, photographs, color separations and like property from tax where such property is purchased, manufactured, processed, or assembled by a person who furnishes such property to a printer and the printer uses such property directly and predominantly in the production of exempt promotional materials, for sale by such printer to the person who furnished such property to the printer. NY Tax Law § 1155(n)(7).

Template for Evaluating Expenditures

Name of Expenditure: 3.306 Materials, tools & fuel used in newspaper printing	**Annual cost:** $3.3M	**Year of adoption:** 1968	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	x	☐	☐
The TE's benefit justifies its fiscal cost	☐	☐	x	☐
The TE is claimed by its intended beneficiaries	☐	☐	☐	x
The TE is claimed by a broad group of taxpayers	x	☐	☐	☐
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	x	☐
The TE is relevant today	☐	x	☐	☐
The TE is easily administered	☐	☐	x	☐
Business only -The TE is beneficial to smaller businesses	☐	☐	x	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	☐	☐

Comments (3.306 Materials, tools & fuel used in newspaper printing)
The revenue cost of this TE is overstated because the TE tax overlaps with the general sales tax exemption for materials, tools & fuel used in manufacturing. If this specific newspaper TE were repealed, many purchases by newspaper publishers would remain exempt under the more general exemption. The relevance of the TE has likely been reduced by the shift in newspaper distribution from hard copy to electronic distribution.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Materials, Tools, Fuels and Machinery Used in Newspaper Printing
TAX EXPENDITURE NUMBER	3.306
TAX EXPENDITURE CATEGORY	Exempt Component of a Product or Consumed in Production
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(r) and (s)
YEAR ENACTED	1968 (Acts 1967, c. 757, § 1); Repealed in 1990 (Acts 1990, c. 121 §§ 48-49); Reinstated in 1995 (1995 Mass. C. 38 §§ 84, 85).
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $3.3 million during FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Materials, tools, fuels, and machinery, including replacement parts, are exempt from sales tax if they are consumed and used directly and exclusively in an industrial plant for purposes of publishing a newspaper to be sold.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the expenditure is intended to support the newspaper industry and the publication and readership of newspapers.	**Are there other states with a similar Tax Expenditure?** Most states exempt sales of components used and consumed in manufacturing from sales tax, which would cover the majority of property that would qualify for this exemption. However, a few states adopt a broader exemption specifically for components used in newspaper publishing (e.g., Idaho, Vermont, North Carolina).

INTRODUCTION

The tax expenditure provides for an exemption from the sales tax for materials, tools, fuels, and machinery, including replacement parts if they are consumed and used directly and exclusively in an industrial plant for purposes of publishing a newspaper to be sold. Examples of these consumables include paper on which the newspaper is printed, ink, and printing presses and replacement parts.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, some materials, tools, fuels, and machinery, including replacement parts that are used in order to publish a newspaper for sale would be taxable when purchased by the newspaper company. However, under the general manufacturing exemption in G.L. c. 64H, s. 6(r) and (s) for sales of materials, tools, fuels and machinery used in an industrial plant in the actual manufacture of tangible personal property to be sold, some equipment and consumables used in newspaper publishing would nevertheless be exempt without this expenditure. Note that when first enacted, the manufacturing exemption was narrowly construed with respect to the newspaper industry. A number of court decisions disagreed with that approach. As a result, the exemption was broadened to specifically include the newspaper publishing industry.

POLICY GOALS

DOR assumes that the expenditure is intended to support the newspaper industry and the publication and readership of newspapers. Newspapers themselves are exempt from the sales tax under G.L. c. 64H § 6(m). By exempting purchases of equipment and consumables used in newspaper publishing, the expenditure ensures that the sales tax exemption related to newspapers applies to all stages of the newspaper production and publishing process.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $3.29 - $3.33 million per year during FY19-FY23. See the table below. [1]

Tax Revenue Loss Estimates for Sales Tax Exemption for Materials, Tools, Fuels and Machinery Used in Newspaper Printing

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$3.33	$3.31	$3.29	$3.30	$3.33

Please note that the general manufacturing exemption (in G.L. c. 64H, s. 6(r) and (s)) mentioned above was evaluated last year by the Tax Expenditure Review Commission (TERC)[2]. Because of the overlap of the general manufacturing exemption and the newspaper printing exemption, a portion of the revenue loss estimates reported in the above table for the newspaper printing exemption might also be included in the revenue loss estimates for the general manufacturing exemption. DOR does not have an analysis on the extent of the overlap estimate.

DIRECT BENEFITS

The Massachusetts businesses that buy or sell exempt products (materials, tools, fuels, and machinery used in newspaper printing) are the direct beneficiaries of the sales tax exemption. Buyers benefit from the sales tax exemption in the form of paying a lower "after tax" price while sellers benefit from the sales tax exemption in the form of receiving a higher "before tax" price. The exact split of the direct benefits depends on the interaction

[1] DOR does not have in-house data to measure sales of the exempt products. The estimates reported above are based on data from the 2017 economic census from the U.S. Census Bureau and data from Regional Economic Models, Inc. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in the table may have significant estimation uncertainty and should be used with caution.

[2] Please see tax expenditure 3.302 - Exemption for Materials, Tools, Fuels and Machinery Used in Manufacturing in the March 2021 TERC report posted on DOR website: https://www.mass.gov/doc/terc-march-2021-final-report/download.

of demand and supply and is often difficult to quantify. Out-of-state businesses selling exempt products to Massachusetts businesses are also direct beneficiaries.

Eligible buyers are the newspaper printing and publishing firms in Massachusetts. However, data on eligible buyers who actually use this sales tax exemption is not available. The data presented below provide a rough estimate of buyers who might have used this exemption.

According to the U.S. Census Bureau, in 2017, Massachusetts had 99 newspaper publishing firms.[2] These firms jointly employed 5,138 people, generating $270.0 million in annual payroll and $926.2 million in annual sales. Nationally, the 2017 Economic Census reported 375 newspaper printing (lithographic) establishments,[3] generating $1.17 billion in annual sales.

The tax revenue loss estimates reported in the table above captures revenue loss from independent newspaper printing establishments (apportioned to Massachusetts) as well as newspaper printing owned by newspaper publishing firms in Massachusetts.

As mentioned above, sellers who sell the exempt products to Massachusetts businesses also benefit from this sales tax exemption. However, given that many types of equipment and consumables are exempt under this exemption, DOR is unable to compile data on such sellers at this time.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for materials, tools, fuels, and machinery used in newspaper printing) and direct benefits (to buyers and sellers of exempt products) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt products, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the

[2] Firms in the industry with 6-digit NAICS of 511110. Some of these firms may own newspaper printing facilities.
[3] Establishments in the industry with 6-digit NAICS of 323111. These may be newspaper printing businesses independent of newspaper publishers.

chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

In addition to the economic costs and benefits, there may also be negative externalities to consider when evaluating this tax expenditure. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, the newspaper publishing industry may produce significant amounts of volatile organic compounds (VOCs) along with heavy metals from ink which may cause air and soil pollution. By indirectly encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

Due to the advancement in technology, online newspaper subscriptions and readership have increased, while the printing of paper versions of newspapers has decreased. The tax expenditure may help improve the state's business tax climate and maintain or increase the state's competitiveness, but it is difficult to quantify how much this tax expenditure spurs economic development and encourages sales by newspaper publishers in Massachusetts.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that impose a sales tax generally exempt sales of materials, machinery and equipment used to manufacture tangible personal property. However, the following states, like Massachusetts, expand on this exemption for newspaper publishers to include additional materials, which would not otherwise qualify for the manufacturing exemption:

Idaho. Tangible personal property directly used and consumed in the production of publications in a newspaper format that are distributed to the public and that rely on advertising revenue as their primary source of income is exempt from sales and use taxes. IC Sec. 63-3622T(a)

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Iowa. Iowa generally exempts all supplies used in printing newspapers. IAC 423.3(46).

New Jersey. Similar to Massachusetts, New Jersey exempts the sale of printing and publishing production machinery, apparatus, or equipment used directly and primarily in publishing newspapers. N.J. Stat. § 54:32B-8.29.

North Carolina. Sales of reproduction proofs by commercial printers to be used to produce negatives that are then used to produce plates for the printing of tangible personal property for sale are exempt. N.C. Admin Code Sec. 17: 07B.4718.

Tennessee. Sales of film, negatives, typesetting, and typesetting materials used in the business of printing are exempt. T.C.A Sec. 67-6-329(a)(14).

Washington. Sales of computer equipment to printers and publishers are exempt, in addition to materials used to produce the publication. WAC 458-20-143.

Template for Evaluating Expenditures

Name of Expenditure: 3.418 Exemption for Fuels, Supplies and Repairs for Vessels Engaged in Interstate or Foreign Commerce	**Annual cost:** $1.5 million	**Year of adoption:** 1967	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other: Retirement saving

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		x		
The TE is relevant today				x
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers		x		

Comments (3.418 Exemption for Fuels, Supplies and Repairs for Vessels Engaged in Interstate or Foreign Commerce)
Fuels for maritime trading vessels are an intermediate input, so exempting them from the sales and use tax could be seen as a way to tax final consumption only (the MA sales and use tax is a tax on retail sales, so non-exempt intermediate goods are in some cases subject to taxation). The expenditure benefits 23 firms which employ 562 people, such that the average tax expenditure per firm is $65,000 or $2,700 per employee. A number of other companies in closely related industries likely benefit indirectly, as well.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Fuels, Supplies and Repairs for Vessels Engaged in Interstate or Foreign Commerce
TAX EXPENDITURE NUMBER	3.418
TAX EXPENDITURE CATEGORY	Exemptions for Specified Uses of Product/Services
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(o)
YEAR ENACTED	1967 (original sales tax enactment, St. 1967, c. 757 § 1.)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Estimated tax loss of $1.43-1.72 million per year during FY19 to FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: The tax expenditure provides for an exemption from the sales and use tax for sales in Massachusetts of fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to further interstate and foreign commerce.	**Are there other states with a similar Tax Expenditure?** There are many variations of exemptions for commercial sea vessels in other states, often including exemptions for fuels and purchases related to the maintenance of these vessels.

INTRODUCTION

The tax expenditure provides for an exemption from the sales and use tax for sales in Massachusetts of fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce.[1]

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, sales in Massachusetts of fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce would be taxable when purchased.

POLICY GOALS

DOR assumes that the tax expenditure is intended to further interstate and foreign commerce. Many of the states that have sales and use tax exemptions for maritime activities are states with seaports. These exemptions encourage the continuation of maritime businesses, including shipbuilding and interstate commercial activities. Further, they may help make Massachusetts port facilities more attractive to water transport companies, increasing overall business activity in the state.

[1] Motor fuels subject to excise are exempt from sales and use tax under M.G.L. c. 64H, § 6(g). See item 3.202 in the annual tax expenditure budget. However, fuels used in watercraft are not subject to excise. Therefore, they are exempt from sales and use tax not under M.G.L. c. 64H, § 6(g), but under other provisions, including M.G.L. c. 64H, § 6(o) as analyzed in this report.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $1.43 - $1.72 million per year during FY19-FY23.[2] See Table 1 below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Fuels, Supplies and Repairs for Vessels Engaged in Interstate or Foreign Commerce

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$1.59	$1.43	$1.51	$1.72	$1.69

DIRECT BENEFITS

The buyers and sellers of the exempt products (fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce) are the direct beneficiaries of the sales tax exemption. Buyers (businesses in the water transportation industry that engage in interstate/foreign commerce and use Massachusetts port facilities) benefit from the sales tax exemption in the form of paying a lower "after tax price" while sellers (Massachusetts suppliers of fuels, supplies, and repairs for vessels used in interstate and foreign commerce) benefit from the sales tax exemption in the form of receiving a higher "before tax price". The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

Buyers who directly benefit from this sales tax exemption are mostly Massachusetts businesses in the NAICS industry of "Deep Sea, coastal, and great lakes water transportation". Table 2 below shows annual payroll, sales, and employment statistics for this industry in Massachusetts from the U.S. Census Bureau.

Table 2. Annual Payroll, Sales, and Employment of the Deep Sea, Coastal, and Great Lakes Water Transportation Industry in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
4831	Deep sea, coastal, and great lakes water transportation	23	24	$155.0	$46.0	562

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The 2022 Economic Census has yet to be released.

[2] DOR does not have in-house data to measure sales of the exempt products. The estimates reported in Table 1 are based on data from federal agencies (2017 economic census data from the U.S. Census Bureau, fuel use data from the Bureau of Transportation Statistics and fuel price data from the U.S. Energy Information Administration) and data from Regional Economic Models, Inc. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in Table 1 may have significant estimation uncertainty and should be used with caution.

According to the U.S. Census Bureau, in 2017, Massachusetts had 23 firms in the "Deep Sea, coastal, and great lakes water transportation" industry. These firms employed 562 people generating $46.0 million in annual payroll and $155.0 million in annual sales.

Most sellers that provide maintenance, repair and related services for maritime vessels are included in the "Other support activities for water transportation" industry. These sellers are most likely the direct beneficiaries from this sales tax exemption. Sellers of exempt fuels are mostly specialized companies that service the shipping industry. These companies are included in the "Petroleum and petroleum products merchant wholesalers" industry. Table 3 below shows annual payroll, sales, and employment statistics for these two industries. Please note that sales shown in Table 3 may include items not covered by the exemption (such as nontaxable services or taxable products that do not meet the requirements of the exemption).

Table 3. Annual Payroll, Sales, and Employment of the "Other Support Activities for Water Transportation" and the "Petroleum and Petroleum Products Merchant Wholesalers" Industry in the United States and Massachusetts

2017 NAICS Code	Geographic Area Name	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Billions)	Annual Payroll ($Millions)	Number of Employees
488390	United States	Other support activities for water transportation	686	805	$1.6	$457.4	7,799
488390	Massachusetts	Other support activities for water transportation	D	D	D	D	100 to 249
4247	United States	Petroleum and petroleum products merchant wholesalers	3,978	6,472	$1,117.3	$7,552.5	99,784
4247	Massachusetts	Petroleum and petroleum products merchant wholesalers	72	91	$29.9	$203.5	2,125

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The 2022 Economic Census has yet to be released.
D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for fuels, supplies, and repairs for vessels engaged in interstate and foreign commerce) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to buyers and sellers of the exempt products, which is the sales tax the buyers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[3]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Besides the economic costs and benefits discussed so far, there may also be negative externalities to consider when evaluating this tax expenditure. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, a greater movement of vessels engaged in interstate and foreign commerce may impact the life of some aquatic (endangered) species and may create some water and air pollution during the repairing and fueling process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

On the other hand, this tax expenditure helps improve the state's business tax climate and helps maintain or increase the state's competitiveness and increase trade. It is difficult to quantify how much this tax expenditure encourages the interstate and foreign commerce,

[3] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

which is assumed to be the goal of this tax expenditure and spurs economic growth in the state.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

There are many variations of exemptions for commercial sea vessels by other states, often including exemptions for fuels and purchases related to the maintenance of these vessels. DOR is aware of the following states with similar exemptions:

Alabama: AL Code § 40-23-62 [fuels and supplies for maritime commerce and commercial fishing].

California: California Revenue and Taxation Code - RTC § 6368 [watercraft and attendant fuels, supplies, and repairs, for commercial maritime and fishing activities].

Florida: Fla. Stats, Sec 212.08 (4), (8) [Multiple exemptions (some partial) for vessels used in interstate commerce, fuels and supplies, commercial fishing, guide boats, ecotourism].

Georgia: Ga. Code § 48-8-3, various subsections [Exemptions for fuels and supplies and containers for ships used in interstate commerce and commercial fishing].

Hawaii: Hawaii Rev. Stats. § 237 – 28.1 [shipbuilding and ship repairs for vessels engaged in interstate or international trade].

Louisiana: La. Rev. Stats § 47:305.1 [various exemptions related to commercial shipbuilding and maintenance]. La. Rev. Stats § 47:305.20 [broad exemptions for sales related to commercial fishing].

Maine: Maine Rev. Stats. § 36-1760(4) [exemption for supplies for ships engaged in interstate or foreign commerce or passengers for hire].

Maryland: Maryland Rev. Stats § 11-218(c) [fuels and repair parts for vessels used for commercial fishing or other commercial purposes].

New Jersey: New Jersey Stats. Ann. § 54:32B-8.12 [limited exemption for the conversion and repair of certain commercial vessels used in trade or fishing, supplies and replacement parts].

New York: New York Tax Law § 1115 (8) [Commercial vessels engaged in interstate or foreign commerce and fuel, provisions, supplies, maintenance, and repairs, but not for original equipping of a new ship]. New York Tax Law § 1115 (24) [Commercial fishing vessels and fuels and maintenance supplies].

Pennsylvania: Penna. Stats. 72-7204 (15), (16) [Exemptions for commercial vessels 50 tons or more, supplies and fuels].

Rhode Island: RI Gen. Laws § 44-18-30 (25) [Sales made to a commercial vessel 50 tons or more engaged in interstate commerce, repairs, and conversions], § 44-18-30 (26) [broad exemption for commercial fishing vessels and sales to such vehicles, maintenance, repair].

South Carolina: South Carolina Code § 12-36-2120 (13) [fuels, lubricants and supplies for commercial vessel, but not painting or repairs]. § 12-36-2120 (15.d) [fuels used in commercial fishing].

Vermont: Vermont Stats c. 233, § 9741 (31) [ferryboats and parts and machinery].

Virginia: Virginia Code § 58.1-609.3(4) [vessels used in interstate or foreign commerce, fuels and supplies, materials used in building or repairing the vessels].

Washington: Rev. Code of Washington § 82.08.0262 [sales of watercraft used in interstate / international commerce and commercial deep-sea fishing].

Template for Evaluating Expenditures

Name of Expenditure: 3.610 Exemption for Rental Charges for Refuse Bins and Containers	**Annual cost:** $0.8M-$0.9M	**Year of adoption:** 1982	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: not stated, maybe compliance costs?

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	X			
The TE's benefit justifies its fiscal cost				X
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers				X
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			X	
The TE is relevant today				X
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses **not sure how big all the waste companies are. Some are big.				
Individuals only -The TE benefits lower income taxpayers				

Comments (3.610 Exemption for Rental Charges for Refuse Bins and Containers)
The tax expenditure exempts from sales and use tax amounts waste service firms charge their customers for refuse containers and bins placed on customer premises in connection with waste service contracts. DOR assumes that the goal of this tax expenditure is to ensure that the Massachusetts sales and use tax is not imposed on waste service transactions where a refuse container or bin is rented to a customer, thereby easing the tax burden on the customers of waste service firms. As there is no direct data available at the state level, a Massachusetts estimate for each variable was determined by DOR using the relative size of the waste collection industry in the U.S. and in Massachusetts as reported in the 2017 Economic Census data. DOR estimated ten companies, with a total of 155 employees, engage in refuse container rentals in Massachusetts. While neighboring states adopt different approaches as to when services sold in conjunction with tangible personal property are subject to their respective sales and use taxes, no neighboring state specifically exempts refuse bins and containers from tax.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Rental Charges for Refuse Bins and Containers
TAX EXPENDITURE NUMBER	3.610
TAX EXPENDITURE CATEGORY	Miscellaneous Sales and Use Tax Exemptions
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(ii)
YEAR ENACTED	1982 (See St. 1982, c. 429, § 4)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average Annual Tax loss of $0.9 million during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Rental charges for refuse containers or bins in connection with service contracts by waste-service firms are exempt from sales and use tax when the containers are placed on the customer's premises by the waste service firm.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the policy goal of this expenditure is to ensure that no portion of the charge to the customer for waste service transactions is subject to sales tax.	**Are there other states with a similar Tax Expenditure?** There are no neighboring states that specifically exempt refuse containers or bins provided by waste-service firms.

INTRODUCTION

The tax expenditure exempts from sales and use tax amounts waste service firms charge their customers for refuse containers and bins placed on customer premises in connection with waste service contracts.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Absent the exemption afforded by this tax expenditure, waste service providers would be required to collect sales or use tax when they provide refuse containers and bins to their customers. Although waste services per se are not subject to sales and use tax, the provision of the containers in the absence of the exemption could be considered a retail sale of tangible personal property subject to tax. The result would be that the sales and use tax would be imposed on part of the charge under the waste services contract.

POLICY GOALS

DOR assumes that the goal of this tax expenditure is to ensure that the Massachusetts sales and use tax is not imposed on waste service transactions where a refuse container or bin is rented to a customer, thereby easing the tax burden on the customers of waste service firms.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $0.8 - $0.9 million per year during FY19-FY23. See Table 1 below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Rental Charges for Refuse Bins and Containers

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$0.8	$0.8	$0.8	$0.9	$0.9

DIRECT BENEFITS

The direct beneficiaries of the sales tax exemption are the lessors that rent refuse bins or containers to lessees, and the lessees who rent those bins or containers. Lessees benefit from the sales tax exemption in the form of paying a lower "after tax" rent while lessors benefit in the form of receiving a higher "before tax" rent. The degree to which the lessee or lessor receives more of the direct benefits depends on the interaction between supply and demand, which is difficult to quantify.

The rental of refuse bins or containers falls under the Waste Collection (NAICS 5621) industry. Table 2 reports the number of such waste collection firms in Massachusetts and their annual payrolls, sales, and employment in 2017. As shown in Table 2, Massachusetts had 254 waste collection firms with 310 establishments. These firms employed 5,868 people generating $361.9 million in annual payroll and $1.6 billion in annual sales.

Table 2. 2017 Payroll, Sales, and Employment of the Waste Collection Industry in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
5621	Waste collection	254	310	$1,576.9	$361.9	5,868
562111	Solid waste collection	230	282	$1,390.6	$322.5	5,062
562112	Hazardous waste collection	10	13	$164.3	$35.0	694
562119	Other waste collection	15	15	$22.0	$4.3	112

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The next Economic Census will be conducted in 2022.

It should be noted that not every establishment in this industry engages solely in the rental of refuse bins or containers. The research company IBISWorld produced a 2019 report, which was updated in May 2021, on the dumpster rental industry in the United States and found that there were 318 companies nationwide that engaged in this activity, which together had an estimated annual revenue of $489.7 million.[1] As there is no direct data available at the state level, a Massachusetts estimate for each variable was determined by DOR using the relative size of the waste collection industry in the U.S. and in Massachusetts as reported in the 2017 Economic Census data. See Table 3 below.

Table 3. National and Massachusetts Dumpster Rental Industry Number of Businesses, Employment & Sales

Variable	National	MA
2016-2021 Annual Growth Rate	3.0%	3.0%
Number of Businesses	318	10
Industry Employment	5,808	155
Industry Sales ($Millions)	$489.7	$14.5

Source: IBISWorld; Massachusetts Department of Revenue estimated.

The results suggest that there are an estimated ten companies in Massachusetts that engage in refuse container rentals. DOR then estimated that there were 155 employees in this industry in Massachusetts by multiplying the national figure of 5,808 employees by 2.7%, which is the industry's employment share in Massachusetts. An informal internet search for dumpster/refuse rentals reveals multiple companies that engage in this business activity in Massachusetts, which may include firms with headquarters outside of Massachusetts.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for the rental of refuse bins or containers) and direct benefits (to lessors and lessees of refuse bins or containers) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to lessors and lessees of refuse bins or containers, which is the sales or use tax they would have had to pay to the Commonwealth.

[1] IBISWorld Dumpster Rental Industry in the US - Market Research Report, Updated: May 18, 2021: https://www.ibisworld.com/united-states/market-research-reports/dumpster-rental-industry/

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the direct costs or benefits to households, such as those of its employees in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[2]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

By encouraging proper refuse disposal, including the re-use of refuse containers, this expenditure helps create a cleaner and safer environment, which would generate positive externalities.[3] Such positive externalities are often difficult to quantify.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

While neighboring states adopt different approaches as to when services sold in conjunction with tangible personal property are subject to their respective sales and use taxes, no neighboring state specifically exempts refuse bins and containers from tax.

[2] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

[3] A positive externality occurs when the production and/or consumption of a good or service exerts a positive effect on a third party independent of the transaction. A cleaner and safer environment will benefit each member of society.

Template for Evaluating Expenditures

Name of Expenditure: 3.611 Exemption for Honor Trays	**Annual cost:** $.21M	**Year of adoption:** 1993	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Administrative burden

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: small household savings

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	x			
The TE's benefit justifies its fiscal cost				x
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	x			
The TE is relevant today			x	
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers			x	

Comments (3.611 Exemption for Honor Trays)
Low cost (less than $1 million per year). The amount of the sales and use tax exemption for sales of snacks and candy from an honor snack tray was raised from $1.00 to $3.50 in 2000. The goal is to help relieve businesses of the burden of compliance. Consumers and businesses receive minimal benefits.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Honor Snack Trays
TAX EXPENDITURE NUMBER	3.611
TAX EXPENDITURE CATEGORY	Miscellaneous Sales and Use Tax Exemptions
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(h)
YEAR ENACTED	1993 (see St. 1993, c. 110, §§ 125, 126)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average Annual Tax loss of $0.26 million during FY19-FY23.
NUMBER OF TAXPAYERS	Buyers and sellers who buy or sell exempt items through honor snack trays.
AVERAGE TAXPAYER BENEFIT	$0.11 per Massachusetts Household in FY19.

Description of the Tax Expenditure: Snacks and candy purchased from honor trays are exempt from the sales tax on meals, provided all items in the tray are sold for less than $3.50.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes the goal to be the removal of sales tax compliance burden on employers making certain de minimis sales of snacks and candy from honor snack trays.	**Are there other states with a similar Tax Expenditure?** Connecticut exempts sales of meals from unattended honor boxes, regardless of the sales price of such meals.

INTRODUCTION

The tax expenditure provides for an exemption of snacks and candy purchased from honor trays from the sales tax on meals, provided all items in the tray are sold for less than $3.50.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While the sales tax is imposed on retail sales, it is not necessarily a tax on final consumption by households, as is the case with the value added taxes (VATs) imposed in most other countries. A retail sale to a business may also be subject to sales tax. For example, paper, desks, computers, and similar items purchased for office use would generally be taxable. The exclusion of sales for resale and the application of certain exemptions prevents the imposition of the tax on many business inputs, but other business inputs remain taxable. Aside from specific statutory exclusions and exemptions, there is no general prohibition in the sales and use tax statutes on the application of the tax to retail sales at multiple stages of the production and sales process.

Sales of food products, including certain snacks and candy, are exempt from the sales tax. M.G.L. c. 64H, § 6(h). While sales of food are generally exempt from sales tax, sales of "meals," defined as food or beverage "prepared for human consumption and provided by a restaurant," are taxable. M.G.L. c. 64H, § 6(h). A "restaurant" is defined as "any eating establishment where food, food products, or beverages are provided and for which a charge is made," and generally would include honor snack trays. However, an honor snack tray is not considered an eating establishment to the extent that it sells only snacks or candy with a sales price of less than $3.50. As a result, sales from an honor snack tray only selling snacks or candy below this threshold are not subject to tax. See 830 CMR 64H.6.5(6)(a)8.

For purposes of the sales tax on meals, an honor snack tray is any arrangement where candy or snacks are available in an open tray for the benefit of employees in an establishment that normally does not sell food products and for which payment is made on the honor system. For example, a workspace may have a box filled with prepackaged snacks and candy, with a bin next to it where employees may voluntarily deposit payment. This tax expenditure provides that this honor snack tray arrangement will not be considered an eating establishment selling meals so long as such snacks and candy are sold for less than $3.50, and therefore sales of such items will not be subject to tax.

The amount of the sales and use tax exemption for sales of snacks and candy from an honor snack tray was raised from $1.00 to the current $3.50 figure in 2000 (St. 2000, c. 209).

Absent the exemption afforded by this tax expenditure, sales of snacks and candy from honor trays would be considered meals sold by a restaurant and subject to tax.

POLICY GOALS

DOR assumes that this tax expenditure is generally intended to ease the compliance burden for employers with respect to sales of certain snacks and candy, where it may be difficult for tax to be reliably collected, particularly where payments are made on the honor system.

DIRECT COSTS

The annual revenue loss from this tax expenditure from FY19 through FY23 is estimated to range from $0.15 million to $0.32 million with an average annual revenue loss of $0.21 million. See Table 1 below.

Table 1. Tax Revenue Loss Estimates for Sales Tax Exemption for Honor Snack Trays ($Million)

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss	$0.30	$0.15	$0.23	$0.32	$0.32

DIRECT BENEFITS

The Massachusetts consumers and businesses that buy or sell exempt items through honor snack trays are the direct beneficiaries of the tax expenditure. Buyers benefit from the tax expenditure in the form of paying a lower "after tax price" while sellers benefit from the tax expenditure in the form of receiving a higher "before tax price". The degree to which the buyer or the seller receives more of the direct benefits depends on the interaction between supply and demand and is often difficult to quantify. In addition, honor tray operators benefit from the tax expenditure by not incurring administrative costs associated with collecting tax for honor snack tray sales, where accurately collecting tax may present unique challenges.

For simplicity, we assume that the entire tax savings due to the tax expenditure is passed on to buyers. Based on this assumption, Table 2 reports the distribution of estimated tax savings in FY19 among households in different income ranges. The table is based primarily on the 2019 Consumer Expenditure Survey data published by the U.S. Bureau of Labor

Statistics and data from other sources (e.g., Moody's Analytics). Please note that this table is created based on the assumption that the distribution of honor snack tray sales among households follows the distribution of consumption of "cereals and bakery products" and "sugar and other sweets" among households. Given that we have limited information on honor snack tray sales, the usage of "cereals and bakery products" and "sugar and other sweets" may be misrepresentative and therefore Table 2 figures below should be used with caution.

According to Table 2, the average tax saving from the exemption is estimated to be $0.11 per Massachusetts household in FY19, varying from $0.05 for households with annual income of less than $15,000, to $0.26 for households with annual income of at least $200,000. 18.2% of all tax savings went to households with annual income of $100,000 to $149,999, while 5.1% went to households with annual income of less than $15,000. The tax savings reduced Massachusetts households' effective tax rate (the ratio of tax to income) by 0.0001 percentage points on average. This reduction varied from 0.0001 percentage points for the households with annual income of at least $70,000 to 0.006 percentage points for households with annual income of less than $15,000.

Table 2. Estimated Distribution of Tax Savings to MA Households by Income Level in FY19

Annual Income Range	Number of MA Households (Millions)	Tax Savings (Millions)	Average Tax Savings ($)	Tax Savings Distribution	Change in Household's Effective Tax Rate
Less than $15,000	0.323	$0.02	$0.05	5.1%	-0.0006%
$15,000 to $29,999	0.405	$0.03	$0.07	9.2%	-0.0003%
$30,000 to $39,999	0.265	$0.02	$0.08	6.6%	-0.0002%
$40,000 to $49,999	0.229	$0.02	$0.08	6.5%	-0.0002%
$50,000 to $69,999	0.356	$0.04	$0.10	11.8%	-0.0002%
$70,000 to $99,999	0.390	$0.05	$0.12	15.3%	-0.0001%
$100,000 to $149,999	0.372	$0.05	$0.15	18.2%	-0.0001%
$150,000 to $199,999	0.169	$0.03	$0.19	10.7%	-0.0001%
$200,000 to more	0.189	$0.05	$0.26	16.5%	-0.0001%
Total	2.696	$0.30	$0.11	100.0%	-0.0001%

Note: Numbers in the table are estimated by Massachusetts Department of Revenue.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax exemption for honor snack tray sales) and direct benefits (to buyers and sellers of exempt items) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the sales tax that would have been collected from these transactions, are equal to the direct benefits afforded by the tax expenditure to purchasers and honor snack tray operators, which is the sales tax they would have had to pay, collect, and remit to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[1]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. Given that the amount of direct costs and benefits are small for this tax expenditure, much less than $1 million per year, DOR did not attempt to quantify such costs and benefits.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

In Connecticut, sales of meals from an unattended "honor box" are exempt from tax. Conn. Gen. Stat. § 12-412(27)(B). Unlike its Massachusetts counterpart, the Connecticut exemption is broader, as it applies to all sales of meals and is not capped at a particular sales price. DOR is not aware of any other state that provides a similar tax expenditure.

[1] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Template for Evaluating Expenditures

Name of Expenditure: 3.604 Exemption for Certain Bed and Breakfast Establishments from Sales Tax on Meals	**Annual cost:** $0.07 million	**Year of adoption:** 1988	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other:

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:
- ☐ Job creation & maintenance
- ☒ Investment
- ☒ Competitiveness/Strategic
- ☐ Health/Environment/Social Justice
- ☐ Other: Administrative compliance

Individual:
- ☐ Relief of poverty
- ☐ Progressivity/assistance to low earners
- ☐ Access to opportunity
- ☐ Health/Environment/Social Justice
- ☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost		x		
The TE is claimed by its intended beneficiaries		x		
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today		x		
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers	x			

Comments (3.604 Exemption for Certain Bed and Breakfast Businesses from Sales Tax on Meals)

Members discussed the complexity of this tax expenditure and its gray areas. Members assumed the purpose of this exemption is intended to prevent the collections of meals tax and the requirement to register as a restaurant. This tax expenditure is a sales tax exemption and does not cover room occupancy tax. The Public Registry of Lodging Operators indicates that there are 471 Bed and Breakfast operators in Massachusetts, which is higher than the U.S. Census figure of 154, which was the basis for the revenue loss impact of this expenditure. Given the narrow scope of the expenditure and absence of data on the 471 operators listed in the Public Registry, there is no need to modify the revenue loss estimates provided in the report at this time.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Certain Bed and Breakfast Businesses from Sales Tax on Meals
TAX EXPENDITURE NUMBER	3.604
TAX EXPENDITURE CATEGORY	Miscellaneous Exemptions
TAX TYPE	Sales and use tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(h)
YEAR ENACTED	1988 (St.1988, c. 31, §§ 1, 6)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average annual tax loss of $0.07 million during FY19 - FY23.
NUMBER OF TAXPAYERS	154 bed and breakfast businesses according to 2017 economic census.
AVERAGE TAXPAYER BENEFIT	$506 per bed and breakfast business in FY23.

Description of the Tax Expenditure: Meals at bed and breakfast businesses are exempt from sales tax on meals unless (i) they are provided by a bed and breakfast that has four or more rooms; and (ii) the meals are included in rent subject to the room occupancy excise.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure aims to reduce the tax and compliance burdens on bed and breakfast businesses.	**Are there other states with a similar Tax Expenditure?** No neighboring state exempts meals sold by bed and breakfast businesses from a sales tax on meals.

INTRODUCTION

The tax expenditure exempts meals provided by bed and breakfast businesses from sales tax on meals unless (i) they are provided by a bed and breakfast that has four or more rooms; and (ii) the meals are included in rent subject to the room occupancy excise. Therefore, such bed and breakfasts generally do not incur the administrative and tax responsibilities unique to restaurants.

Room Occupancy Excise

Massachusetts imposes a room occupancy excise on rentals of a room in a bed and breakfast establishment, hotel, lodging house, or motel in Massachusetts at a rate of 5.7% of the rent. M.G.L. c. 64G, § 3. In general, "rent" includes the total consideration paid by the occupant for the room, but generally does not include charges that are subject to the Massachusetts sales and use tax. M.G.L. c. 64G, §1.

A "bed and breakfast establishment" is defined as a private owner-occupied house where no fewer than 4 rooms are let, a breakfast is included in the rent and all accommodations are reserved in advance. In contrast, the rental of a room in a "bed and breakfast home," defined as any private owner-occupied house where no more than 3 rooms are let, a breakfast is included in the rent and all accommodations are reserved in advance, is exempt from the room occupancy excise. M.G.L. c. 64G, §§ 1, 2.

Sales Tax on Meals

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

While food products are exempt, meals sold by a restaurant are subject to tax. M.G.L. c. 64H, § 6(h). In general, sales of "meals," defined as food or beverage "prepared for human consumption and provided by a restaurant," are taxable. M.G.L. c. 64H, § 6(h). A "restaurant" is defined as "any eating establishment where food, food products, or beverages are provided and for which a charge is made." However, the term "restaurant" does not include a bed and breakfast establishment or a bed and breakfast home to the extent that the value of a breakfast served is included in the rent subject to the room occupancy excise. M.G.L. c. 64H, § 6(h). Although bed and breakfast homes are not subject to the room occupancy excise, the Commissioner has interpreted this provision as exempting meals provided by bed and breakfast homes.[1] Therefore, as a practical matter, meals provided by all bed and breakfast businesses are exempt from sales tax on meals unless they are provided by a bed and breakfast establishment where the meals are not included in rent subject to the room occupancy excise. This tax expenditure generally has the effect of subjecting breakfast meals provided by bed and breakfast establishments, to the room occupancy excise (imposed at a state rate of 5.7%) rather than the sales tax on meals (imposed at a state rate of 6.25%). The imposition of the lower rate constitutes a tax expenditure.

Absent the exemption afforded by this tax expenditure, a bed and breakfast business would be required to register as a restaurant, separately state charges for breakfast from charges for room rentals and collect sales tax on meals on those amounts.

POLICY GOALS

DOR assumes the goal of the tax expenditure is to reduce the tax burden on bed and breakfast businesses by exempting them from having to collect and remit sales tax on meals on the breakfast meals they provide. The expenditure also eases the tax administration burden on such bed and breakfast businesses by ensuring they do not incur the tax responsibilities unique to restaurants when providing such meals.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $0.07 – $0.08 million per year during FY19-FY23.[2] See the table below.

Table 1. Tax Revenue Loss Estimates for Sales Tax on Meals Exemption for Certain Bed and Breakfast Businesses

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($ Million)	$0.07	$0.07	$0.07	$0.08	$0.08

DIRECT BENEFITS

The Massachusetts bed and breakfast businesses that provide meals to guests are the direct beneficiaries of the sales tax exemption. They benefit from this tax expenditure in the form of receiving a higher "before tax" rent. Guests, who may be Massachusetts residents or out-

[1] See 830 CMR 64H.6.5(7)(c)3.

[2] DOR does not have in-house data to measure sales of the exempt products. The estimates reported above are based on data from the 2017 economic census from the U.S. Census Bureau and data from Moody's. Due to the use of external data and the limitations of the data for estimating this tax expenditure, the estimates reported in the table may have significant estimation uncertainty and should be used with caution.

of-state visitors, also benefit from this tax expenditure in the form of paying a lower "after tax" rent. The exact split of the direct benefits depends on the interaction of demand and supply and is often difficult to quantify.

The table below shows annual payroll, sales, and employment statistics for the "Bed & Breakfast Inns" industry in Massachusetts from the U.S. Census Bureau.

Table 2. Annual Payroll, Sales, and Employment of the Bed & Breakfast Inns Industry in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
721191	Bed and Breakfast Inns	154	156	$71.1	$16.1	557

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of the Economic Census. The 2022 Economic Census has yet to be released.

According to the U.S. Census Bureau, in 2017 Massachusetts had 154 firms in the bed and breakfast inns industry. These firms employed 557 people and generated $16.1 million in annual payroll and $71.1 million in annual sales.

If we assume that the entire tax saving due to this tax expenditure is passed on to the bed and breakfast businesses, the average tax saving per business would be about $506 in FY23. This estimate assumes that the number of bed and breakfast businesses does not change from calendar year 2017 to fiscal year 2023 ($0.08 million divided by 154 firms).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the sales tax (on meals) exemption for certain bed and breakfast businesses) and direct benefits (to affected bed and breakfast businesses and their guests) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the amount by which the sales tax (imposed at a rate of 6.25%) that would have been collected on the meals exceeds the room occupancy excise (imposed at a rate of 5.7%) actually collected, are equal to the direct benefits afforded by the tax expenditure to the affected bed and breakfast businesses and their guests, who pay the lower state room occupancy rate rather than the higher sales tax rate on such meals.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[3]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

Please note that the tax expenditure has a specific purpose. The goal may be to reduce the tax and compliance burdens on bed and breakfast businesses. From this standpoint, this tax expenditure meets the policy goal.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

No neighboring state exempts meals sold by bed and breakfast businesses from a sales tax on meals.

[3] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Template for Evaluating Expenditures

Name of Expenditure: 3.301 Exemption for Items Used in Making Clothing	**Annual cost:** Negligible	**Year of adoption:** 1967	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☐ Personal Income ☒ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☐ Yes ☒ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☒ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Consistency with exemption for sales of clothing

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)			x	
The TE's benefit justifies its fiscal cost				x
The TE is claimed by its intended beneficiaries				x
The TE is claimed by a broad group of taxpayers			x	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses				
Individuals only -The TE benefits lower income taxpayers			x	

Comments (3.301 Exemption for Items Used in Making Clothing)
Consumer sales of clothing below $175 per item is exempt from MA sales/use tax. In the absence of an exemption for consumer sales of material used to make clothing, sales of commercially produced clothing would be exempt while home-made clothes would carry a tax burden. While fewer consumers may sew their own clothes today than at the time the TE was adopted, nevertheless, this TE creates a rough equity between these clothing produced commercially and clothing that is still produced by individuals.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Items Used in Making Clothing
TAX EXPENDITURE NUMBER	3.301
TAX EXPENDITURE CATEGORY	Exempt Component of a Product or Consumed in Production
TAX TYPE	Sales and Use Tax
LEGAL REFERENCE	M.G.L. c. 64H, § 6(v)
YEAR ENACTED	1967 (St. 1967, c. 751, § 1)
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Negligible
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Sales of materials used in making clothes, such as thread and fabric, are exempt from sales and use tax.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the goal of the expenditure is to reduce the burden of the tax on clothing by exempting materials that households use to make their own clothes. It complements the exemption that applies to each item of finished clothing sold for $175 or less.	**Are there other states with a similar Tax Expenditure?** Most neighboring states tax fabric, yarn, and other component parts of clothing. However, New York provides a similar exemption for sales of fabric and other components that are incorporated into clothing. New Jersey exempts from tax sales of yarn, fabric, and other items to noncommercial purchasers if the items are incorporated into clothing.

INTRODUCTION

All retail sales of tangible personal property in Massachusetts are subject to a 6.25% sales tax, unless otherwise exempt. M.G.L. c. 64H, § 2. However, M.G.L. c. 64H, § 6(v) provides that sales of materials used in making clothes, such as thread and fabric, are exempt from Massachusetts sales and use tax. Other items eligible for the exemption include zippers, buttons, hooks and eyes, thread and similar items used in making clothing. See Letter Ruling 86-8.

The Massachusetts sales tax (and complementary use tax) is a transaction tax that applies to retail sales of tangible personal property (including prewritten computer software regardless of mode of transfer) and enumerated services (currently including only telecommunication services). A retail sale is any sale other than a sale for resale. A sale for resale occurs when a business purchases an item and sells it to a third party in substantially the same form in which it was purchased. All retail sales are taxable unless an exemption applies. These exemptions are tax expenditures because they prevent the imposition of tax on transactions that would otherwise be taxable.

Some exemptions are formulated to reduce the burden of the sales and use tax on items that can be viewed as essential, such as groceries and prescription medications. Clothing can likewise be viewed as essential and is exempted from sales tax so long as each item of clothing sells for $175 or less. See M.G.L. c. 64H, § 6(k). The exemption for materials used by households to make clothing complements the exemption for items of finished clothing. If purchases of finished items of clothing are exempt, then it makes sense to provide an exemption for materials that households used to make their own clothing.

Absent the exemption afforded by this tax expenditure, sales of materials used in making clothes, such as thread and fabric would generally be taxable when purchased by noncommercial purchasers. However, under the general manufacturing exemption in G.L. c. 64H, s. 6(r) and (s) for sales of materials, tools, fuels, and machinery used in an industrial plant in the actual manufacture of tangible personal property to be sold, some of these same items used in making clothing would nevertheless be exempt.

POLICY GOALS

DOR assumes that the goal of the expenditure is reduce the burden of the tax on clothing by exempting materials that households use to make their own clothes. It complements the exemption that applies to each item of finished clothing sold for $175 or less. See M.G.L. c. 64H, § 6(k).

DIRECT COSTS

The revenue loss resulting from this tax expenditure is negligible.

DIRECT BENEFITS

The total dollar benefit resulting from this tax expenditure is negligible.

EVALUATION: COMPARING COSTS AND BENEFITS

Both costs and benefits for this tax expenditure are negligible.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most neighboring states tax fabric, yarn, and other component parts of clothing. However, New York exempts from tax sales of fabric, thread, yarn, and other items that become a component part of clothing and footwear (which are generally exempt from tax in New York). NY CLS Tax § 1101(a)(15). New Jersey also exempts from tax purchases of sewing materials, such as fabrics, thread, knitting yarn, buttons and zippers from tax when bought by noncommercial purchasers who incorporate them into clothing. N.J. Stat. § 54:32B-8.4.c.

Template for Evaluating Expenditures

Name of Expenditure: 1.304 & 2.305 Modified Accelerated Cost Recovery for Equipment	**Annual cost:** $149.7M - $318.2M	**Year of adoption:** 1986	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Same as business goals

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	x	☐	☐
The TE's benefit justifies its fiscal cost	☐	x	☐	☐
The TE is claimed by its intended beneficiaries	☐	☐	x	☐
The TE is claimed by a broad group of taxpayers	☐	☐	☐	x
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	☐	☐	x	☐
The TE is relevant today	☐	☐	☐	x
The TE is easily administered	☐	☐	☐	x
Business only -The TE is beneficial to smaller businesses	☐	☐	x	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	☐	☐

Comments (1.304 & 2.305 Modified Accelerated Cost Recovery for Equipment)
We lack information confirming that MACRS increases actual investment in equipment. However, the TE may be justified for competitiveness and simplicity (Code conformity) reasons. The revenue cost of the TE is from deferral of tax; total depreciation deductions under MACRS is the same as under straight line depreciation.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Modified Accelerated Cost Recovery System for Equipment
TAX EXPENDITURE NUMBER	1.304 & 2.305
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code § 168
YEAR ENACTED	1986
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	For FY2023, $28.7 million in personal income tax and $121.0 million in corporate and business excise.
NUMBER OF TAXPAYERS	At least 10,000 corporate taxpayers and 10,000 personal income taxpayers. Exact number of taxpayers is uncertain.
AVERAGE TAXPAYER BENEFIT	Uncertain

Description of the Tax Expenditure:	**Is the purpose defined in the statute?**
In general, businesses may recover the cost of durable business assets only by capitalizing the cost and claiming depreciation deductions over a period of years. Traditional financial accounting rules required the cost to be recovered pro rata over a set number of years. However, Massachusetts conforms to the Modified Accelerated Cost Recovery System (MACRS) set out in the Internal Revenue Code (the "Code"). MACRS allows more of the cost of the property to be deducted in the first few years of an asset's life, and relatively less later. MACRS also allows taxpayers to choose an	The statute does not explicitly state the purpose of this tax expenditure.

alternative depreciation method that more closely conforms to traditional financial accounting rules. The use of the accelerated method instead of the alternative method results in a temporary reduction of tax in the earlier years of an asset's life, which constitutes a tax expenditure. The deferral of tax is analogous to an interest-free loan from the Commonwealth to taxpayers.	
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment used for business purposes.	**Are there other states with a similar Tax Expenditure?** Most states conform to the depreciation deduction allowed under the Internal Revenue Code (the "Code"). States that do so include Connecticut, Maine, New Hampshire, Rhode Island, and Vermont. New York conforms to MACRS with some state-specific modifications. California does not conform to MACRS and generally requires the use of depreciation methods in effect for federal purposes prior to 1981.

INTRODUCTION

An essential characteristic of a business income tax is that it is imposed on the net of business receipts over deductible business expenses. However, an immediate deduction is generally not allowed for the full cost of durable business property that has a useful life measured in years. Rather, the cost of such property must be capitalized and deducted as depreciation expense over a number of years based on the property's useful life. Traditional financial accounting rules required the cost of depreciable tangible personal property to be recovered pro rata over a period intended to approximate the property's anticipated actual useful life. This depreciation schedule is referred to as the "straight-line" method.

The Internal Revenue Code (the "Code") follows the general approach to cost recovery described above by providing depreciation schedules applicable to different classes of property. However, the Code permits taxpayers to use depreciation schedules that are more favorable than straight-line depreciation. Specifically, the Code adopts the Modified Accelerated Cost Recovery System (MACRS), which allows accelerated cost recovery over a period that is shorter than the property's anticipated useful life and allows more of the cost of the property to be deducted in the first few years of an asset's life, and relatively less later. In addition to such accelerated depreciation, MACRS allows taxpayers to elect to use an alternative method that conforms more closely to traditional financial accounting rules by requiring the use of straight-line depreciation.

Massachusetts conforms to MACRS for purposes of determining taxable net income under the corporate excise and taxable income under the personal income tax. The state tax expenditure is a result of this conformity. Allowing accelerated depreciation under MACRS is a tax expenditure because it allows a larger depreciation deduction earlier in an asset's life than would be allowed under alternative depreciation. To the extent that taxpayers employ accelerated depreciation instead of alternative depreciation, a temporary reduction of tax results. The reduction is temporary because the depreciation deduction is smaller in the later years of an asset's useful life. The temporary deferral of tax can be viewed as an interest-free loan from the Commonwealth to taxpayers.

POLICY GOALS

DOR assumes that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment used for business purposes.

DIRECT COSTS

Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report of the Joint Committee on Taxation, Congress of the United States (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the federal estimates for difference between the federal and state fiscal year,[2] effective tax rates, and the size of tax base. Table 1 provides Massachusetts revenue loss estimates resulting from this expenditure during FY2019-FY2023, which range from $149.7 million to $318.2 million. By tax type, the loss estimates range from $121.0 million to $258.5 million for corporate excise, and from $28.7 million to $59.8 million for personal income tax.

Table 1. Revenue Loss Estimates for Modified Accelerated Cost Recovery System for Equipment ($ Million)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise Tax	$258.5	$227.9	$187.6	$155.5	$121.0
Personal Income Tax	$59.8	$51.8	$42.1	$35.7	$28.7
Total	$318.2	$279.7	$229.6	$191.3	$149.7

DIRECT BENEFITS

IRS form 4562 is used to report information on the tax benefits claimed by taxpayers. More specifically, this form captures depreciation and amortization information on non-residential real property with certain limitations. After matching IRS form 4562 data and Massachusetts return data, DOR was able to determine that at least 10,000 corporate and business return filers and at least another 10,000 personal income taxpayers benefited from this tax expenditure.[3]

Tables 2 through 7 below show the percentage of impacted businesses, the average percentage change in taxable income due to this tax expenditure, and the average change in taxable income per impacted bussiness by *range of taxable income*, by *range of employees*, and by *industry* for both corporate taxpayers and personal income taxpayers (or individual businesses).

[1] JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

[3] Please note that the exact number of taxpayers benefiting from this tax expenditure could not be determined due to data limitations.

Corporate and business taxpayers:

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*

Taxable Income Range	% of Affected Corporations	Average % Change in Taxable Income Due to Tax Expenditure	Average Taxable Income Change per Impacted Corporation
Less than $0	25.8%	2.9%	-$88,495
0 to $9,999	19.0%	-98.1%	-$73,947
$10,000 to $99,999	16.3%	-6.3%	-$2,873
$100,000 to $999,999	19.8%	-3.3%	-$13,394
$1,000,000 to $9,999,999	15.6%	-3.3%	-$114,149
$10,000,000 or more	3.4%	-1.5%	-$737,939
Total or average	100.0%	-5.3%	-$83,012

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

According to Table 2, corporations with negative taxable incomes have the highest percentage of impacted corporations, at 25.8% (see second column). Corporations in the taxable income range of $10 million of more average the largest dollar benefit from the expenditure (taxable income reduction of $737,939, see fourth column). Coporations in the taxable income range of $0 to $9,999 average the largest percetange reduction in taxable income from this expenditure (98.1%, see third column). The average taxable income reduction for all corporations benefitting from the tax expenditure is estimated to be $83,012. On average, impacted coporations reduced their taxable income by 5.3% due to the tax expenditure.

Table 3. Impact on Corporate and Business Taxpayers by *Range of Employees*

Range of Employees	% of Affected Corporations	Average % Change in Taxable Income Due to Tax Expenditure	Average Taxable Income Change per Impacted Corporation
Less than 5	32.5%	-4.2%	-$47,118
5 to 49	21.3%	-15.9%	-$107,930
50 to 99	8.0%	-1.6%	-$19,122
100 to 199	9.0%	-6.1%	-$87,181
200 to 499	9.1%	-14.9%	-$67,666
500 or more	20.1%	-1.9%	-$145,230
Total or average	100.0%	-5.3%	-$83,012

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at Table 3, 53.8% of all impacted corporations have less than 50 employees (32.5% plus 21.3%, see second column). 20.1% of all impacted corporations have 500 or more employees. Corporations with 500 or more employees also have the highest reduction in taxable income per corporation, which is estimated to be $145,230 (see fourth column).

Table 4. Impact on Corporate and Business Taxpayers by *Industry*:

Industry	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
11 Agriculture, Forestry, Fishing and Hunting	0.6%	-4.0%	-$15,974
21 Mining, Quarrying, and Oil and Gas Extract	0.1%	-421.4%	-$254,532
22 Utilities	0.3%	-6.9%	-$147,068
23 Construction	3.3%	-2.2%	-$11,966
31-33 Manufacturing	24.9%	-5.5%	-$115,790
42 Wholesale Trade	10.9%	-2.1%	-$39,756
44-45 Retail Trade	9.0%	-1.2%	-$59,679
48-49 Transportation and Warehousing	2.9%	-17.1%	-$194,407
51 Information	6.5%	-3.9%	-$131,921
52 Finance and Insurance	3.0%	-2.7%	-$90,592
53 Real Estate and Rental and Leasing	3.7%	-14.1%	-$169,988
54 Professional, Scientific, and Technical Services	21.4%	-3.5%	-$56,270
55 Management of Companies and Enterprises	4.5%	-2.3%	-$127,793
56 Administrative and Support and Waste Management and Remediation Services	2.1%	-0.6%	-$7,135
61 Educational Services	0.6%	-0.9%	-$3,852
62 Health Care and Social Assistance	1.1%	-1.6%	-$15,924
71 Arts, Entertainment, and Recreation	0.7%	-1.8%	-$16,034
72 Accommodation and Food Services	1.7%	-25.0%	-$71,377
81 Other Services (except Public Administration)	1.0%	-2.5%	-$11,635
Others or unmatched	1.5%	-1.2%	-$30,489
Total or average	100.0%	-5.3%	-$83,012

Source: Department of Revenue (corporate excise returns and federal form 4562 data sets for tax year 2018)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at Table 4, the taxable income reduction per corporation varied from $3,852 for Educational Services to $254,532 for Mining, etc (see fourth column).

Personal Income Taxpayers:

Table 5. Impact on Personal Income Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
0 to $9,999	16.0%	-26.1%	-$1,235
$10,000 to $99,999	50.1%	-2.5%	-$1,210
$100,000 to $999,999	33.1%	-0.6%	-$1,351
$1,000,000 to $9,999,999	0.7%	0.04%	-$1,140
$10,000,000 or more	0.1%	0.01%	-$1,977
Total or average	100.0%	-0.8%	-$1,261

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by taxable income range, the highest percentage of impacted businesses fall within the range of $10,000 to $99,999, at 50.1% (see second column). Businesses in the taxable income range of $10 million or more average the largest dollar benefit from the expenditure (taxable income reduction of $1,977, see fourth column). Businesses in the taxable income range of $0 to $9,999 average the largest percentage reduction from the expenditure (26.1%, see third column). The average taxable income reduction for all impacted personal income taxpayers due to the tax expenditure is estimated to be $1,261. On average, the impacted businesses reduced their taxable income by 0.8% due to the tax expenditure.

Table 6. Impact on Personal Income Taxpayers by *Range of Employees*:

Range of Employees	% of Affected Businesses	Average % Change in Taxable Income Due to Tax Expenditure	Average Taxable Income Change per Impacted Business
Less than 5	99.9%	-0.8%	-$1,261
5 to 49	0.1%	-1.8%	-$750
Total or average	100.0%	-0.8%	-$1,261

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by range of employees, all impacted businesses have less than 50 employees. 99.9% of them have less than 5 employees.

Table 7. Impact on Personal Income Taxpayers by *Industry*:

Industry	% of Affected Businesses	Average % Change in Taxable Income Due to Tax Expenditure	Average Taxable Income Change per Impacted Business
11 Agriculture, Forestry, Fishing and Hunting	0.5%	-0.8%	-$1,206
21 Mining, Quarrying, and Oil and Gas Extract	0.1%	-0.03%	-$628
22 Utilities	0.1%	-6.0%	-$2,222
23 Construction	5.9%	-2.0%	-$1,522
31-33 Manufacturing	1.6%	-2.2%	-$2,705
42 Wholesale Trade	0.9%	-1.5%	-$1,370
44-45 Retail Trade	6.3%	-1.6%	-$1,511
48-49 Transportation and Warehousing	5.5%	-8.9%	-$4,604
51 Information	2.9%	-0.2%	-$381
52 Finance and Insurance	1.3%	-0.6%	-$737
53 Real Estate and Rental and Leasing	5.4%	-0.8%	-$1,070
54 Professional, Scientific, and Technical Services	21.3%	-0.3%	-$671
56 Administrative and Support and Waste Management and Remediation Services	4.0%	-1.8%	-$1,139
61 Educational Services	4.6%	-0.4%	-$531
62 Health Care and Social Assistance	7.8%	-1.0%	-$1,590
71 Arts, Entertainment, and Recreation	13.9%	-0.3%	-$693
72 Accommodation and Food Services	3.1%	-1.8%	-$1,751
81 Other Services (except Public Administration)	9.1%	-2.0%	-$1,512
Others or unmatched	5.7%	-1.1%	-$927
Total or average	100.0%	-0.8%	-$1,261

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562 data sets for tax year 2018)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by industry, the taxable income reduction per impacted busines varied from $381 for Information to $4,604 for Transportation and Warehousing (see fourth column).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance this tax expenditure) and direct benefits (to businesses that used modified accelerated depreciation on buildings other than rental housing) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate, business and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states conform to MACRS as allowed under the Code. States that do so include Connecticut, Maine, New Hampshire, Rhode Island, and Vermont. New York adopts MACRS with modifications. California does not conform to MACRS and generally requires the use of depreciation methods in effect for federal purposes prior to 1981.

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

References

JOINT COMMITTEE ON TAXATION . (2020). *ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2020-2024.* JOINT COMMITTEE ON TAXATION, Congress of United States . Washington D.C.: JOINT COMMITTEE ON TAXATION . Retrieved from https://www.jct.gov/publications/2020/jcx-23-20/

Template for Evaluating Expenditures

Name of Expenditure: 1.305 & 2.306 Expense Deduction for First-Year Depreciation of Business Assets	**Annual cost:** \$37.6M-\$57.3M	**Year of adoption:** 1958	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance

☒ Investment

☒ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☐ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☒ Access to opportunity

☐ Health/Environment/Social Justice

☐ Other: Simplify tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers			x	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				x
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers		x		

Comments (1.305 & 2.306 Expense Deduction for First-Year Depreciation of Business Assets)
Code § 179 allows federal taxpayers to elect to claim an immediate expense deduction in the tax year during which the asset was first placed in service. Massachusetts follows the federal depreciation rules, with modifications. Most states either follow the Code § 179 deduction or allow a similar state-specific deduction. Using the Massachusetts share of the U.S. population (2.1%), DOR estimates that in 2017 roughly 20,000 corporate excise taxpayers and 81,700 personal income taxpayers benefited from this tax expenditure. Members discussed the challenge of businesses navigating the differences between federal and state depreciation schedules, which would be the case without this tax expenditure.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Expense Deduction for First-Year Business Assets
TAX EXPENDITURE NUMBER	1.305 & 2.306
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code § 179
YEAR ENACTED	1958
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	For FY2023, $40.3 million revenue loss in personal income tax and $10.0 million revenue loss in corporate and business excise tax.
NUMBER OF TAXPAYERS	See the text in the report.
AVERAGE TAXPAYER BENEFIT	See the text in the report.

Description of the Tax Expenditure:	**Is the purpose defined in the statute?**
Under the Internal Revenue Code (the "Code"), businesses may recover the cost of durable business assets only by capitalizing the cost and claiming depreciation deductions over a period of years. The Code adopts different depreciation schedules for specified classes of assets. Massachusetts follows the federal depreciation rules, with modifications. Code § 179 allows federal taxpayers to elect to claim an immediate expense deduction in the tax year during which the asset was first placed in service. Due to its conformity to the Code for determining business expense deductions, Massachusetts allows the Code § 179 deduction in the same amount as it is allowed for federal tax purposes. The tax expenditure	The statute does not explicitly state the purpose of this tax expenditure.

is a result of such conformity. The immediate deduction of the cost of business assets constitutes a tax expenditure because it results in a deferral of tax.	
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment by allowing the immediate deduction of part of the purchase price, instead of requiring the entire purchase price to be capitalized and deducted over a period of years.	**Are there other states with a similar Tax Expenditure?** Most states either follow the Code § 179 deduction or allow a similar state-specific deduction. New York, Maine, Rhode Island, and Vermont follow the federal deduction. California, Connecticut, and New Hampshire allow state-defined deductions similar to Code § 179 expensing

INTRODUCTION

An essential characteristic of a business income tax is that it is imposed on the net of business receipts over deductible business expenses. However, an immediate deduction is generally not allowed for the full cost of durable business property that has a useful life measured in years. Rather, the cost of such property must be capitalized and deducted as depreciation expense over a number of years based on the property's useful life. The Internal Revenue Code (the "Code") adopts this approach in providing depreciation schedules applicable to different classes of property. The net income measure of the Massachusetts corporate excise and the Massachusetts personal income tax both adopt the federal depreciation rules, with modifications not relevant to this report.

Code § 179 allows taxpayers an election to immediately deduct in a given year 100% of the cost of depreciable property placed in service in that year, up to a limit of $1 million. If the taxpayer's asset purchases for the year exceed $2.5 million, the deduction is reduced on a dollar-for-dollar basis for each additional dollar spent. Both these thresholds are adjusted annually for inflation. The Code § 179 deduction is allowed in addition to the allowable depreciation deduction, but the basis for depreciation is reduced by the amount of the deduction. Massachusetts conforms to the Code § 179 deduction for both corporate excise net income tax and personal income tax purposes. The Massachusetts tax expenditure is a result of this conformity. The Code § 179 deduction is a tax expenditure because it allows the cost of eligible assets to be deducted earlier in an asset's useful life, resulting in a temporary reduction of tax. The tax reduction is temporary because it reduces the allowable depreciation deduction later in the asset's useful life. The deferral of tax can be viewed as an interest-free loan from the Commonwealth to taxpayers.

POLICY GOALS

DOR assumes that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment used for business purposes, by allowing the immediate deduction of part of the purchase price, instead of requiring the entire purchase price to be capitalized and deducted over a period of years.

DIRECT COSTS

Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report prepared by the Joint Committee on Taxation, Congress of the United States (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the

[1] JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/.

federal estimates for the difference between federal and state fiscal year,[2] effective tax rates, and size of tax base. Table 1 provides Massachusetts revenue loss estimates resulting from this tax expenditure during the FY2019-FY2023, period, which range from $37.6 million to $57.3 million. By tax type, the revenue loss estimates range from $7.7 million to $10.6 million for corporate excise, and from $29.9 million to $46.7 million for personal income tax.

Table 1. Revenue Loss Estimates for Expense Deduction for Excess First-Year Business Assets ($ Million)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise Tax	$10.6	$9.5	$8.5	$7.7	$10.0
Personal Income Tax	$46.7	$37.8	$33.0	$29.9	$40.3
Total	$57.3	$47.3	$41.5	$37.6	$50.3

DIRECT BENEFITS

Code § 179 provides an election to expense 100% of the cost of certain assets, new and used, when the property is placed in service as an alternative to recovering cost over a period of years through depreciation or amortization deductions. The Code § 179 deduction applies to tangible personal property such as machinery and equipment purchased for use in a trade or business, and if the taxpayer elects, qualified real property.

The Internal Revenue Service's "Statistics of Income" program provides information on the number of beneficiaries of the federal expenditure. They estimate that in 2017 about 955,000 corporate income tax filers and 3.9 million personal income tax filers benefited from the federal expenditure. Using the Massachusetts share of the U.S. population (2.1%), we estimate that in 2017 roughly 20,000 corporate excise taxpayers and 81,700 personal income taxpayers benefited from Massachusetts' conformity with Code § 179[3].

IRS form 4562 is used to report depreciation and amortization deductions claimed by taxpayers. After matching IRS form 4562 data and Massachusetts return data, DOR was able to tabulate the following statistical information on potential beneficiaries of this tax expenditure. Tables 2 through 7 below show the percentage of impacted businesses, the average percentage change in taxable income due to the expenditure, and the average

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st t June 30th of the following year.

[3] Please note that the exact number of taxpayers benefiting from this tax expenditure could not be determined due to data limitations.

change in taxable income per impacted business by *range of taxable income*, by *range of employees*, and by *industry* for both corporate taxpayers and personal income taxpayers (or individual businesses).

Corporate and business taxpayers:

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
Less than $0	1.8%	-146.8%	-$203,066
0 to $9,999	18.4%	-85.0%	-$16,801
$10,000 to $99,999	40.4%	-15.7%	-$7,710
$100,000 to $999,999	31.2%	-10.7%	-$39,775
$1,000,000 to $9,999,999	7.9%	-5.7%	-$154,600
$10,000,000 or more	0.4%	-1.5%	-$253,234
Total or average	100.0%	-8.4%	-$35,526

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

According to Table 2, corporations with taxable income in the range of $10,000 to $99,999 have the highest percentage of impacted corporations, at 40.4% (see second column). The table also shows that the lower the income range, the higher the average percentage change in taxable income due to the tax expenditure (see third column). Corporations in the taxable income range of $10 million or more average the largest dollar benefit from the expenditure (taxable income reduction of $253,234, see fourth column). The average taxable income reduction for all corporations benefitting from the tax expenditure is estimated to be $35,526. On average, impacted coporations reduced their taxable income by 8.4% due to the expenditure.

Table 3. Impact on Corporate and Business Taxpayers by *Range of Employees*:

Employees Range	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
Less than 5	34.4%	-6.1%	-$9,935
5 to 49	29.9%	-8.2%	-$29,491
50 to 99	14.0%	-11.5%	-$66,222
100 to 199	10.8%	-8.5%	-$68,727
200 to 499	7.2%	-8.3%	-$74,385
500 or more	3.8%	-4.4%	-$34,219
Total or average	100.0%	-8.4%	-$35,526

Source: Department of Revenue (corporate excise returns and federal form 4562 data sets for tax year 2018)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change

Looking at Table 3, 64.3% of all impacted corporations have less than 50 employees (34.4% plus 29.9%, see second column). Corporations that have 200 to 499 employees average the highest reduction in taxable income per corporation, which is estimated to be $74,385 (see fourth column).

Table 4. Impact on Corporate and Business Taxpayers by *Industry*:

Industry	% of Affected Corporations	Average % Change in Taxable Income Due to Tax Expenditure	Average Taxable Income Change per Impacted Corporation
11 Agriculture, Forestry, Fishing and Hunting	0.4%	-30.3%	-$10,411
21 Mining, Quarrying, and Oil and Gas Extract	***	***	***
22 Utilities	***	***	***
23 Construction	8.7%	-13.9%	-$84,098
31-33 Manufacturing	12.5%	-12.4%	-$49,680
42 Wholesale Trade	14.1%	-5.7%	-$22,306
44-45 Retail Trade	7.3%	-10.6%	-$48,004
48-49 Transportation and Warehousing	2.3%	-17.3%	-$47,636
51 Information	4.1%	-6.6%	-$15,250
52 Finance	6.2%	-3.2%	-$42,132
53 Real Estate and Rental and Leasing	2.5%	-6.5%	-$47,688
54 Professional, Scientific, and Technical Services	24.9%	-8.7%	-$21,943
55 Management of Companies and Enterprises	3.1%	-6.8%	-$22,167
56 Administrative and Support and Waste Management	4.4%	-9.7%	-$30,245
61 Educational Services	0.6%	-9.5%	-$26,195
62 Health Care and Social Assistance	1.6%	-7.6%	-$27,984
71 Arts, Entertainment, and Recreation	1.9%	-1.5%	-$2,948
72 Accommodation and Food Services	3.8%	-8.8%	-$22,464
81 Other Services (except Public Administration)	1.5%	-13.1%	-$31,747
Total or average	100.0%	-8.4%	-$35,526

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Notes: 1. Numbers are estimates using available sample data. The data are preliminary and subject to change.
2. *** Not disclosed due to very few samples.

Looking at Table 4, the taxable income reduction per corporation varied from $2,948 for Arts, Entertainment, and Recreation to $84,098 for Construction (see fourth column). Impacted corporations were concentrated mostly in the following industries: Manufacturing, Wholesale Trade, and Professional, Scientific, and Technical Services.

Personal Income Taxpayers:

Table 5. Impact on Personal Income Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
0 to $9,999	11.8%	-54.9%	-$4,661
$10,000 to $99,999	44.4%	-9.6%	-$5,041
$100,000 to $999,999	42.3%	-2.1%	-$5,606
$1,000,000 to $9,999,999	1.5%	-0.9%	-$16,926
$10,000,000 or more	***	***	***
Total or average	100.0%	-2.9%	-$5,409

Source: Department of Revenue (personal income tax returns and federal form 4562 data sets for tax year 2018).
Notes: 1. Numbers are estimates using available sample data, and the data are preliminary, subject to change.
2. *** Not disclosed due to very few samples.

Looking at the impact on personal income taxpayers by taxable income range, the highest percentage of impacted businesses fall within in the range of $10,000 to $99,999, at 44.4% (see second column). The table also shows that the lower the taxable income bracket, the higher the average percentage change in taxable income due to the tax expenditure (see third column). Businesses in the taxable income range of $1,000,000 to $9,999,999 average the largest dollar benefit from the tax expenditure (taxable income reduction of $16,926, see fourth column). The average taxable income reduction for all impacted personal income taxpayers due to the tax expenditure is estimated to be $5,409. On average, impacted businesses reduced their taxable income by 2.9% due to this expenditure.

Table 6. Impact on Personal Income Taxpayers by *Range of Employees*:

Employees Range	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
Less than 5	99.9%	-2.9%	-$5,395
5 to 49	0.1%	-8.2%	-$16,675
Total or average	100.0%	-2.9%	-$5,409

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by range of employees, all impacted businesses have less than 50 employees. 99.9% of them have less than 5 employees.

Table 7. Impact on Personal Income Taxpayers by *Industry*:

Industry	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
11 Agriculture, Forestry, Fishing and Hunting	0.5%	-7.5%	-$9,801
21 Mining, Quarrying, and Oil and Gas Extract	***	***	***
22 Utilities	***	***	***
23 Construction	5.6%	-12.1%	-$9,504
31-33 Manufacturing	1.2%	-5.0%	-$5,305
42 Wholesale Trade	0.8%	-3.2%	-$7,384
44-45 Retail Trade	4.2%	-2.7%	-$3,699
48-49 Transportation and Warehousing	2.7%	-16.0%	-$11,709
51 Information	4.0%	-1.2%	-$3,775
52 Finance and insurance	1.6%	-1.5%	-$4,007
53 Real Estate and Rental and Leasing	4.3%	-2.2%	-$4,434
54 Professional, Scientific, and Technical Services	32.3%	-1.6%	-$3,787
56 Administrative and Support and Waste Management	4.3%	-6.0%	-$6,570
61 Educational Services	4.2%	-1.3%	-$1,659
62 Health Care and Social Assistance	10.9%	-3.5%	-$8,669
71 Arts, Entertainment, and Recreation	11.9%	-2.6%	-$4,241
72 Accommodation and Food Services	2.0%	-10.3%	-$15,715
81 Other Services (except Public Administration)	5.9%	-5.4%	-$5,882
Total or average	100.0%	-2.9%	-$5,409

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562 data sets for tax year 2018)
Notes: 1. Numbers are estimates using available sample data. The data are preliminary and subject to change.
2. *** Not disclosed due to very few samples.

Looking at the impact on personal income taxpayers by industry, the taxable income reduction per impacted business varied from $1,659 for Educational Services to $15,715 for Accommodation and Food Services (see fourth column).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance this tax expenditure) and direct benefits (to businesses that used modified accelerated depreciation on buildings other than rental housing) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate, business and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the “Multiplier Effect”.[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states either follow the Code § 179 deduction or allow a similar state-specific deduction. New York, Maine, Rhode Island, and Vermont follow the federal deduction. California, Connecticut, and New Hampshire allow state-defined deductions similar to Code § 179 expensing.

[4] For an illustration of “Multiplier Effect”, see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

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Template for Evaluating Expenditures

Name of Expenditure: 1.303 & 2.307 Modified Accelerated Depreciation on Buildings (other than Rental Housing)	**Annual cost:** $4.5M-$5.2M	**Year of adoption:** 1986	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☒ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	☐	X	☐	☐
The TE's benefit justifies its fiscal cost	☐	☐	X	☐
The TE is claimed by its intended beneficiaries	☐	☐	☐	X
The TE is claimed by a broad group of taxpayers	☐	X	☐	☐
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	X	☐	☐	☐
The TE is relevant today	☐	☐	☐	X
The TE is easily administered	☐	☐	☐	X
Business only -The TE is beneficial to smaller businesses	☐	☐	X	☐
Individuals only -The TE benefits lower income taxpayers	☐	☐	☐	☐

Comments (1.303 & 2.307 Modified Accelerated Depreciation on Buildings (other than Rental Housing))
Conformity with federal depreciation rules simplifies tax compliance and administration by allowing the same general depreciation rules to be used for Massachusetts and federal purposes. Most states conform to the current Code deduction allowing depreciation of nonresidential buildings. DOR estimates that at least 10,000 corporate taxpayers and 10,000 personal income taxpayers benefit from this tax expenditure, with more than half of the impacted businesses having less than 50 employees.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Modified Accelerated Depreciation on Buildings (other than Rental Housing)
TAX EXPENDITURE NUMBER	1.303 & 2.307
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code § 168
YEAR ENACTED	1986
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	For FY2023, $3.0 million revenue loss in personal income tax and $2.3 million revenue loss in corporate and business excise.
NUMBER OF TAXPAYERS	At least 10,000 corporate taxpayers and 10,000 personal income taxpayers. Exact number is uncertain.
AVERAGE TAXPAYER BENEFIT	Uncertain

Description of the Tax Expenditure: In general, businesses may recover the cost of durable business assets only by capitalizing the cost and claiming depreciation deductions over a period of years. This expenditure reflects Massachusetts' conformity with federal rules allowing for accelerated depreciation of nonresidential buildings.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage investment in industrial, commercial, and other nonresidential buildings used for business purposes. Conformity with federal depreciation rules also simplifies tax	**Are there other states with a similar Tax Expenditure?** Most states conform to the current Code deduction allowing depreciation of nonresidential buildings. States that do so include Connecticut, Maine, New Hampshire, New York, Rhode Island, and Vermont.

compliance and administration by allowing the same general depreciation rules to be used for Massachusetts and federal purposes.	California requires the use of traditional financial accounting depreciation schedules for all buildings.

INTRODUCTION

An essential characteristic of a business income tax is that it is imposed on the net of business receipts over deductible business expenses. However, an immediate deduction is generally not allowed for the full cost of buildings, which have a useful life measured in years. Rather, the cost of such property must be capitalized and deducted as depreciation expense over a number of years based on the property's useful life. Traditional financial accounting rules required the cost of buildings to be recovered pro rata over a period intended to approximate the property's anticipated actual useful life. This depreciation schedule is referred to as the "straight-line" method.

The Internal Revenue Code (the "Code") follows the general approach to cost recovery described above by providing depreciation schedules applicable to different classes of property. Since 1993, the Code has allowed nonresidential buildings to be depreciated using straight-line depreciation over 39 years. The Code refers to this method as "accelerated". The Code also provides an option to use straight-line depreciation over a period of 40 years. This method is considered to conform to traditional financial accounting rules. The benefit of using the 39-year recovery period instead of the 40-year recovery period is a federal tax expenditure to which Massachusetts conforms.

The expenditure also reflects more favorable federal depreciation rules in effect for nonresidential buildings prior to 1993. These rules allowed a larger depreciation deduction over a shorter recovery period than the current Code rules. For example, a building placed in service in 1992 could be depreciated over 31.5 years. Some of buildings placed in service prior to 1993 are still in service and continue to be depreciated under these historical rules. For such legacy buildings, the Code allows more of the cost of the property to be deducted than would be allowed under the current depreciation rules. This legacy effect is also considered to be part of the federal tax expenditure.

Massachusetts generally adopts the business expense deductions allowed under the Code, including the federal deduction for depreciation. Specifically, Massachusetts allows the use of the 39-year accelerated recovery period for nonresidential buildings under the current Code and adopts the favorable historic rules applicable to legacy buildings under the Code. These rules allow a larger depreciation deduction in the earlier years of the useful life of nonresidential buildings than would be available under traditional accounting concepts. However, the depreciation deduction is smaller in the later years. The net result is a temporary reduction, or deferral, of tax. The deferral of tax can be viewed as an interest-free loan from the Commonwealth to taxpayers.

POLICY GOALS

DOR assumes that the tax expenditure is intended to encourage investment in commercial, industrial, and other nonresidential buildings. Conformity with federal depreciation rules also simplifies tax compliance and administration by allowing the same general depreciation rules to be used for Massachusetts and federal purposes.

DIRECT COSTS

Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report prepared by the Joint Committee on Taxation, Congress of the United States (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the federal estimates for the differences between federal and state fiscal years,[2] effective tax rates, and size of tax base. Table 1 provides Massachusetts revenue loss estimates resulting from this tax expenditure during the FY2019-FY2023 period, which range from $4.5 million to $5.2 million. By tax type, the revenue loss estimates range from $1.7 million to $2.3 million for corporate excise, and from $2.6 million to $3.0 million for personal income tax.

Table 1. Revenue Loss Estimates for Modified Accelerated Depreciation on Buildings (other than Rental Housing) ($ Million)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise	$1.9	$1.7	$1.7	$1.7	$2.3
Personal Income Tax	$2.6	$2.9	$3.0	$3.0	$3.0
Total	$4.5	$4.5	$4.6	$4.6	$5.2

DIRECT BENEFITS

IRS form 4562 is used to report information on the tax benefits claimed by taxpayers. More specifically, this form captures depreciation and amortization information on non-residential real property with certain limitations. After matching IRS form 4562 data and Massachusetts return data, DOR was able to determine that at least 10,000 corporate and business return filers and at least another 10,000 personal income taxpayers benefited from this tax expenditure[3]. Tables 2 through 7 below show the percentage of impacted businesses, the average percentage change in taxable income due to this tax expenditure,

[1] JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/.

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

[3] Please note that the exact number of taxpayers who are potentially benefiting from this tax expenditure could not be determined due to data limitations.

and the average change in taxable income per impacted bussiness by *range of taxable income*, by *range of employees*, and by *industry* for both corporate taxpayers and personal income taxpayers (or individual businesses).

Corporate and business taxpayers:

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*

Taxable Income Range	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
Less than $0	11.2%	0.6%	-$14,750
$0 to $9,999	15.4%	-57.0%	-$1,806
$10,000 to $99,999	20.0%	-0.2%	-$100
$100,000 to $999,999	28.0%	-0.3%	-$1,308
$1,000,000 to $9,999,999	20.2%	-0.2%	-$6,394
$10,000,000 or more	5.2%	-0.1%	-$44,678
Total or average	100.0%	-0.2%	-$5,931

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

According to Table 2, corporations with taxable income in the range of $100,000 to $999,999 have the highest percentage of impacted corporations, at 28.0% (see second column). Corporations in the taxable income range of $10 million or more average the largest dollar benefit from the expenditure (taxable income reduction of $44,678, see fourth column). Coporations in the taxable income range of $0 to $9,999 average the largest percentage reduction in taxable income (57.0%, see third column). The average taxable income reduction for all corporatations benefitting from the tax expenditure is estimated to be $5,931. On average, the impacted coporations reduced their taxable income by 0.2% due to the tax expenditure.

Table 3. Impact on Corporate and Business Taxpayers by *Range of Employees*

Range of Employees	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
Less than 5	37.5%	-0.3%	-$3,654
5 to 49	15.8%	-0.9%	-$6,384
50 to 99	6.2%	-0.8%	-$1,626
100 to 199	7.3%	-1.4%	-$9,291
200 to 499	9.1%	-0.3%	-$4,705
500 or more	24.2%	-0.1%	-$9,700
Total or average	100.0%	-0.2%	-$5,931

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at Table 3, 53.3% of all impacted corporations have less than 50 employees (37.5% plus 15.8%, see second column). 24.2% of all impacted corporations have 500 or more employees. Corporations with 500 or more employees also have the highest reduction in taxable income per corporation, which is estimated to be $9,700 (see fourth column).

Table 4. Impact on Corporate and Business Taxpayers by *Industry*:

Industry	% of Affected Corporations	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Corporation
11 Agriculture, Forestry, Fishing and Hunting	0.2%	-0.2%	-$1,594
21 Mining, Quarrying, and Oil and Gas Extract	0.0%	-0.1%	-$38
22 Utilities	0.1%	-0.5%	-$7,442
23 Construction	2.0%	0.0%	-$220
31-33 Manufacturing	28.0%	-0.3%	-$7,541
42 Wholesale Trade	14.0%	-0.1%	-$2,072
44-45 Retail Trade	6.4%	-0.1%	-$5,416
48-49 Transportation and Warehousing	2.9%	-1.0%	-$11,799
51 Information	5.2%	-0.1%	-$4,311
52 Finance and Insurance	4.7%	-0.3%	-$13,348
53 Real Estate and Rental and Leasing	3.1%	-0.4%	-$8,029
54 Professional, Scientific, and Technical Services	16.3%	-0.9%	-$5,961
55 Management of Companies and Enterprises	6.1%	-0.1%	-$6,736
56 Administrative and Support and Waste Management and Remediation Services	3.0%	-0.3%	-$4,971
61 Educational Services	0.7%	-0.2%	-$646
62 Health Care and Social Assistance	1.3%	-2.6%	-$3,496
71 Arts, Entertainment, and Recreation	0.9%	0.0%	-$688
72 Accommodation and Food Services	2.4%	-0.3%	-$2,075
81 Other Services (except Public Administration)	0.7%	4.6%	-$2,258
Others or unmatched	1.9%	-0.1%	-$3,184
Total or average	100.0%	-0.2%	-$5,931

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at Table 4, the taxable income reduction per corporation varied from $38 for Mining, etc. to $13,348 for Finance and Insurance (see fourth column). Impacted corporations concentrated mostly in the following industries: Manufacturing, Wholesale Trade, and Professional, Scientific, and Technical Services.

Personal Income Taxpayers:

Table 5. Impact on Personal Income Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
$0 to $9,999	7.3%	-40.4%	-$1,695
$10,000 to $99,999	33.3%	-1.5%	-$819
$100,000 to $999,999	56.9%	-0.4%	-$982
$1,000,000 to $9,999,999	2.4%	-0.1%	-$1,918
$10,000,000 or more	0.1%	0.0%	-$1,229
Total or average	100.0%	-0.5%	-$1,002

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by taxable income range, the highest percentage of impacted businesses fall within the range of $100,000 to $999,999, at 56.9% (see second column). On average, businesses in the taxable income range of $1,000,000 to $9,999,999 average the largest dollar benefit from the expenditure (taxable income reduction of $1,918, see fourth column). On average, businesses in the taxable income range of $0 to $9,999 average the largest percentage reduction in tax from the expenditure (40.4%, see third column). The average taxable income reduction for all impacted businesses due to the tax expenditure is estimated to be $1,002. On average, the impacted businesses reduced their taxable income by 0.5% due to the tax expenditure.

Table 6. Impact on Personal Income Taxpayers by *Range of Employees*:

Range of Employees	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Business
Less than 5	99.9%	-0.5%	-$1,003
5 to 49	0.1%	-0.6%	-$612
Total or average	100.0%	-0.5%	-$1,002

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by number of employees, all impacted businesses have less than 50 employees. 99.9% of businesses have less than 5 employees.

Table 7. Impact on Personal Income Taxpayers by *Industry*:

Industry	% of Affected Businesses	Average % Change in Taxable Income	Average Taxable Income Change per Impacted Businesses
11 Agriculture, Forestry, Fishing and Hunting	0.3%	-0.8%	-$2,417
21 Mining, Quarrying, and Oil and Gas Extract	0.1%	0.0%	-$3
22 Utilities	0.1%	0.0%	-$2
23 Construction	3.3%	-1.1%	-$1,204
31-33 Manufacturing	0.9%	-3.9%	-$6,559
42 Wholesale Trade	0.8%	-0.1%	-$278
44-45 Retail Trade	5.6%	-0.6%	-$1,225
48-49 Transportation and Warehousing	1.1%	-0.3%	-$515
51 Information	1.9%	-0.5%	-$576
52 Finance and Insurance	2.6%	-0.4%	-$1,459
53 Real Estate and Rental and Leasing	7.1%	-0.5%	-$1,091
54 Professional, Scientific, and Technical Services	36.7%	-0.4%	-$1,001
61 Educational Services	1.9%	-0.3%	-$1,670
62 Health Care and Social Assistance	5.2%	-0.3%	-$546
71 Arts, Entertainment, and Recreation	10.6%	-0.4%	-$776
72 Accommodation and Food Services	10.5%	-0.7%	-$873
81 Other Services (except Public Administration)	2.3%	-0.4%	-$1,149
Total or average	100.0%	-0.5%	-$1,002

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562 data sets for tax year 2018)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayer by industry, the taxable income reduction per impacted business varied from $2 for Utilities to $6,559 for Manufacturing (see fourth column). Impacted businesses are concentrated in the following industries: Professional, Scientific, and Technical Services followed by Arts, Entertainment, and Recreation and Accommodation and Food Services.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance this tax expenditure) and direct benefits (to businesses that used modified accelerated depreciation on buildings other than rental housing) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate, business and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states conform to the current Code deduction allowing accelerated depreciation of nonresidential buildings. States that do so include Connecticut, Maine, New Hampshire, New York, Rhode Island, and Vermont. California requires the use of traditional financial accounting depreciation schedules for all buildings.

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

References

JOINT COMMITTEE ON TAXATION . (2020). *ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2020-2024.* JOINT COMMITTEE ON TAXATION, Congress of United States . Washington D.C.: JOINT COMMITTEE ON TAXATION . Retrieved from https://www.jct.gov/publications/2020/jcx-23-20/

Template for Evaluating Expenditures

Name of Expenditure: 1.102 Treatment of Incentive Stock Options	**Annual cost:** $4.3M	**Year of adoption:** 1954	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☐ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)	X			
The TE's benefit justifies its fiscal cost			X	
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers		X		
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		X		
The TE is relevant today				X
The TE is easily administered			X	
Business only -The TE is beneficial to smaller businesses			X	
Individuals only -The TE benefits lower income taxpayers	X			

Comments (1.102 Treatment of Incentive Stock Options)
Members discussed this tax expenditure is a result of state conformity to the federal code and that the overall benefit is difficult to measure due to limited data. States that adopt the definition of income under the Code follow the federal rules for incentive stock options unless they specifically decouple. Only Pennsylvania has decoupled. This tax expenditure is a relatively small cost to the state and benefits small businesses through promoting competitiveness and employee retention.

As of the date of this draft, TERC assumes no material changes will result form proposed updates to Massachusetts' conformity to federal codes.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Treatment of Incentive Stock Options
TAX EXPENDITURE NUMBER	1.102
TAX EXPENDITURE CATEGORY	Deferrals of Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	G.L. c. 62 § 1(c) and (d); G.L. c. 62, § 2(a); Code §§ 421, 422, and 424
YEAR ENACTED	August 16, 1954 – Code § 421; August 13, 1981- Code § 422; and February 26, 1964 – Code § 424
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Average Tax loss of $4.3 million annually for FY19 to FY23
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Massachusetts adopts the federal tax treatment of incentive stock options as provided in the Internal Revenue Code (the "Code") as amended on January 1, 2005. Under the federal rules, and therefore for Massachusetts purposes as well, no tax consequences result when employees are granted or exercise options to purchase company stock. Employees are taxed only when they sell the stock acquired through the exercise. This results in a deferral of tax for both federal and Massachusetts tax purposes which constitutes a tax expenditure.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the goal of the tax expenditure is to promote hiring and retention of employees.	**Are there other states with a similar Tax Expenditure?** States that adopt the definition of income under the Code follow the federal rules for incentive stock options unless they specifically decouple. Only Pennsylvania has decoupled.

INTRODUCTION

Massachusetts conforms to the federal tax treatment of incentive stock options as stated in the Internal Revenue Code (the "Code") as amended on January 1, 2005. Under the federal rules, and therefore for Massachusetts purposes as well, no tax consequences result to an employee upon the grant or exercise of an incentive stock option. Employees are taxed only when they sell the stock acquired through the exercise.

The gain or loss recognized when the stock is sold is the difference between the amount paid for the stock (the option exercise price) and the amount received when the stock is sold. When an incentive stock option is granted, it has some value. The value is largely conjectural because it depends on the future performance of the stock. However, the value need not be determined because Code § 422 prevents the imposition of tax at the time of the grant. When an incentive stock option is exercised, the employee receives value equal to the value of the stock in excess of the option exercise price. This value can be readily determined and would be taxable to the employee but for Code § 422, which defers federal tax on the value until the employee sells the stock to a third party. Due to Massachusetts' conformity with Code § 422, state tax is similarly deferred. This deferral constitutes a Massachusetts tax expenditure.

When the employee sells the stock to a third party, tax is triggered. Gain is recognized based on the difference between the amount for which the stock is sold and the option exercise price. Gains are treated as ordinary income up to the amount by which the stock's value at the time the option was exercised exceeds the option exercise price. Any additional gain is long term capital gain. If there is a loss from the sale, it is treated as a long-term capital loss.

Long term capital gains are taxed at favorable rates for federal purposes. However, for Massachusetts purposes, long term capital gains are generally taxed at the same rate as ordinary income. Thus, treating a portion of the gain as capital gain does not result in a revenue loss for the Commonwealth and is therefore not part of the state tax expenditure.

POLICY GOALS

DOR assumes that the goal of the tax expenditure is to promote employee retention by allowing employees to purchase the employer's stock at a discount.

DIRECT COSTS

The revenue loss resulting from the special tax treatment of Incentive Stock Options (ISO) is estimated to be about $4.1-4.4 million per year during FY19-FY23. See the table below.

Tax Revenue Loss Estimates for Treatment of Incentive Stock Options

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$4.2	$4.3	$4.1	$4.3	$4.4

The estimated revenue loss is based on estimates prepared by the federal Joint Committee on Taxation ("JCT")[1] of the impact on federal tax collections of the special tax treatment of Incentive Stock Options (ISO). The JCT's estimates are shared down to Massachusetts based on the state's share of national wages and salaries and adjusted for differences in state and federal income tax rates. Given the use of external data and the fact that market gains are volatile and difficult to forecast, the revenue loss estimates are uncertain. Therefore, the estimates reported in the table above should be used with extreme caution.

DIRECT BENEFITS

The primary direct beneficiaries are the employees who are granted the ISO as they can defer the tax payments on the bargain element (the price difference between the grant price an employee pays and the fair market value on the day the employee exercises the options to buy the stock). Employers also benefit from this tax expenditure indirectly since the tax expenditure helps them retain employees.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the favorable tax treatment of incentive stock options) and direct benefits (to employees offered incentive stock options) of this tax expenditure. In this instance, the direct costs to the Commonwealth in terms of deferred income tax collections, are essentially equal to the direct benefits afforded by the tax expenditure to employees granted incentive stock options, which is the deferral of income tax they will pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. To measure indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic

[1] The Joint Committee on Taxation is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. https://www.jct.gov/

Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that adopt the definition of income under the Code follow the federal rules for incentive stock options unless they specifically decouple. Only Pennsylvania has decoupled.

Template for Evaluating Expenditures

Name of Expenditure: 2.205 Deduction for Certain Dividends from Cooperatives	**Annual cost:** \$4M – \$4.2M	**Year of adoption:** 1962	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty
☒ Progressivity/assistance to low earners
☒ Access to opportunity
☒ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers			x	
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		x		
The TE is relevant today			x	
The TE is easily administered				x
Business only -The TE is beneficial to smaller businesses			x	
Individuals only -The TE benefits lower income taxpayers			x	

Comments (2.205 Deduction for Certain Dividends from Cooperatives)
This deduction follows the federal code, and it seems no states have disallowed it. It is one of the key sources of differentiation between a conventional C-corporation and a cooperative, so it likely reflects the desire among policymakers to support collective entities—such as non-profit corporations—that serve purposes different from those of conventional corporations. Because cooperatives can pursue a range of objectives, and data are limited on the direct beneficiaries of this deduction, it is difficult to judge its effects in more detail.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Deduction for Certain Dividends from Cooperatives
TAX EXPENDITURE NUMBER	2.205
TAX EXPENDITURE CATEGORY	Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax
LEGAL REFERENCE	Code §§ 1381-1388
YEAR ENACTED	Taxable years beginning after December 31,1962 (P.L. 87-834, Subchapter T, § 17(a) (1962)).
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $4.0 - $4.2 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Cooperatives subject to tax under Subchapter T of the Internal Revenue Code (the "Code"), including farmers' cooperatives, and most other corporations operating on a cooperative basis, may deduct amounts paid to members as patronage dividends. Massachusetts adopts the federal deduction by virtue of its conformity with the Code.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure. However, federal court cases interpreting the deduction have stated that the corporation is viewed as an agent for the members and that amounts distributed are merely a return of the members' own funds.
What are the policy goals of the expenditure? DOR infers that the primary function of a cooperative is to allow member businesses to band together to take advantage of economies of scale when buying supplies or selling products. The tax expenditure allows the members to do so without incurring additional tax on transactions with the cooperative. The	**Are there other states with a similar Tax Expenditure?** Every state with a corporate income tax based on federal taxable income would allow the deduction unless they specifically disallowed it. It does not appear that any state has done so.

deduction promotes the formation and operation of cooperative corporations.	

INTRODUCTION

Cooperatives are organizations comprised of separate businesses that band together for limited purposes to take advantage of economies of scale, for example when buying supplies or selling products. Farmers' cooperatives and certain corporations acting as cooperatives may deduct so-called "patronage dividends" from their gross incomes. A "patronage dividend" is a dividend paid to members of the cooperative: (i) based on the quantity or value of business done with the members, (ii) under a pre-existing obligation of the cooperative; and (iii) determined by the cooperative's net earnings from business with members. In order to deduct the dividends, cooperatives must provide notice to members of the total patronage dividend and must pay a minimum of 20% of each member's dividend in cash within 8½ months following the close of the cooperative's taxable year.

The deduction is based on the notion that the cooperative is an agent working for the members and that any funds transferred to members already belong to the members. *See Farm Service Cooperative v. Commissioner*, 619 F.2d 718, 722 (1979). In this view, the primary function of a cooperative is the allocation of the economic benefits of the cooperative, either in the form of net savings or net earnings. The deduction recognizes that taxing patronage dividends would discourage such allocation and could result in double taxation of income (first when earned by the cooperative and second as a dividend received by the member).

POLICY GOALS

DOR infers that the primary function of a cooperative is to allow member businesses to band together to take advantage of economies of scale when buying supplies or selling products. The tax expenditure allows the members to do so without incurring additional tax on transactions with the cooperative. The deduction promotes the formation and operation of cooperative corporations.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $4.0 - $4.2 million per year during FY19-FY23. See Table 1. The estimates are based on the Internal Revenue Service (IRS) data on Form 1099-PATR, individual income tax returns, and the U.S. Department of Agriculture (USDA) data on agricultural cooperatives.[1] Due to the use of

[1] Form 1099-PATR, which is displayed in the appendix (copy A for IRS), is the IRS form a cooperative files for each person to whom the cooperative has paid at least $10 in patronage dividends and other distributions, or from whom the cooperative withheld any federal income tax under the backup withholding rules regardless of the amount of the payment. Although cooperatives that distribute patronage dividends can deduct the dividends from their tax returns, the patrons who received the dividends must include them in their taxable income.

external data and the limitations of this data, the estimates reported in Table 1 may have a high estimation uncertainty and should be used with caution.

Table 1. Tax Revenue Loss Estimates for Deduction for Certain Dividends from Cooperatives

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$4.2	$4.2	$4.1	$4.0	$4.0

DIRECT BENEFITS

Cooperatives and their members are direct beneficiaries of this tax expenditure. Like other C corporations, cooperatives are taxed at the corporate level. However, cooperatives have several tax advantages over regular C corporations.

First, cooperatives avoid double taxation on patronage dividends. Recipients of these dividends include the dividends in their individual taxable income, but the cooperatives can deduct dividends paid. In contrast, dividends are not deductible at the corporate level for regular C corporations.

In addition, farmers' cooperatives may also deduct dividends paid on capital stock and amounts allocated to patrons that were paid from funds derived from non-patronage sources.

IRS Publication 6961 projects the expected count of various information and withholding tax forms. According to that publication as updated in 2020,[2] the actual national count for 2019 Form 1099-PATR was 1,604,471, and projections for 2020 through 2023 are reported in Table 2 below.

Table 2. Projection of the Number of Form 1099-PATR Filed

Year	2019 (actual)	2020	2021	2022	2023
National count of Form 1099-PATR	1,604,471	1,584,000	1,563,400	1,542,900	1,522,400

Source: The Internal Revenue Service (IRS), Statistics of Income, Publication 6961, 2020 Update.

IRS currently does not report line item data for the entries on Form 1099-PATR. To estimate this tax expenditure, DOR used actual and projected number of 1099-PATR forms filed with IRS (source: IRS publication 6961). DOR also estimated the average amount of distributions from cooperatives based on IRS' individual income tax returns line-item estimates. The product of the number 1099-PATR forms and average distribution amount generated the estimates of total deductions the cooperatives took on their returns for the whole country, which were then apportioned to Massachusetts (using the ratio of agricultural cooperative numbers) and converted into revenue loss estimates by applying Massachusetts corporate income tax rate.

[2] https://www.irs.gov/pub/irs-pdf/p6961.pdf

Direct data on all cooperatives, and for Massachusetts in particular, are limited. We are not aware that any such data has been compiled and released by federal government agencies such as the Census Bureau, the Bureau of Labor Statistics, or the Internal Revenue Service. A study conducted by the Center for Cooperatives at the University of Wisconsin in 2009[3] describes and quantifies the magnitude of economic activity accounted for by U.S. cooperative businesses. According to that report, the U.S. has nearly 30,000 cooperatives, owning more than $3 trillion of assets, accounting for $650 billion plus in revenue and more than 2 million jobs.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance deduction for patronage dividends from cooperatives) and direct benefits (to cooperatives that distribute these dividends) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate and business tax that would have been collected from these dividends, are equal to the direct benefits afforded by the tax expenditure to cooperatives, which is the corporate and business tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. Generally, the indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the first impacted businesses. The induced impact (cost or benefit) occurs when an impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

DOR infers that the goal of this tax expenditure is to promote the formation and operation of cooperative corporations by providing a deduction for dividends paid to members of

[3] http://reic.uwcc.wisc.edu/sites/all/REIC_FINAL.pdf
[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

such corporations. Although DOR is not aware of empirical studies assessing whether this goal is achieved, there are studies indicating the positive impact cooperatives have on their members. According to Grashuis & Su (2019), "Generally, [farmer] cooperative membership is found to positively impact price, yield, input adoption, income, and other indicators of member performance, yet there is growing evidence of an uneven distribution of benefits for small and large producers."

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Every state with a corporate income tax based on federal taxable income would allow the deduction unless they specifically disallowed it. DOR is not aware of any state that has done so.

References

About Form 1099-PATR, Taxable Distributions Received From Cooperatives. (n.d.). Retrieved from IRS: https://www.irs.gov/forms-pubs/about-form-1099-patr

Grashuis, J., & SU, Y. (2019). A review of the empirical literature on farmer cooperatives: Performance, ownership and governance, finance, and member attitude. *Annals of Public and Cooperative Economics, 90*(1), 77–102.

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Appendix

9797 ☐ VOID ☐ CORRECTED

PAYER'S name, street address, city or town, state or province, country, ZIP or foreign postal code, and telephone no.		1 Patronage dividends $ 2 Nonpatronage distributions $ 3 Per-unit retain allocations $	OMB No. 1545-0118 2021 Form 1099-PATR	Taxable Distributions Received From Cooperatives
PAYER'S TIN	RECIPIENT'S TIN	4 Federal income tax withheld $	5 Redeemed nonqualified notices $	Copy A For Internal Revenue Service Center
RECIPIENT'S name		6 Section 199A(g) deduction $	7 Qualified payments (Section 199A(b)(7)) $	File with Form 1096.
Street address (including apt. no.)		8 Section 199A(a) qual. items $	9 Section 199A(a) SSTB items $	For Privacy Act and Paperwork Reduction Act Notice, see the 2021 General Instructions for Certain Information Returns.
City or town, state or province, country, and ZIP or foreign postal code		10 Investment credit $	11 Work opportunity credit $	
Account number (see instructions)	2nd TIN not. ☐	12 Other credits and deductions $	13 Specified Coop ☐	

Form 1099-PATR Cat. No. 14435F www.irs.gov/Form1099PATR Department of the Treasury - Internal Revenue Service

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Template for Evaluating Expenditures

Name of Expenditure: 1.306 & 2.304 Election to Deduct and Amortize Business Startup Costs	**Annual cost:** $0.8M-$0.9M	**Year of adoption:** 2004	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance

☒ Investment

☐ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☒ Access to opportunity

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)				X
The TE's benefit justifies its fiscal cost				X
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers				X
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today				X
The TE is easily administered			X	
Business only -The TE is beneficial to smaller businesses				X
Individuals only -The TE benefits lower income taxpayers		x		

Comments (1.306 & 2.304 Election to Deduct and Amortize Business Startup Costs)

This tax expenditure should be continued for the purpose of promoting Massachusetts economic competitiveness. Massachusetts conforms with Internal Revenue Code §195, which allows corporate, business, and personal income taxpayers to elect to deduct up to $5,000 of business startup costs that would otherwise have to be capitalized over a period of 15 years. DOR estimates that annual revenue loss to Massachusetts totaled $1.6 million in FY2021, including $800,000 in corporate excise taxes and $800,000 personal income taxes. Every state that imposes a corporate or individual tax on income conforms to federal Code § 195. Eliminating this deduction would make Massachusetts the only state to have done so. U.S. News and World Report ranked Massachusetts as 10th-best state in which to start a small business. This tax expenditure is intended to promote the development of new businesses and is particularly advantageous to small businesses.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Election to Deduct and Amortize Business Startup Costs
TAX EXPENDITURE NUMBER	1.306 & 2.304
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code § 195
YEAR ENACTED	2004
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	For FY2023, $0.9 million (personal income tax), $0.8 million (corporate and business excise tax).
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: For federal tax purposes, taxpayers can immediately deduct startup costs that would otherwise have to be capitalized over a period of 15 years. Massachusetts conforms to the federal deduction, resulting in a state tax expenditure.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage taxpayers to start new businesses.	**Are there other states with a similar Tax Expenditure?** Every state that imposes a corporate or individual tax on income conforms to Internal Revenue Code (the "Code") § 195.

INTRODUCTION

For federal tax purposes, many business expenses must be capitalized and then deducted over a period of years. Under the Internal Revenue Code (the "Code") § 195, taxpayers can elect to deduct up to $5,000 of business startup costs. The $5,000 deduction is reduced dollar-for-dollar (but not below zero) by the cumulative amount of startup costs exceeding $50,000. Thus, for example, a business with $53,000 of startup costs would be able to immediately deduct $2,000 of startup costs and would have to amortize the remaining $51,000. The immediate deduction results in a deferral of tax because startup costs would otherwise have to be capitalized and deducted over a 15-year recovery period. Startup costs consist of business expenses incurred after the organization of a business but before it begins generating revenue. Examples include pre-opening advertising costs and costs incurred in procuring business premises or lining up prospective suppliers and customers.

Massachusetts conforms to Code § 195 for purposes of both the income measure of the corporate excise and the personal income tax. This conformity results in a deferral of Massachusetts tax and therefore constitutes a state tax expenditure.

POLICY GOALS

DOR assumes that the tax expenditure is intended to encourage taxpayers to start new businesses.

DIRECT COSTS

Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report prepared by the Joint Committee on Taxation, Congress of the United States (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the federal estimates for the difference between federal and state fiscal year,[2] effective tax rates, and size of tax base. Table 1 (see below) provides Massachusetts revenue loss estimates resulting from this tax expenditure during the FY2019-FY2023 period, which range from $1.3 million to $1.7 million. By tax type, the revenue loss estimates range from $0.5 million to $0.9 million for personal income tax and $0.8 million annually for corporate excise.

[1] JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/.

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

Table 1. Revenue Loss Estimates for Election to Deduct and Amortize Business Start-up Costs ($ Million)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise Tax	$0.8	$0.8	$0.8	$0.8	$0.8
Personal Income Tax	$0.5	$0.7	$0.8	$0.8	$0.9
Total	$1.3	$1.5	$1.6	$1.6	$1.7

DIRECT BENEFITS

The IRS' "Statistics of Income" program provides information on the number of corporate beneficiaries of the federal expenditure. They estimate that in 2017 about 13,867 corporate income tax filers benefited from the federal expenditure. Using the Massachusetts share of the number of firms (3.1%),[3] DOR estimated that in 2017 roughly 430 corporate excise taxpayers (13,867 times 3.1%) benefited from this expenditure. Using the federal individual income tax data, DOR estimated that in 2017 roughly 1,000 personal income tax payers benefited from this expenditure. [4]

Data from IRS form 4562 is used to report business start-up depreciation and amortization deductions claimed by taxpayers. After matching IRS form 4562 data and Massachusetts return data, DOR was able to tabulate the following statistical information on potential beneficiaries of this tax expenditure. Tables 2 through 7 below show the percentage of impacted businesses, and the percentage of tax liability by *range of taxable income*, by *range of employees*, and by *industry* for both corporate taxpayers and businesses subject to the personal income tax.

Corporate taxpayers:

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Affected Corporations	% of Total Tax Liability Reported by Impacted Corporations
<$0	38.9%	27.6%
$0 to $9,999	51.7%	19.6%
$10,000 to $99,999	6.5%	11.6%
$100,000 or more	2.8%	41.2%
Total	100.0%	100.0%

[3] Business Employment Dynamics - U.S. Bureau of Labor Statistics.
[4] Please note that the exact number of taxpayers benefiting from this tax expenditure could not be determined due to data limitations.

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by taxable income range, the highest percentage of impacted corportations fall within the range of $0 to $9,999, at 51.7% (see second column). Corporations in this taxable income range represent 19.6% of the tax liability of all corporations benefitting from the expenditure (see third column). While the lowest percentage of impacted corporations fall within the taxable income range of $100,000 or more, at 2.8% (see second column), they have the highest percentage of tax liability, at 41.2% (see third column).

Table 3. Impact on Corporate Taxpayers by *Range of Employees*:

Employees Range	% of Affected Corporations	% of Total Tax Liability Reported by Impacted Corporations
Less than 5	65.3%	45.3%
5 to 49	28.4%	31.6%
50 to 99	3.7%	10.4%
200 to 499	1.4%	6.7%
500 or more	1.1%	6.0%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by range of employees, 93.7% of all impacted corporations have less than 50 employees (65.3% plus 28.4%, see second column), representing 76.9% of the tax liability of all corporations benefitting from this tax expenditure (45.3% plus 31.6%, see third column).

Table 4. Impact on Corporate Taxpayers by *Industry*:

Industry	% of Affected Corporations	% of Total Tax Liability Reported by Impacted Corporations
11 Agriculture, Forestry, Fishing and Hunting	1.4%	2.6%
23 Construction	4.0%	1.9%
31-33 Manufacturing	4.8%	7.3%
42 Wholesale Trade	2.6%	7.4%
44-45 Retail Trade	7.1%	5.2%
48-49 Transportation and Warehousing	1.1%	0.5%

51 Information	5.4%	2.2%
52 Finance and Insurance	4.5%	2.4%
53 Real Estate and Rental and Leasing	6.5%	16.5%
54 Professional, Scientific, and Technical Services	22.4%	15.1%
55 Management of Companies and Enterprises	3.1%	8.4%
56 Administrative and Support and Waste Management and Remediation Services	3.7%	6.5%
61 Educational Services	0.6%	0.1%
62 Health Care and Social Assistance	7.1%	7.2%
71 Arts, Entertainment, and Recreation	0.3%	0.1%
72 Accommodation and Food Services	12.2%	8.5%
81 Other Services (except Public Administration)	12.5%	7.8%
Others or unmatched	0.6%	0.3%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by industry, impacted corporations were concentrated mostly in the following industries: Professional, Scientific, and Technical Services, Accommodation and Food Services and Other Services (except Public Administration). These industries account for 47.1% of impacted corporations (22.4% plus 12.2% plus 12.5%, see second column) representing 31.4% of the tax liability of all corporations benefitting from this tax expenditure (15.1% plus 8.5% plus 7.8%, see third column).

Personal Income Taxpayers:

Table 5. Impact on Personal Income Taxpayers by *Taxable Income Range*:

Tax Liability Range	% of Affected Businesses	% of Total Tax Liability Reported by Impacted Businesses
0 to $9,999	24.4%	13.0%
$10,000 to $99,999	44.0%	16.5%
$100,000 to $999,999	30.1%	36.1%
$1,000,000 or more	1.6%	34.4%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by taxable income range, businesses with taxable income in the range of $10,000 to $99,999 have the highest percentage of impacted businesses, at 44.0% (see second column), representing 16.5% of the tax liability. Businesses in the taxable income range of $1,000,000 or more have lowest percentage of impacted businesses, at 1.6% (see second column), representing 34.4% of the tax liability of all personal income taxpayers benefiting from this tax expenditure (see third column).

Table 6. Impact on Personal Income Taxpayers by *Range of Employees*:

Employees Range	% of Affected Businesses	% of Total Tax Liability Reported by Impacted Businesses
Less than 5	99.0%	99.7%
5 to 49	1.0%	0.3%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by range of employees, all impacted businesses have less than 50 employees. 99.0% of them have less than 5 employees, representing 99.7% of the tax liability.

Table 7. Impact on Personal Income Taxpayers by *Industry*:

Industry	% of Affected Businesses	% of Total Tax Liability Reported by Impacted Businesses
11 Agriculture, Forestry, Fishing and Hunting	0.5%	0.6%
23 Construction	2.6%	1.0%
42 Wholesale Trade	1.0%	0.8%
44-45 Retail Trade	11.9%	5.7%
48-49 Transportation and Warehousing	8.3%	0.7%
52 Finance and Insurance	2.6%	2.6%
53 Real Estate and Rental and Leasing	4.1%	3.0%
54 Professional, Scientific, and Technical Services	23.8%	55.3%
56 Administrative and Support and Waste Management and Remediation Services	4.1%	1.0%
61 Educational Services	1.6%	0.0%
62 Health Care and Social Assistance	9.8%	4.3%
71 Arts, Entertainment, and Recreation	4.1%	1.2%
72 Accommodation and Food Services	4.7%	0.5%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state personal income tax returns and federal form 4562)
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on personal income taxpayers by industry, impacted business were concentrated mostly in Professional, Scientific, and Technical Services, at 23.8% (see second column), representing the highest percentage of the tax liability of all personal income taxpayers benefitting, at 55.3% (see third column).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance this tax expenditure) and direct benefits (to businesses that elected to deduct and amortize business startup costs) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate, business and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[5]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Every state that imposes a corporate or individual tax on income conforms to Code § 195.

[5] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Template for Evaluating Expenditures

Name of Expenditure: 2.101 Deferral of Tax on Certain Shipping Companies	**Annual cost:** $0.8M	**Year of adoption:** 1987	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☐ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☒ Job creation & maintenance
☒ Investment
☒ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☒ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☐ Other:

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)		x		
The TE's benefit justifies its fiscal cost			x	
The TE is claimed by its intended beneficiaries			x	
The TE is claimed by a broad group of taxpayers	x			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit			x	
The TE is relevant today			x	
The TE is easily administered			x	
Business only -The TE is beneficial to smaller businesses				x
Individuals only -The TE benefits lower income taxpayers	x			

Comments (2.101 Deferral of Tax on Certain Shipping Companies)

As the DOR report notes, this tax expenditure is coupled to the federal tax code and "No state has affirmatively decoupled from the federal expenditure." While the ship- and boat-building industry in Massachusetts is not large, it employs over 600 people directly and would likely suffer substantially from the state's unilateral decoupling. Though this tax expenditure would be of questionable value if initiated by the state, revoking it without coordinated action across states could easily lower overall revenue for the state.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Deferral of Tax on Certain Shipping Companies
TAX EXPENDITURE NUMBER	2.101
TAX EXPENDITURE CATEGORY	Deferrals of Gross Income
TAX TYPE	Corporate & Business Excise Tax
LEGAL REFERENCE	Code § 7518(c), (g)(5); M.G.L. c. 63, §§ 30.3, 30.4
YEAR ENACTED	1987
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	$0.8 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: Under Internal Revenue Code (the "Code") § 7518, certain companies with merchant marine capital construction funds receive a deferral of tax on certain amounts set aside for acquisition, construction, modernization, and major repair of ships.	**Is the purpose defined in the statute?** DOR infers that the purpose is to encourage the acquisition, construction, modernization, and repair of ships. Note that this is a federal expenditure to which Massachusetts conforms by virtue of its conformity with the Code.
What are the policy goals of the expenditure? DOR assumes that the tax expenditure is intended to encourage acquisition, construction, modernization, and repair of certain ships by allowing a deferral of tax for income set aside to fund such activities.	**Are there other states with a similar Tax Expenditure?** States that use federal taxable income as the basis for their calculation of taxable income will allow the deduction unless they specifically decouple from Code § 7518. States that allow the deduction on that basis include New York, California, Connecticut, Maine, Rhode Island, and Vermont. No state has affirmatively decoupled from the federal expenditure.

INTRODUCTION

Federal law provides for the creation of special funds ("merchant marine capital construction funds" or "CCFs") by taxpayers who own eligible vessels. Taxpayers can use CCFs to set aside funds for the acquisition, construction, modernization, and major repair of ships that are constructed or reconstructed in the U.S., registered in the U.S., and used in trade or fishing activity. A deduction is allowed under the Code for amounts properly deposited into a CCF. Tax on income earned on amounts in the fund is deferred. Amounts placed in the CCF must be used for an eligible purpose within 25 years of being contributed or they will be taxed. Massachusetts conforms to the federal tax treatment of the contributions by virtue of its conformity with the Internal Revenue Code (the "Code").

Amounts withdrawn from a CCF are characterized as either qualified withdrawals or nonqualified withdrawals. Qualified withdrawals are those made for the purpose of either the acquisition, construction, or repair of qualified vessels, or making principal payments on the mortgage of a qualified vessel. Qualified withdrawals are excluded from a taxpayer's taxable income. Instead, taxpayers must reduce the depreciable basis of the vessel by the amount of the qualified withdrawal. Nonqualified withdrawals, which are any withdrawals that are not qualified withdrawals, are taxable. Nonqualified withdrawals include amounts used to make principal payments on the mortgage of a vessel if the basis of that vessel has already been reduced to zero.

Amounts that remain in a CCF after the termination of the agreement with the U.S. Secretary of Commerce or the U.S. Department of Transportation (see the next paragraph) are taxable. In addition, any amount left in the account for more than 25 years after being contributed must be recaptured through the inclusion of twenty percent of such amount in income in each of the next five years.

The Department of Transportation's Maritime Administration (MARAD)[1] and the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA)[2] are responsible for administering the CCF program, with MARAD handing commercial vessels, and NOAA handling those in the fishing industry.

The deferral of the tax is essentially an interest-free loan from the government.

[1] https://maritime.dot.gov/grants/capital-construction-fund
[2] https://www.fisheries.noaa.gov/national/funding-and-financial-services/capital-construction-fund-program

POLICY GOALS

DOR surmises that the deferral of tax on income deposited into a CCF is designed to encourage the acquisition, construction, modernization, and repair of ships by allowing a deferral of tax for amounts set aside to fund such activities.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be about $0.8 million per year during FY19-FY23. See Table 1 below. [3]

Table 1. Tax Revenue Loss Estimates for Deferral of Tax on Certain Shipping Companies

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$0.8	$0.8	$0.8	$0.8	$0.8

DIRECT BENEFITS

MARAD gives examples of eligible businesses/vessels that include a broad cross section of the U.S. maritime industry, such as:

- Liner companies that operate containerships and other specialized vessels from the west coast of the United States to points in the Far East and Hawaii and from Gulf of Mexico and east coast ports to Europe, South America, and Africa;
- Tanker operators delivering crude oil from the North Slope of Alaska to the U.S. mainland;
- Bulk vessel operators moving ore, and operators providing ferry and passenger service on the Great Lakes;
- Companies specialized in offshore towing and supply operations that serve oil drilling and production rigs off U.S. coasts and in foreign waters;
- Operators serving Caribbean and Central American ports;
- Tug and barge operators providing service between Pacific Coast ports and points in Alaska, on the river system in Alaska, and in the Gulf of Alaska;
- Cruise vessels and tug-barge operators providing inter-island service in the Hawaiian Islands; and

[3] The revenue loss resulting from this tax expenditure is estimated based on federal estimates contained in the most recent tax expenditure report prepared by the Joint Committee on Taxation (JCT), Congress of the United States. To convert the federal estimates into Massachusetts estimates, adjustments are made to take into account, among other factors, the difference between the federal fiscal year and Massachusetts fiscal years, and the difference between the Massachusetts effective corporate tax rate and federal effective corporate tax rate.

- Operators moving containers and Roll-on/Roll-off cargo in short-sea Shipping trades; and

For fishing vessels, a taxpayer must enter into a CCF agreement with the Secretary of Commerce through NOAA/National Marine Fisheries Service (NMFS). For other vessels, CCF agreements are administered by MARAD.

The list of CCF fundholders with agreements with MARAD as of April 19, 2021 can be found on MARAD's website: [Capital Construction Fund (CCF) Fundholders 2021.pdf (dot.gov)](). It seems that there is no similar list publicly available for fundholders with CCF agreements administered by NMFS.

CCF fundholders that file a Massachusetts state tax return are the direct beneficiaries of this tax expenditure.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the deferral of tax on certain shipping companies) and direct benefits (to CCF fundholders) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the corporate tax that would have been collected from the income deposited into the CCF, are equal to the direct benefits afforded by the tax expenditure to the relevant businesses, which is the corporate tax they would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees, in the form of lower or higher income, such as wages and salaries, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[4]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact

[4] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

One industry in particular benefits significantly but indirectly from this tax expenditure: the ship and boat building industry in Massachusetts. Businesses in this industry likely benefit from this tax expenditure due to both increased demand and higher prices for their products and services.[5]

According to the U.S. Census Bureau, in 2017, Massachusetts had 11 firms in the industry of ship building and repairing. These firms employed 381 people generating $22.8 million in annual payroll and $76.9 million in annual sales. In the same year, Massachusetts had 25 firms in the industry of boat building, employing 240 people and generating $12.6 million in annual payroll and $60.9 million in annual sales (see Table 2 below).

Table 2. Annual Payroll, Sales, and Employment of the Industry of Ship and Boat Building in Massachusetts

2017 NAICS Code	Meaning of NAICS Code	Number of Firms	Number of Establishments	Sales, Value of Shipments, or Revenue ($Millions)	Annual Payroll ($Millions)	Number of Employees
33661	Ship and boat building	36	36	$137.8	$35.4	621
336611	Ship building and repairing	11	11	$76.9	$22.8	381
336612	Boat building	25	25	$60.9	$12.6	240

Source: The U.S. Census Bureau, 2017 Economic Census, which is the most recent version of Economic Census. The next version will be 2022 Economic Census.

Besides the economic costs and benefits discussed so far, there may also be externalities to consider. A negative externality occurs when the production and/or consumption of a good or service exerts a negative effect on a third party independent of the transaction. For example, a shipyard involved in the building or repairing of vessels may cause noise and air pollution during the building/repairing process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

[5] In turn, the growth of the "ship and boat building" industry due to this tax expenditure will spur growth in other industries (further indirect impact and induced impact), as shown in a report prepared by MARAD: https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/resources/3641/maradeconstudyfinalreport2015.pdf

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

States that use federal taxable income as the basis for their calculation of taxable income will allow the deduction for CCF contributions unless they specifically disallow the deduction. States that follow the deduction include New York, California, Connecticut, Maine, Rhode Island, and Vermont. No state has affirmatively decoupled from the federal expenditure.

Template for Evaluating Expenditures

Name of Expenditure: 1.308 & 2.309 Expensing Exploration and Development Costs	**Annual cost:** For FY2023, \$0.01 million (personal), \$0.135 million (corporate).	**Year of adoption:** 1976	**Sunset date:** None

Tax Type (check all that apply): ☒ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance

☒ Investment

☐ Competitiveness/Strategic

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Individual:

☐ Relief of poverty

☐ Progressivity/assistance to low earners

☐ Access to opportunity

☐ Health/Environment/Social Justice

☒ Other: Simplify tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)			X	
The TE's benefit justifies its fiscal cost			X	
The TE is claimed by its intended beneficiaries			X	
The TE is claimed by a broad group of taxpayers	X			
The TE amount claimed per taxpayer is meaningful as an incentive/benefit		X		
The TE is relevant today			X	
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses				X
Individuals only -The TE benefits lower income taxpayers **(no information to assess)**				

Comments (1.308 & 2.309 Expensing Exploration and Development Costs)
The Commission members expressed concern regarding this tax expenditure for mineral extraction industries (including geothermal power) since these industries have little or no presence in the Commonwealth, and the available data were difficult to interpret as to who the Massachusetts beneficiaries of the tax expenditure may be. The members speculate that the Massachusetts beneficiaries are either Massachusetts investors who hold partnership interests in various mineral extraction businesses operating in other states, or perhaps non-Massachusetts extraction businesses with limited local presence through sales/distribution. The Commission members were also concerned whether tax expenditures for mineral extraction industries were appropriate at a time when the Commonwealth has concerns about global warming and other environmental impacts.

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Expensing Exploration and Development Costs
TAX EXPENDITURE NUMBER	1.308 & 2.309
TAX EXPENDITURE CATEGORY	Accelerated Deductions from Gross Income
TAX TYPE	Corporate & Business Excise Tax/Personal Income Tax
LEGAL REFERENCE	Code §§ 193, 263(c), 616, 617; M.G.L. c. 63, § 30.4.
YEAR ENACTED	1976
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	For FY2023, $0.01 million (personal income tax), $0.135 million (corporate and business excise tax).
NUMBER OF TAXPAYERS	Not available
AVERAGE TAXPAYER BENEFIT	Not available

Description of the Tax Expenditure: For federal tax purposes taxpayers can immediately deduct certain costs incurred in developing specified mineral deposits. Such costs would otherwise have to be capitalized and deducted over a period of years. The recovery period for capitalized items varies based on the nature of the costs and the type of mineral deposit. Massachusetts conforms to the federal deduction, resulting in a state tax expenditure.	**Is the purpose defined in the statute?** The statute does not explicitly state the purpose of this tax expenditure.
What are the policy goals of the expenditure? DOR assumes that the federal tax expenditure on which the Massachusetts tax expenditure is based is intended to encourage investment in the development of oil, natural gas, and geothermal resources. Because Massachusetts has few oil, natural gas, or geothermal resources, DOR assumes that an additional purpose of the Massachusetts tax expenditure is the	**Are there other states with a similar Tax Expenditure?** Most states that impose a corporate or individual tax on income conform to the federal deduction for costs incurred in developing mineral deposits. States that conform to the federal deduction include California, Connecticut, Maine, New

simplification of conforming to federal expensing rules.	Hampshire, New York, Rhode Island, and Vermont.

INTRODUCTION

Section 263(c) of the Internal Revenue Code (the "Code") allows taxpayers to elect to deduct certain costs incurred in developing mineral deposits the year the costs are incurred. Costs that are not deducted in this manner must be capitalized and deducted over a period of years. As per Code §§ 193, 616 and 617, the recovery period depends on the nature of the costs and the type of mineral deposit that is developed. Eligible costs generally include expenses incurred in bringing known mineral deposits into production. These expenses include items such as labor, fuel, repairs, hauling and supplies that do not have a salvage value. The deduction applies to domestic oil, natural gas, and geothermic energy sources. Treas. Reg. §1.612-4(a)

Massachusetts conforms to the Code for purposes of determining corporate excise net income tax and personal income tax business expense deductions. Accordingly, Massachusetts conforms to this accelerated deduction. This conformity results in a deferral of Massachusetts tax and therefore constitutes a state tax expenditure.

POLICY GOALS

DOR assumes that the federal tax expenditure on which the Massachusetts tax expenditure is based is intended to encourage investment in the development of oil, natural gas, and geothermal resources. Because Massachusetts has few oil, natural gas, or geothermal resources, DOR assumes that an additional purpose of the Massachusetts tax expenditure is the simplification of conforming to federal expensing rules.

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $0.145 - $0.151 million per year during FY19-FY23. See the table below. By tax type, the annual revenue loss estimates are $0.010 million to $0.016 million for personal income tax and $0.135 million for corporate excise. Revenue loss estimates for Massachusetts are based on the most recent tax expenditure report prepared by the Joint Committee on Taxation (JCT).[1] To share down the federal estimates into Massachusetts estimates, DOR adjusted the federal estimates for the difference between federal and state fiscal year,[2] effective tax rates, and size of tax base.

[1] The JCT is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. Among other tasks, the JCT provides revenue estimates for federal tax expenditures and tax legislation considered by the Congress. See https://www.jct.gov/about-us/overview/.

[2] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

Table 1. Revenue Loss Estimates for Expensing Exploration and Development Costs ($ Millions)

	FY2019	FY2020	FY2021	FY2022	FY2023
Corporate Excise Tax	$0.135	$0.135	$0.135	$0.135	$0.135
Personal Income Tax	$0.016	$0.012	$0.010	$0.010	$0.010
Total	**$0.151**	**$0.147**	**$0.145**	**$0.145**	**$0.145**

DIRECT BENEFITS

IRS form 4562 is used to report amount of deducted exploration and development costs by taxpayers. After matching IRS form 4562 data and Massachusetts return data, DOR was able to estimate that in 2018, about 20-30 corporate excise filers and about 30-40 personal income taxpayers benefited from this tax expenditure. [3] DOR was able to tabulate the following statistical information on potential corporate beneficiaries of this tax expenditure using corporate income tax data.[4] Table 2 below shows the percentage of impacted corporations, and the percentage of tax reported by these impacted corporations by *range of taxable income*. [5]

Table 2. Impact on Corporate Taxpayers by *Taxable Income Range*:

Taxable Income Range	% of Impacted Corporations	% of Total Tax Reported by the Impacted Corporations
<$0	15.0%	11.2%
$0 to $9,999	80.0%	59.8%
$10,000 to $99,999	5.0%	29.0%
Total	100.0%	100.0%

Source: Massachusetts Department of Revenue (tax year 2018 data on state corporate excise returns and federal form 4562).
Note: Numbers are estimates using available sample data. The data are preliminary and subject to change.

Looking at the impact on corporate taxpayers by taxable income range, corporations with taxable income in the range of $0 to $9,999 have the highest percentage of impacted corporations, at 80% (see second column). Corporations in this taxable income range represent 59.8% of the total tax reported by the impacted corporations (see third column). Corporations in the taxable income range of $10,000 to $99,999 have the lowest

[3] Please note that the exact number of taxpayers benefiting from this tax expenditure could not be determined due to data limitations.
[4] We were not able to create the same tabulation for the personal income tax filers due to data limitations.
[5] Due to data limitations, we were not able to tabulate the data by *range of employment* and *industry*.

percentage of impacted corporations, at 5% (see second column), representing 29% of the total tax reported (see third column).

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs of financing the tax expenditure and the direct benefits resulting from the expenditure. The direct costs are borne by the Commonwealth (in the form of the revenue reduction caused by the tax expenditure) or ultimately by residents and businesses (in the form of government spending reductions or tax increases needed to offset that revenue reduction). The direct benefits inure to employees in the form of lower personal income taxes. In this instance, the direct costs to the Commonwealth, namely the corporate, business, and personal income tax that would have been collected, are equal to the direct benefits afforded by the tax expenditure to the affected businesses, which is the tax the affected taxpayers would have had to pay to the Commonwealth.

There are indirect and induced costs and benefits associated with this tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) occurs when a directly or indirectly impacted business passes on the costs or benefits to households, such as those of its employees in the form of lower or higher income, who then in turn reduce or increase purchases of goods and services from other businesses. The total costs or benefits to the whole economy is larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect". [6]

To measure these indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Most states that impose a corporate or individual tax on income conform to the federal deduction for costs incurred in developing mineral deposits. States that conform to the federal deduction include California, Connecticut, Maine, New Hampshire. New York, Rhode Island, and Vermont.

[6] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

Template for Evaluating Expenditures

Name of Expenditure: 1.022 Exemption for Capital Gains at Time of Death	**Annual cost:** $511.5 - $796.4M/yr, FY19-FY23.	**Year of adoption:** 1915	**Sunset date:** None

Tax Type (check all that apply): ☐ Corporate ☒ Personal Income ☐ Sales ☐ Other

This tax expenditure is a result of state conformity to the Federal Code: ☒ Yes ☐ No

Goal of expenditure (check all that apply):

Business:

☐ Job creation & maintenance
☐ Investment
☐ Competitiveness/Strategic
☐ Health/Environment/Social Justice
☐ Other:

Individual:

☐ Relief of poverty
☐ Progressivity/assistance to low earners
☐ Access to opportunity
☐ Health/Environment/Social Justice
☒ Other: Simplify tax compliance and administration through conformity with federal code

Measurement and Effectiveness Ratings:

Which best reflects your opinion on each statement?	*Strongly disagree*	*Somewhat disagree*	*Somewhat agree*	*Strongly agree*
We can measure the overall benefit toward achieving the goal(s)			X	
The TE's benefit justifies its fiscal cost			X	
The TE is claimed by its intended beneficiaries				X
The TE is claimed by a broad group of taxpayers		X		
The TE amount claimed per taxpayer is meaningful as an incentive/benefit				X
The TE is relevant today				X
The TE is easily administered				X
Business only -The TE is beneficial to smaller businesses				
Individuals only -The TE benefits lower income taxpayers	X			

Comments (1.022 Exemption for Capital Gains at Time of Death)
This expenditure conforms to the Federal tax code. All other states that have an income tax also conform to the Federal rules for this item. The expenditure is relatively large and we spent some time discussing several issues. The expenditure eases compliance burdens because the Federal rules allow for a step-up in basis for the heirs and if Massachusetts did not do the same, then taxpayers would have to track two separate basis amounts for the same asset for Federal (stepped-up) and state (carryover) purposes. In addition, the Massachusetts estate tax has a relatively low exemption amount (currently $1M), thus, this expenditure likely prevents double taxation in many cases because if the gain were taxed immediately upon death, the decedent's estate would owe income tax and also estate tax on the capital gain (or if the capital gain tax were assessed on the heirs when they sold, there would still be double taxation- estate tax upon death and capital gains tax in the future). One issue we discussed is that eliminating this expenditure may lead to greater incentives for taxpayers to leave the state prior to death (if possible).

MASSACHUSETTS TAX EXPENDITURES
EVALUATION SUMMARY

EVALUATION YEAR: 2022

TAX EXPENDITURE TITLE	Exemption for Capital Gains at Time of Death
TAX EXPENDITURE NUMBER	1.022
TAX EXPENDITURE CATEGORY	Exclusion from Gross Income
TAX TYPE	Personal Income Tax
LEGAL REFERENCE	Code §§ 1001, 1014
YEAR ENACTED	1915
REPEAL/EXPIRATION DATE	None
ANNUAL REVENUE IMPACT	Tax loss of $511.5 - $796.4 million per year during FY19-FY23.
NUMBER OF TAXPAYERS	Approximately 21,200 - 42,500 households annually.
AVERAGE TAXPAYER BENEFIT	$16,000 - $33,000 per benefiting households.

Description of the Tax Expenditure:	**Is the purpose defined in the statute?**
Ordinarily, for federal income tax purposes, capital gains are taxed at the time appreciated property is transferred to a new owner. However, tax is not imposed on capital assets transferred by reason of the owner's death. Further, the new owner receives the assets with a new basis (i.e. the fair market value of assets at the time of decedent's death) rather than the same "carryover" basis of the decedent. Thus, the amount of appreciation that occurred while the decedent held the asset is never taxed. Massachusetts generally follows the federal rules for purposes of determining taxable capital gains. This conformity allows capital assets to escape the personal income tax to the extent of appreciation occurring prior to the	The statute does not explicitly state the purpose of this tax expenditure.

decedent's death, resulting in a state tax expenditure.	
What are the policy goals of the expenditure? The federal rules applicable to capital gains on inherited property were originally intended to coordinate the federal income tax with the federal estate tax. The nontaxation of capital gains on inherited property was intended to prevent the imposition of income tax on transfers that are potentially subject to the federal estate tax. Massachusetts imposes an estate tax.	**Are there other states with a similar Tax Expenditure?** Every state that imposes a personal income tax generally follows the federal income recognition and basis rules applicable to transfers of capital assets.

INTRODUCTION

Massachusetts generally follows the federal income recognition and basis rules applicable to transfers of capital assets. The Massachusetts tax expenditure is a result of this conformity.

In Massachusetts, long-term gains on transfers of capital assets are taxed at the regular income rate of 5% unless otherwise exempt. Short-term gains are taxed at a rate of 12%. Special, less favorable, rates apply to capital gains on the sale of collectibles such as antiques.

For both federal and Massachusetts purposes, the taxable capital gain is the difference between the holder's basis in the property, and its selling price. An owner's basis is generally the amount paid for the capital asset, adjusted for depreciation allowed as a deduction with respect to the asset. Ordinarily, for both federal and Massachusetts purposes, capital gains are taxed at the time of transfer of a capital asset to a new owner. However, if a capital asset is transferred by reason of the owner's death, Code §§ 1001 and 1014 provide that the new owner's basis is the fair market value of the asset at the time of the transferor's death. Thus, when the new owner sells the capital asset, his or her taxable capital gain will include only the appreciation that occurs after the inheritance. The receipt of assets through inheritance is not subject to federal or Massachusetts income tax. Thus, the income tax will never be imposed on the appreciation of a capital asset that occurred while the decedent held the asset. The foregone revenue resulting from the Commonwealth's adoption of these rules constitutes a state tax expenditure.

A recent report by the Congressional Research Service provides more detail on the federal expenditure.[1]

POLICY GOALS

The federal rules applicable to capital gains on inherited property were originally intended to coordinate the federal income tax with the federal estate tax. The nontaxation of capital gains on inherited property was intended to prevent the imposition of income tax on transfers that are potentially subject to the federal estate tax. Massachusetts imposes an estate tax.

As a practical matter, conforming to federal law by using a stepped-up basis for decedent's assets rather than a carry-over basis simplifies the administration of the estate tax and eliminates the need to maintain separate Massachusetts basis records.

[1] https://crsreports.congress.gov/product/pdf/IF/IF11812

DIRECT COSTS

The revenue loss resulting from this tax expenditure is estimated to be $511.5 - $796.4 million per year during FY19-FY23 (see the table below). The estimated revenue loss is based on estimates produced by the federal Joint Committee on Taxation ("JCT")[2] of the impact on federal tax collections due to this tax expenditure. JCT's estimates are shared down to Massachusetts based on the state's share of capital gains as reported on the federal income tax return. JCT's estimates are adjusted for differences between federal and state fiscal years[3] and tax rates. Shared down revenue loss estimates are uncertain given the use of external data and that capital gains are volatile and difficult to forecast. The estimates reported in the table below should be used with extreme caution.

Tax Revenue Loss Estimates from Nontaxation of Capital Gains at Death

Fiscal Year	2019	2020	2021	2022	2023
Estimated Revenue Loss ($Million)	$631.9	$511.5	$796.4	$789.4	$701.8

DIRECT BENEFITS

The direct benefits are in the form of a tax savings for certain households. While it is difficult to determine the exact number of impacted households and the average benefit per household, DOR created estimates by using data on mortality and the portion of the population who hold capital assets and cross referenced this population with the annual revenue impact.

The Massachusetts Department of Public health reported that approximately 59,000 residents died in calendar 2017.[4] To estimate the number that held capital assets, we consulted a joint report by the Congressional Budget Office and the Joint Committee on Taxation (CBO-JCT).[5] They reported that 72% of families hold some form of capital asset. However, for half of these families this asset was their primary residence.[6] Excluding their primary residence, the report found that only 36% of families hold any form of capital asset. Using these two percentage figures generates a range of roughly 21,200 - 42,500 households in Massachusetts claiming this exclusion each year. The revenue impact for

[2] The Joint Committee on Taxation is a nonpartisan committee of the United States Congress, originally established under the Revenue Act of 1926. https://www.jct.gov/

[3] Note that the federal fiscal year runs from October 1st to September 30th of the following year, while the Massachusetts fiscal year runs from July 1st to June 30th of the following year.

[4] See the summary of mortality data and statistics for the 2017 calendar year here: https://www.mass.gov/lists/death-data (page 14).

[5] https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51831-capitalgains.pdf

[6] Note that for primary residences, a capital gain of up to $250,000 is generally already excluded ($500,000 for couples) under a separate exclusion.

this exclusion is estimated to be $702 million in FY23. Based on these estimates, the average tax savings per affected household is $16,000 - $33,000.

EVALUATION: COMPARING COSTS AND BENEFITS

In the previous sections, we report the direct costs (to the Commonwealth, or to the residents and businesses who ultimately bear the costs when the Commonwealth cuts government spending or increases taxes to finance the nontaxation of capital gains at death) and direct benefits (to heirs) of this tax expenditure. In this instance, the direct costs to the Commonwealth, namely the income tax that would have been collected from the excluded capital gains, are equal to the direct benefits afforded by the tax expenditure to the heirs, which is the income tax the estate would have had to pay to the Commonwealth.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with this tax expenditure. To measure indirect and induced costs and benefits, economists often need to utilize complicated models, such as REMI (Regional Economic Models, Inc.) or IMPLAN (Impact Analysis for Planning) models. DOR did not attempt to use such models given their complexity and the data limitations present in this instance.

SIMILAR TAX EXPENDITURES OFFERED BY OTHER STATES

Every state that imposes a personal income tax generally follows the federal income recognition and basis rules applicable to transfers of capital assets.

Appendix E

Tax Expenditure Review Commission Meeting Minutes

Tax Expenditure Review Commission Public Meeting Minutes
October 7, 2021
Via Teleconference
10:00AM

Commission Members in Attendance:

Chairman Kevin Brown, MA Department of Revenue
Auditor Suzanne Bump, MA Auditor
Chairman Adam Hinds, Joint Revenue Committee, Senate Co-Chair
Professor Matthew Weinzierl, Governor's Appointee
Professor Michelle Hanlon, Governor's Appointee
Jacob Blanton, Designee, Senate Ways and Means Committee
Sue Perez, Designee, MA Treasurer
William Burke, Designee, House Minority Leader
Greg Sullivan, Designee, Senate Minority Leader

Commission Members Absent:

Chairman Aaron Michlewitz, House Ways and Means Committee
Chairman Mark Cusack, Joint Revenue Committee, House Co-Chair

List of Documents:

1. Meeting Agenda
2. Draft Minutes – March 12, 2021 Meeting
3. Draft Reports of Tax Expenditures:

2.101	Deferral of Tax on Certain Shipping Companies
3.609	Exemption for Vessels or Barges of 50 Tons or Over
3.610	Exemption for Rental Charges for Refuse Containers
3.611	Exemption for Honor Trays
3.606	Exemption for Trade-in Allowances for Motor Vehicles and Trailers
3.112	Exemption for Aircraft & Aircraft Parts

Members were asked to announce themselves and a quorum was recognized by Chairman Brown. The meeting via teleconference was called to order at 10:05AM.

Chairman Brown put the Commission and public on notice that the meeting is recorded for purposes of minutes. Once the minutes are approved, the recording will be deleted.

Chairman Brown requested that Commission members provide any changes to the March 12, 2021 draft meeting minutes. Hearing none, members voted unanimously to approve the March 12, 2021 meeting minutes.

Chairman Brown informed members that an additional staff member will be joining DOR to work on Commission matters. Cole Doherty-Crestin will be reaching out to members in the coming weeks to introduce himself and provide meeting updates and materials.

Chairman Brown stated that while it is not the role of the Commission to recommend policy changes, following its first report to the legislature, some tax expenditures were repealed in the final FY22 state budget, including the Harbor Maintenance Credit, Medical Device User Fee Credit, and the Energy Patent Deduction. Members discussed adding a column to the full tax expenditure list to track the status of each item following the Commission's review. Chairman Brown responded that this may be administratively challenging given the volume of tax expenditures and various legislative vehicles policymakers may utilize for policy reconsiderations.

Professor Weinzierl led a discussion on Deferral of Tax on Certain Shipping Companies. This tax expenditure was adopted in 1987 and has a current annual revenue impact of approximately $800,000. There is a federal deduction for certain boat building expenses, with which all states are coupled. Approximately 600 people are employed in the Massachusetts ship-building industry. Members voted to approve the Deferral of Tax on Certain Shipping Companies review template as presented.

Auditor Bump and Greg Sullivan led a discussion on the Exemption for Vessels or Barges of 50 Tons or Over. Activity for building these types of vessels and barges in Massachusetts is nearly indiscernible but is exempt from sales tax. Dr. Kazim Ozyurt, DOR's Chief Economist, stated that the method of analysis DOR uses when researching and drafting tax expenditure reports includes national data. As a result, each state reflects some degree of activity according to the NAECS codes. Auditor Bump stated that the adoption of this exemption in 1967 could be tied to the formerly robust shipbuilding industry at the Fore River Shipyard in Quincy. Chairman Brown suggested the draft report include additional background information provided by Greg Sullivan and Auditor Bump. Members agreed to revisit the exemption during the next Commission meeting to allow for updates to the review template, including background information and noting the uncertainty of exemption beneficiaries and cost.

Professor Hanlon led a discussion on the Exemption for Rental Charges for Refuse Containers. This tax expenditure was adopted in 1982 and has a current annual cost of approximately $900,000. Chairman Brown stated that the expenditure may have been the legislature's response to a Supreme Judicial Court ruling on sales tax collections on refuse container rentals. Chairman Brown stated that services are not taxable in Massachusetts and the normal rule is that if a service is being provided that requires transfer of tangible property, the customer is generally not taxed on it. Sales tax is supposed to arise at the retail level, but if a service provider breaks down a charge for renting tangible property, it then becomes taxable. Whether something is considered a service or rental property has spurred litigation. Dr. Ozyurt and Chairman Brown discussed the challenges that sales tax presents for data collection. For example, DOR can easily identify which vehicles retailers are largely selling, but some retailers sell multiple types of property that are not broken down on Massachusetts sales tax return filings. Members voted to approve the Exemption for Rental Charges for Refuse Containers review template with the addition of a note stating that the revenue cost is an estimate.

Sue Perez and William Burke led a discussion on the Exemption for Honor Trays, which are often set out by companies to allow employees to purchase food items with the expectation of payment without a formal transaction. This tax expenditure was adopted in 1993 and has a current annual cost estimate of approximately $200,000. Members discussed the burden of tracking sales tax on these types of purchases without this exemption, which supports its administrative simplicity. Members voted to approve the Exemption for Honor Trays review template with a change from Strongly Disagree to Strongly Agree that its benefits outweigh the cost.

Jacob Blanton and Chairman Brown led a discussion on the Exemption for Trade-in Allowances for Motor Vehicles and Trailers. This tax expenditure was adopted in 1967 and has a current annual cost estimate of approximately $107 - $135 million. Chairman Brown stated that purchases subject to sales tax are also taxable on the value of the transaction. For example, if a new car is purchased with the value of a trade-in offsetting the cost, the general rule is that the full amount of the new car is taxable. This tax exemption carves out the value of the trade-in from taxation. The major benefit of the exemption is to encourage new vehicle purchases, though it does not benefit those without a trade-in. Dr. Ozyurt stated that DOR is confident in the reported revenue cost given the directness of the data. Jacob Blanton and Chairman Brown discussed the possibility of driving up trade-in values and new vehicle sticker prices due to the exemption offsetting sales tax for buyers with trade-ins. A detriment the legislature may want to consider is whether this exemption encourages vehicle purchases rather than mass transit. Professor Weinzierl asked about private “driveway sales” of used vehicles. Chairman Brown responded that driveway sales are taxable transactions and ineligible for the exemption. It only applies to transactions involving dealers but does also apply to “new” used vehicle purchases. The vehicle must only be new to the purchaser offering a trade-in. Members agreed to changing the review template from Slightly Agree to Slightly Disagree that the exemption benefits outweigh its cost. Members further agreed to revisit the exemption during the next Commission meeting to allow DOR to draft comments regarding the policy question for the legislature on encouraging car sales versus mass transit, given the significant annual cost of the expenditure.

Chairman Brown led a discussion on the Exemption for Aircraft & Aircraft Parts. This tax expenditure was adopted in 2002 and has a current annual cost estimate of approximately $25 million. It was supported by local airports maintaining they were losing business to surrounding states offering similar exemptions. Supporters sought to exempt aircraft parts from sales tax; however, the adopted version of the exemption also exempted commercial carriers and aircraft purchases. Aircraft are also not subject to state excise tax though there may be local property tax associated with planes where registered. Members agreed to revisit the exemption during the next meeting to allow DOR to provide a further breakdown of purchases of aircraft versus aircraft parts, as well as research on other applicable taxes.

Members discussed producing an annual legislative report instead of the biennial March report required by the Commission’s enabling legislation. Members agreed to schedule a meeting prior to Thanksgiving. Chairman Brown concluded the meeting at 11:48AM.

Tax Expenditure Review Commission Public Meeting Minutes
November 18, 2021
Via Teleconference
10:00AM

Commission Members in Attendance:

Chairman Kevin Brown, MA Department of Revenue
Professor Matthew Weinzierl, Governor's Appointee
Professor Michelle Hanlon, Governor's Appointee
Jacob Blanton, Designee, Senate Ways and Means Committee
Sue Perez, Designee, MA Treasurer
William Burke, Designee, House Minority Leader
Greg Sullivan, Designee, Senate Minority Leader
Kerri-Ann Hanley, Designee, MA Auditor

Commission Members Absent:

Chairman Aaron Michlewitz, House Ways and Means Committee
Chairman Adam Hinds, Joint Revenue Committee, Senate Co-Chair
Chairman Mark Cusack, Joint Revenue Committee, House Co-Chair

List of Documents:

1. Meeting Agenda
2. Draft Minutes – October 7, 2021 Meeting
3. Draft Reports of Tax Expenditures:

1.042 & 1.501	Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain
2.205	Deduction for Certain Dividends of Cooperatives
2.703	Exemption for Regulated Investment Companies
3.109	Exemption for Cement Mixers
3.410	Exemption for Containers
3.421	Exemption for Films

Members were asked to announce themselves and a quorum was recognized by Chairman Brown. The meeting via teleconference was called to order at 10:05AM.

Chairman Brown put the Commission and public on notice that the meeting is recorded for purposes of minutes. The recording of the meeting will be kept for public record.

Chairman Brown requested that Commission members provide any changes to the October 7, 2021 draft meeting minutes. Hearing none, members voted unanimously to approve the October 7, 2021 meeting minutes.

Chairman Brown led a discussion on sales tax exemptions in an effort to provide clarity to sales tax structure. DOR added additional detail to tax expenditure summaries reviewed during the October meeting, which reflect the discussion on how sales tax works. Members agreed that the sales tax explanation provided a helpful overview. Members agreed to adopt these revisions.

Jacob Blanton and Sue Perez led a discussion on Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain. This tax expenditure was adopted in 2005 and has a current annual revenue impact of approximately $32M-$49.8M with no sunset date. Gains derived from the sale of certain "qualified small business stock" ("QSBS") are eligible for a 50% income exclusion because of Massachusetts' conformity with section 1202 of the Internal Revenue Code (the "Code") as in effect in 2005. If it meets certain requirements, QSBS gains that are included in income is taxed at a rate of 3% instead of the generally applicable long-term gain rate of 5%. Many states allow an exclusion for the entire amount of gain on the sale of qualified small business stock including New York, Connecticut, Maine, Rhode Island, and Vermont. The goal of this tax expenditure is to encourage investment in new small businesses. Note, there is a 100% exclusion for federal tax purposes on these capital gains. Members discussed that given the existing federal exemption, it is hard to determine how the tax expenditure spurs investment at the state level. Dr. Kazim Ozyurt, DOR's Chief Economist, stated that DOR does not have data on where the investments are being made. Professor Hanlon stated that there is pending federal legislation (Build Back Better bill) that would take the federal benefit away from people who earn over $400K. Rebecca Forter, Deputy Commissioner of OTA, stated that this is an area that taxpayers find confusing because Massachusetts conforms to federal rules to an extent, but then the 3% rate that MA offers can only be claimed if taxpayers meet additional requirements. Approximately 130 taxpayers currently benefit from this tax expenditure at an average of $246,000 per taxpayer. Members discussed whether the benefits justify the costs given the small group of claimants. Members agreed to move Benefits Justify Costs from Somewhat Disagree to Strongly Disagree and to move Ease of Administration from Somewhat Disagree to Strongly Disagree.

Professor Weinzierl and Greg Sullivan led a discussion on Deduction for Certain Dividends of Cooperatives. This tax expenditure was adopted in 1962 and has a current annual revenue impact of approximately $4.0M-$4.2M with no sunset date. Cooperatives subject to tax under Subchapter T of the Internal Revenue Code (the "Code"), including farmers' cooperatives, and most other corporations operating on a cooperative basis, may deduct amounts paid to members as patronage dividends. Massachusetts adopts the federal deduction by virtue of its conformity with the Code. DOR infers that the primary function of a cooperative is to allow member businesses to band together to take advantage of economies of scale when buying supplies or selling products. The tax expenditure allows the members to do so without incurring additional tax on transactions with the cooperative. Members discussed how the deduction promotes the formation and operation of cooperative corporations. Every state with a corporate income tax based on federal taxable income allows the deduction unless they specifically disallow it. It does not appear that any state has done so. Professor Weinzierl and Greg Sullivan stated that this tax expenditure appears to benefit cooperative members by about $150 each per year. Members voted to approve the Deduction for Certain Dividends of Cooperatives evaluation template as presented.

William Burke led a discussion on the Exemption for Regulated Investment Companies. This tax expenditure was adopted in 1992 and has a current annual revenue impact of approximately $400M-$502M with no sunset date. Regulated Investment Companies (RICs), also known as mutual funds, are investment vehicles that are eligible for favored tax treatment for federal tax purposes. Specifically, unlike most ordinary corporations, RICs may deduct dividends they pay to their shareholders for federal tax purposes. Massachusetts does not conform to the federal tax treatment of RICs, but in Massachusetts RICs are fully exempt from both the income and non-income measures of the corporate excise. DOR assumes that the expenditure is intended to promote the mutual fund industry and encourage investment, and to avoid taxing mutual fund income at both the entity and shareholder levels. Most states that impose a corporate income tax follow the federal tax treatment of RICs. These states include California, Connecticut, Maine, New Hampshire, New York, and Vermont. Greg Sullivan stated that if Massachusetts taxed mutual funds at the entity level it would hurt competitiveness. Many states have this type of tax expenditure, but Massachusetts is particularly attractive for mutual fund firms. Members agreed that without this tax expenditure, it would be easier for RICs to relocate to other states. Members voted to approve the Exemption for Regulated Investment Companies evaluation template as presented.

Kerri-Ann Hanley and Jacob Blanton led a discussion on the Exemption for Cement Mixers. This tax expenditure was adopted in 1971 and has a current annual revenue impact of approximately $1.6M with no sunset date. Concrete mixing units mounted on the back of trucks are exempt from sales tax. Spare parts for such units are also exempt. The truck chassis is subject to sales tax. DOR assumes that the policy goal of this expenditure is to spur economic development through construction projects and to ensure that tax is imposed only on finished products, rather than multiple times on companies during construction. No New England state has a similar statutory exemption. However, cement mixers and repair parts may be exempt in other states as machinery used in manufacturing. New York, for example, does not have a statutory exemption for cement mixers, but the mixers are exempt as manufacturing machinery. Members discussed the changes in technology and deployment of delivery since the tax expenditure was adopted. Professor Weinzierl inquired about the number of cement mixer suppliers taking advantage of this tax expenditure. Members voted to approve the Exemption for Cement Mixers evaluation template as presented with an addition of a note on the number of cement mixer suppliers in Massachusetts.

Chairman Brown led a discussion on the Exemption for Containers. This tax expenditure was adopted in 1967 and has a current annual revenue impact of approximately $130.8-$148.9M with no sunset date. Sales eligible for the exemption include sales of empty containers to be filled and resold, containers the contents of which are exempt from the sales tax, and returnable containers when sold with the contents or resold for refilling. DOR assumes the goal to be to reduce the sales tax burden on purchases of items sold in containers where the object of the transaction is to purchase the contents of such containers. In these transactions the container is used to provide a service, such as transportation and containment of the contents, and service transactions are generally exempt from sales tax. Most other neighboring states offer a similar sales and use tax exemption for containers. Members voted to approve the

Exemption for Containers evaluation template as presented with an addition of a note on level of packaging impacted.

Chairman Brown led a discussion on the Exemption for Films. This tax expenditure was adopted in 1967 and has a current annual revenue impact of approximately $0.8-$3.6M with no sunset date. Motion picture films sold for commercial exhibition are exempt from sales tax. DOR assumes that the expenditure was adopted to exempt one of the key business inputs of exhibitors in order to prevent sales tax from being either built into the charge for movie admission, which itself is explicitly exempt from the sales tax, or driving up the cost of operating a television station or movie theater. Other states with a similar tax expenditure include Connecticut, Georgia, Vermont, and Virginia. Professor Weinzierl inquired whether COVID-19 impacted the revenue estimate since theaters were closed, and small businesses closed. Dr. Kazim Ozyurt, DOR's Chief Economist, said the figure could be revisited, but on the other hand the estimate could go down given more competitiveness within the industry and viewer access to movies. Purchasing a movie ticket is a nontaxable service in MA, so this tax expenditure provides a somewhat outdated carve-out for theaters that had to purchase films. Members discussed how this tax expenditure becomes less relevant as competition from streaming increases. Members voted to approve the Exemption for Films review template with a change from Strongly Agree to Somewhat Agree for Claimed by Intended Beneficiaries and a change from Somewhat Disagree to Strongly Disagree for Relevant Today.

Members discussed the next batch of tax expenditures to be reviewed at the next Commission meeting. Members agreed to schedule a meeting prior to mid-January 2022. Chairman Brown concluded the meeting at 11:48AM.

Tax Expenditure Review Commission Public Meeting Minutes
January 14, 2021
Via Teleconference
10:00AM

Commission Members in Attendance:

Chairman Kevin Brown, MA Department of Revenue
Professor Matthew Weinzierl, Governor's Appointee
Professor Michelle Hanlon, Governor's Appointee
Jacob Blanton, Designee, Senate Ways and Means Committee
Sue Perez, Designee, MA Treasurer
William Burke, Designee, House Minority Leader
Greg Sullivan, Designee, Senate Minority Leader
Suzanne Bump, MA Auditor & Kerri-Ann Hanley, Designee

Commission Members Absent:

Chairman Aaron Michlewitz, House Ways and Means Committee
Chairman Adam Hinds, Joint Revenue Committee, Senate Co-Chair
Chairman Mark Cusack, Joint Revenue Committee, House Co-Chair

List of Documents:

1. Meeting Agenda
2. Draft Minutes – November 18, 2021 Meeting
3. Draft Reports of Tax Expenditures:

2.312	Expensing of Certain Expenditures for Alternative Energy Sources
2.501	Nontaxation of Certain Energy Property
3.306	Exemption for Materials, Tools, Fuels, and Machinery Used in Newspaper Printing
3.405	Exemption for Certain Energy Conservation Equipment
3.411	Exemption for Certain Sales by Typographers, Compositors and Color Separators
1.303 & 2.307	Modified Accelerated Depreciation on Buildings (other than Rental Housing)
1.304 & 2.305	Modified Accelerate Cost Recovery System (MACRS) for Equipment
1.305 & 2.306	Deduction for Excess First-Year Depreciation

Members were asked to announce themselves and a quorum was recognized by Chairman Brown. The meeting via teleconference was called to order at 10:05AM.

Chairman Brown put the Commission and public on notice that the meeting is recorded for purposes of minutes. The recording of the meeting will be kept for public record.

Chairman Brown requested that Commission members provide any changes to the November 18, 2021 draft meeting minutes. Hearing none, members voted unanimously to approve the November 18, 2021 meeting minutes.

Auditor Bump led a discussion on Expensing of Certain Expenditures for Alternative Energy Sources. This tax expenditure was adopted in 1976 and has a current revenue impact of $0 with no sunset date. Massachusetts General Laws chapter 63, § 38H allows a corporation to deduct "expenditures paid or incurred during the taxable year with respect to the installation of any solar or wind powered climatic control unit and any solar or wind powered water heating unit, or any other type of unit or system powered thereby." Without this provision, such costs would have to be capitalized and depreciated. To qualify for the deduction, the equipment must be located in Massachusetts and used exclusively in the trade or business of the corporation. The statute provides that equipment must meet certain technical standards that are required to be set by a now-defunct state agency – the Bureau of Building Construction. The Bureau of Building Construction was abolished in 1980 and was absorbed by the Division of Capital Asset Management & Maintenance ("DCAMM"). There is now no certification process in place and no current published guidance in effect. In the absence of that agency or a successor agency to certify the property, no exemption can be allowed. Members discussed that the tax expenditure is not currently active, although the statute authorizing it is still in effect, because the deduction requires certification by a state agency that no longer exists. DOR is not aware of other states that allow a similar deduction for alternative energy equipment. However, it is not uncommon for states to offer income tax credits, sales tax deductions or property tax exemptions for such equipment. Members assume the goal to be the encouragement of investment in alternative energy equipment. Members voted to approve the Expensing of Certain Expenditures for Alternative Energy Sources evaluation template as presented.

Greg Sullivan and Sue Perez led a discussion on Nontaxation of Certain Energy Property. Members discussed the similarities between this tax expenditure and the Expensing of Certain Expenditures for Alternative Energy Sources. This tax expenditure was adopted in 1976 and has a current revenue impact of $0 with no sunset date. Nontaxation of Certain Energy Property allows a corporate excise deduction for certain alternative energy property. Historically, the Bureau of Building Construction, a now-defunct state agency, was responsible for setting construction standards in Massachusetts. The Bureau of Construction's function in certifying alternative energy property was not specifically delegated to any successor agency. No certification standards, guidelines or regulations have been established by DCAMM or any other Massachusetts agencies for corporations seeking to take the alternative energy property deduction. Relatively few states impose a state level tax on tangible property. Of those states, none allow a specific exemption for alternative energy property. Members presumes that the expenditure is intended to encourage investment in alternative energy equipment. Members discussed DCAMM's proposed language change that may potentially affect the certification process for this tax expenditure. DCAMM submitted a proposed language change that would remove the certification requirement. Members voted to approve the Nontaxation of Certain Energy Property evaluation template as presented.

Chairman Brown led a discussion on the Exemption for Materials, Tools, Fuels, and Machinery Used in Newspaper Printing. This tax expenditure was enacted in 1968, repealed in 1990, and reinstated in 1995 and has a current annual revenue impact of approximately $3.3M per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales tax for materials, tools, fuels, and machinery, including replacement parts if they are consumed and used directly and exclusively in an industrial plant for purposes of publishing a newspaper to be sold. Examples of these consumables include paper on which the newspaper is printed, ink, and printing presses and replacement parts. Most states exempt sales of components used and consumed in manufacturing from sales tax, which would cover the majority of property that would qualify for this exemption. However, a few states adopt a broader exemption specifically for components used in newspaper publishing (e.g., Idaho, Vermont, North Carolina). Members assume that the expenditure is intended to support the newspaper industry and the publication and readership of newspapers. According to the U.S. Census Bureau, in 2017, Massachusetts had 99 newspaper publishing firms. These firms jointly employed 5,138 people, generating $270.0 million in annual payroll and $926.2 million in annual sales. Members discussed how this tax expenditure has become less relevant today as newspapers have become more popular online and hardcopy newspapers have diminished. Members also discussed the overlap of general manufacturing exemptions and this exemption. Members voted to approve the Exemption for Materials, Tools, Fuels, and Machinery Used in Newspaper Printing evaluation template as presented.

William Burke and Sue Perez led a discussion on the Exemption for Certain Energy Conservation Equipment. This tax expenditure was adopted in 1977 and has a current annual revenue impact of approximately $6.2M-$8.9M per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales and use tax for equipment directly relating to any solar, wind-powered or heat pump system used as a primary or auxiliary energy source in an individual's principal residence. More than twenty other states have exemptions for solar equipment, while nearly twenty have exemptions for wind equipment. Several also have exemptions for heat pump systems. Members assume the goal of the expenditure is to encourage energy conservation in residential homes in Massachusetts. Members discussed the trend of tax expenditures lacking sunset dates, or expiration dates. Members supported the notion advising the application of sunset dates to tax expenditures in order to encourage the re-evaluation of the tax expenditure to periodically analyze changes in industries and technologies. Such changes can impact the direct costs and benefit of tax expenditures. Members voted to approve the Exemption for Certain Energy Conservation Equipment evaluation template as presented.

William Burke and Greg Sullivan led a discussion on the Exemption for Certain Sales by Typographers, Compositors and Color Separators. This tax expenditure was adopted in 1979 and has a current annual revenue impact of $3.1M-$3.4M per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales tax for sales by typographers, compositors or color separators of composed type, film positives and negatives and reproduction proofs, or the fabrication or transfer of such items to a printer, publisher, or manufacturer of folding boxes, for use in printing. This is a broadening of the manufacturing exemption. Connecticut, Maine, and California have similar exemptions. Other states exempt tangible personal property purchased by typographers, compositors, and color separators. Rhode Island exempts property consumed in the process of manufacturing tangible personal property for resale. New York offers a more limited exemption. Members assume the goal of the expenditure is to encourage and support the printing and publishing industry. Members discussed that the tax expenditure is potentially outdated due to technological improvements. Members also discussed the size of impacted businesses. Based on estimates, impacted businesses have approximately 20 employees. Members voted to approve the Exemption for Certain Sales by Typographers, Compositors and Color Separators evaluation template with a change from Strongly Agree to Somewhat Agree for Relevant Today and a change from Somewhat Disagree to Somewhat Agree for Beneficial to Small Businesses.

Jacob Blanton and Professor Hanlon led a discussion on Modified Accelerated Depreciation on Buildings (other than Rental Housing). This tax expenditure was adopted in 1986 and has an annual revenue impact of $5.3M for FY23 with no sunset date. This is a tax expenditure due to Massachusetts' conformity to the Internal Revenue Code (the "Code"). Since 1993, the Code has allowed nonresidential buildings to be depreciated using straight-line depreciation over 39 years. The Code refers to this method as "accelerated". The Code also provides an option to use straight-line depreciation over a period of 40 years. The benefit of using the 39-year recovery period instead of the 40-year recovery period is a federal tax expenditure to which Massachusetts conforms. Most states conform to the current Code deduction allowing depreciation of nonresidential buildings. States that do so include Connecticut, Maine, New Hampshire, New York, Rhode Island, and Vermont. California requires the use of traditional financial accounting depreciation schedules for all buildings. Members assume that the tax expenditure is intended to encourage investment in industrial, commercial, and other nonresidential buildings used for business purposes. Conformity with federal depreciation rules also simplifies tax compliance and administration by allowing the same general depreciation rules to be used for Massachusetts and federal purposes. DOR estimates that at least 10,000 corporate taxpayers and 10,000 personal income taxpayers benefit from this tax expenditure, with more than half of the impacted businesses having less than 50 employees. Members voted to approve the Modified Accelerated Depreciation on Buildings (other than Rental Housing) evaluation template as presented.

Chairman Brown led a discussion on Modified Accelerate Cost Recovery System (MACRS) for Equipment. This tax expenditure was adopted in 1986 and has a current annual revenue impact of $149.7M for FY23 with no sunset date. In general, businesses may recover the cost of durable business assets only by capitalizing the cost and claiming depreciation deductions over a period of years. However, Massachusetts conforms to the Modified Accelerated Cost Recovery System (MACRS) set out in the Code. MACRS allows more of the cost of the property to be deducted in the first few years of an asset's life, and relatively less later. The use of the accelerated method instead of the alternative method results in a temporary reduction of tax in the earlier years of an asset's life, which constitutes a tax expenditure. The deferral of tax is analogous to an interest-free loan from the Commonwealth to taxpayers. Most states conform to the depreciation deduction allowed under the Code. States that do so include Connecticut, Maine, New Hampshire, Rhode Island, and Vermont. New York conforms to MACRS with some state-specific modifications. California does not conform to MACRS and generally requires the use of depreciation methods in effect for federal purposes prior to 1981. Members assume that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment used for business purposes. DOR estimates that at least 10,000 corporate taxpayers and 10,000 personal income taxpayers benefit from this tax expenditure. Members voted to approve the Modified Accelerate Cost Recovery System (MACRS) for Equipment evaluation template as presented.

Professor Weinzierl and Auditor Bump led a discussion on the Deduction for Excess First-Year Depreciation. This tax expenditure was adopted in 1958 and has an annual revenue impact of $50.3 million for FY23 with no sunset date. The Code adopts different depreciation schedules for specified classes of assets. Code § 179 allows federal taxpayers to elect to claim an immediate expense deduction in the tax year during which the asset was first placed in service. Massachusetts follows the federal depreciation rules, with modifications. Due to its conformity to the Code for determining business expense deductions, Massachusetts allows the Code § 179 deduction in the same amount as it is allowed for federal tax purposes. The tax expenditure is a result of such conformity. The immediate deduction of the cost of business assets constitutes a tax expenditure because it results in a deferral of tax. Most states either follow the Code § 179 deduction or allow a similar state-specific deduction. New York, Maine, Rhode Island, and Vermont follow the federal deduction. California, Connecticut, and New Hampshire allow state-defined deductions similar to Code § 179 expensing. Members assume that the tax expenditure is intended to encourage investment in durable business assets such as machinery and equipment. Using the Massachusetts share of the U.S. population (2.1%), DOR estimates that in 2017 roughly 20,000 corporate excise taxpayers and 81,700 personal income taxpayers benefited from this tax expenditure. Members discussed the challenge of businesses navigating the differences between federal and state depreciation schedules, which would be the case without this tax expenditure. Members voted to approve the Deduction for Excess First-Year Depreciation evaluation template with a change from Somewhat Disagree to Somewhat Agree for Easily Administered.

Members discussed tax expenditures that are a result of Massachusetts' conformity to the Code. Members agreed it would be beneficial to re-evaluating the review schedule of these tax expenditures. Members agreed to determine which tax expenditures to examine more closely based on factors including revenue impact and other states' conformity to the Code. DOR agreed to provide a table of the requested data. Members agreed to revisit this discussion at the next Commission meeting.

Members discussed the next batch of tax expenditures to be reviewed at the next Commission meeting. Members agreed to schedule a meeting prior to late-February 2022. Chairman Brown concluded the meeting at 11:32AM.

Tax Expenditure Review Commission Public Meeting Minutes
February 25, 2022
Via Teleconference
10:00AM

Commission Members in Attendance:

Chairman Kevin Brown, MA Department of Revenue
Professor Matthew Weinzierl, Governor's Appointee
Professor Michelle Hanlon, Governor's Appointee
Sue Perez, Designee, MA Treasurer
Steve Maher, Designee, Joint Revenue Committee, Senate Co-Chair
Greg Sullivan, Designee, Senate Minority Leader
Kerri-Ann Hanley, Designee, MA Auditor

Commission Members Absent:

William Burke, Designee, House Minority Leader
Jacob Blanton, Designee, Senate Ways and Means Committee
Chairman Aaron Michlewitz, House Ways and Means Committee
Chairman Mark Cusack, Joint Revenue Committee, House Co-Chair

List of Documents:

1. Meeting Agenda
2. Draft Minutes – January 14, 2022 Meeting
3. Draft Reports of Tax Expenditures:

1.018	Exemption of Meals and Lodging Provided at Work
1.022	Nontaxation of Capital Gains at Time of Death
1.106	Nontaxation of Capital Gains at Time of Gift
3.108	Exemption for Certain Precious Metals
3.301	Exemption for Items Used in Making Clothing
1.306 & 2.304	Election to Deduct and Amortize Business Startup Costs
1.308 & 2.309	Expensing of Exploration and Development Costs
1.309 & 2.308	Expensing of Research and Development Expenditures in One Year

Members were asked to announce themselves and a quorum was recognized by Chairman Brown. The meeting via teleconference was called to order at 10:02AM.

Chairman Brown put the Commission and public on notice that the meeting is recorded for purposes of minutes. The recording of the meeting will be kept for public record.

Chairman Brown requested that Commission members provide any changes to the January 14, 2022 draft meeting minutes. Hearing none, members voted unanimously to approve the January 14, 2022 meeting minutes.

Professor Weinzierl led a discussion on the Exemption of Meals and Lodging Provided at Work. This tax expenditure was adopted in 1973 and has a current annual revenue impact of $20.7 - $50.3 million per year during FY19-FY23 with no sunset date. This tax expenditure provides employees with an income exclusion for the value of meals and lodging provided by their employers for the employers' business purposes. Massachusetts conforms to the exclusion set out in the Internal Revenue Code (the "Code"), which results in a state tax expenditure. M.G.L. c. 62, § 2 was enacted in 1973 but the exclusion stems from Code § 119 (1954). States that adopt the definition of income under the Code follow the federal exclusion rules for meals and lodging provided to employees for the convenience of the employer unless they specifically decouple. DOR is not aware of any states that have decoupled from the federal exclusion. DOR assumes that the tax expenditure is intended to promote business efficiency by allowing employees to eat or sleep at or near their work locations without incurring a tax liability for the value of employer-provided meals or lodging. Members voted to approve the Exemption of Meals and Lodging Provided at Work evaluation template as presented.

Professor Hanlon led a discussion on the Nontaxation of Capital Gains at Time of Death. This tax expenditure was adopted in 1915 and has an annual revenue impact of $511.5 - $796.4 million per year during FY19-FY23 with no sunset date. Ordinarily, for federal income tax purposes, capital gains are taxed at the time appreciated property is transferred to a new owner. However, tax is not imposed on capital assets transferred by reason of the owner's death. Further, the new owner receives the assets with a new basis (i.e. the fair market value of assets at the time of decedent's death) rather than the same "carryover" basis of the decedent. Thus, the amount of appreciation that occurred while the decedent held the asset is never taxed. Massachusetts generally follows the federal rules for purposes of determining taxable capital gains. This conformity allows capital assets to escape the personal income tax to the extent of appreciation occurring prior to the decedent's death, resulting in a state tax expenditure. Every state that imposes a personal income tax generally follows the federal income recognition and basis rules applicable to transfers of capital assets. The nontaxation of capital gains on inherited property was intended to prevent the imposition of income tax on transfers that are potentially subject to the federal estate tax. Massachusetts also imposes an estate tax. Approximately 21,200 - 42,500 households benefit from this tax expenditure annually with an average benefit of $16,000 - $33,000 per household. Members discussed how the expenditure eases compliance burdens and if Massachusetts did not conform to federal rules, then taxpayers would have to track two separate basis amounts for the same asset for federal (stepped-up) and state (carryover) purposes. In addition, members discussed how this expenditure likely prevents double taxation in many cases because if the gain were taxed immediately upon death, the decedent's estate would owe income tax in addition to estate tax on the capital gain. Members also discussed that the elimination of this expenditure may lead to greater incentives for taxpayers to leave the state prior to death. Members voted to approve the Nontaxation of Capital Gains at Time of Death evaluation template as presented with the addition of a comment identifying the problematic nature of this tax expenditure. Professor Hanlon agreed to provide this comment.

Professor Weinzierl led a discussion on the Nontaxation of Capital Gains at Time of Gift. This tax expenditure was adopted in 1921 and has a current annual revenue impact of $23.9 - $37.2 million per year during FY19-FY23 with no sunset date. Ordinarily, for federal income tax purposes, capital gains are taxed at the time appreciated property is transferred to a new owner. However, the tax on capital gains on property transferred by gift is deferred until the new owner sells the property. If the new owner dies holding the gifted property, the tax is never imposed. Massachusetts generally follows the federal rules for purposes of determining taxable capital gains. This conformity results in a deferral and potential exclusion of tax on capital gains and therefore constitutes a state tax expenditure. Every state that imposes a personal income tax generally follows the federal income recognition and basis rules applicable to transfers of capital assets. These federal rules were originally intended to coordinate the federal income tax with the federal estate and gift taxes. The deferral and potential exclusion of capital gains was intended to prevent the imposition of income tax on transfers that are potentially subject to gift and estate taxes. Massachusetts does not impose a gift tax but does impose an estate tax. Members discussed that Massachusetts, unlike the federal government, does not assess a gift tax on transfers. This asymmetry is important because the absence of a state gift tax makes gifts relatively more attractive under Massachusetts law than under the federal code. To the extent that the federal gift tax is designed to complement the federal estate tax, namely to discourage potential bequestors from avoiding the estate tax through gifting, the state's choice not to assess a gift tax both lowers state revenue and encourages gifting. Members discussed that this tax expenditure benefits those making and receiving gifts, but legislators may wish to assess whether the state's divergence from the federal strategy is merited. Members agreed to approve the Nontaxation of Capital Gains at Time of Gift evaluation template with a change from somewhat disagree to somewhat agree for Easily Administered and the addition of a comment discussing the absence of gift tax. Professor Weinzierl agreed to provide this comment.

Sue Perez and Kerri-Ann Hanley led a discussion on the Exemption for Certain Precious Metals. This tax expenditure was adopted in 1987 and has a current annual revenue impact of $7.9 - $10.3 million per year during FY19-FY23 with no sunset date. This tax expenditure provides for a sales tax exemption for transactions with a sale amount of $1,000 or more of certain precious metals. The exempt items include rare coins of numismatic value; gold or silver bullion or coins; and gold or silver tender of any nation which is traded and sold according to its value as precious metal. Fabricated precious metals that have been processed or manufactured for industrial, professional, or artistic use do not qualify for the exemption. Of the 45 states that impose a sales tax, 36 have complete or partial sales tax exemptions on the retail sale of coins and precious metals bullion. States with partial exemptions typically require purchases to equal or exceed a stated minimum amount in order to qualify. Across states, the minimum amount ranges from a low of $500 (Florida) to a high of $1,500 (California). One state, Louisiana, imposes an upper limit pursuant to which the sales price must be below $500 for a purchase to qualify for the exemption. DOR assumes that the policy goal of the Massachusetts tax expenditure is to treat the specified precious metals in the same manner as investments or financial assets, rather than as taxable sales of tangible personal property. Members voted to approve the Exemption for Certain Precious Metals evaluation template as presented with an additional comment on the partial exemption of other states.

Chairman Brown led a discussion on the Exemption for Items Used in Making Clothing. This tax expenditure was adopted in 1967; the current revenue impact is negligible and there is no sunset date. Sales of materials used in making clothes, such as thread and fabric, are exempt from sales and use tax. Most neighboring states tax fabric, yarn, and other component parts of clothing. However, New York provides a similar exemption for sales of fabric and other components that are incorporated into clothing. New Jersey exempts from tax the sales of yarn, fabric, and other items to noncommercial purchasers if the items are incorporated into clothing. DOR assumes that the goal of the expenditure is to reduce the burden of the tax on clothing by exempting materials that households use to make their own clothes. It complements the Massachusetts exemption that applies to each item of finished clothing sold for $175 or less. Members voted to approve the Exemption for Items Used in Making Clothing evaluation template as presented.

Kerri-Ann Hanley and Greg Sullivan led a discussion on the Election to Deduct and Amortize Business Startup Costs. This tax expenditure was adopted in 2004 and has an estimated revenue impact of $1.3-$1.7 million per year during FY19-FY23 with no sunset date. For federal tax purposes, taxpayers can immediately deduct startup costs that would otherwise have to be capitalized over a period of 15 years. Massachusetts conforms to the federal deduction, resulting in a state tax expenditure. Every state that imposes a corporate or individual tax on income conforms to Internal Revenue Code (the "Code") § 195. DOR assumes that the tax expenditure is intended to encourage taxpayers to start new businesses. Members discussed the competitiveness of this tax expenditure and its relatively small revenue impact. If Massachusetts were to decouple from this federal tax expenditure the state could be less attractive for startups. Members voted to approve the Election to Deduct and Amortize Business Startup Costs evaluation template with the addition of adding "conformity to the Code" under business and individual goals.

Professor Hanlon led a discussion on the Expensing of Exploration and Development Costs. This tax expenditure was adopted in 1976 and has a current annual revenue impact of $0.145-$0.151 million per year during FY19-FY23 with no sunset date. For federal tax purposes taxpayers can immediately deduct certain costs incurred in developing specified mineral deposits. Such costs would otherwise have to be capitalized and deducted over a period of years. The recovery period for capitalized items varies based on the nature of the costs and the type of mineral deposit. Massachusetts conforms to the federal deduction, resulting in a state tax expenditure. Most states that impose a corporate or individual tax on income conform to the federal deduction for costs incurred in developing mineral deposits. States that conform to the federal deduction include California, Connecticut, Maine, New Hampshire, New York, Rhode Island, and Vermont. DOR assumes that the federal tax expenditure on which the Massachusetts tax expenditure is based is intended to encourage investment in the development of oil, natural gas, and geothermal resources. Because Massachusetts has few oil, natural gas, or geothermal resources, DOR further assumes that an additional purpose of the Massachusetts tax expenditure is the simplification of conforming to federal expensing rules. Members discussed the limited data on Massachusetts beneficiaries and the level of uncertainty of the size of impacted businesses since the estimated state revenue impacts are based on post-apportioned national estimates. Members shared concerns regarding the negative environmental implications of this tax expenditure since it is promoting the mining of fossil fuels. Members voted to approve the Expensing of Exploration and Development Costs evaluation template with a change from strongly agree to somewhat agree for Benefits Justify Costs and a change from strongly agree to somewhat agree for Intended Beneficiaries.

Chairman Brown and Sue Perez led a discussion on the Expensing of Research and Development Expenditures in One Year. This tax expenditure was adopted in 1986 and has an annual revenue impact of $46-$3.4 million per year from FY19-FY23 with a sunset date of 2022. Prior to tax year 2022, for federal purposes taxpayers could elect to immediately deduct research and experimental expenditures that they would otherwise have had to capitalize and deduct over a period of five years. Starting with tax year 2022, all expenditures for research conducted in the U.S must be capitalized and deducted over five years. Expenditures incurred outside the U.S. must be capitalized and deducted over 15 years. Massachusetts generally conforms to the federal rules for deducting research and experimental expenditures. This conformity resulted in a Massachusetts tax expenditure for tax years prior to 2022. Most states adopt the federal deduction for research and experimental expenditures. States that follow earlier versions of the Code may continue to allow the immediate deduction of research and experimental expenditures. States that require capitalization include Connecticut, Maine, New York, Rhode Island, and Vermont. California continues to allow the immediate deduction because it has its own state-specific cost recovery rules. DOR assumes that the tax expenditure was intended to encourage research and development. Members discussed the difficulty of measuring the overall benefit of this tax expenditure considering its 2022 sunset date. Members voted to approve the Expensing of Research and Development Expenditures in One Year evaluation template with a change from somewhat agree to somewhat disagree for Claimed by a Broad Group of Taxpayers.

Members continued the discussion on tax expenditures that are a result of Massachusetts' conformity to the Code. Members agreed it would be beneficial to re-evaluate the review schedule of these tax expenditures. Starting next year, DOR will present brief summaries of these tax expenditures to Commission members prior to providing finalized analyses. These summaries will include analyses on revenue impacts, other states' conformity, and level of difficulty associated with decoupling. DOR proposed providing lesser economic analysis for those tax expenditures with a lesser likelihood of legislative change based on the aforementioned criteria. Members agreed with this strategy.

Members discussed the next batch of tax expenditures to be reviewed at the next Commission meeting. Members agreed to schedule a meeting prior to late-April 2022. Chairman Brown concluded the meeting at 11:42AM.

Tax Expenditure Review Commission Public Meeting Minutes
May 6, 2022
Via Teleconference
10:00AM

Commission Members in Attendance:

Chairman Kevin Brown, MA Department of Revenue
Professor Matthew Weinzierl, Governor's Appointee
Sue Perez, Designee, MA Treasurer
Suzanne Bump, State Auditor
Kerri-Ann Hanley, Designee, MA Auditor
Steve Maher, Designee, Joint Revenue Committee, Senate Co-Chair
Greg Sullivan, Designee, Senate Minority Leader
Jacob Blanton, Designee, Senate Ways and Means Committee
William Burke, Designee, House Minority Leader

Commission Members Absent:

Chairman Aaron Michlewitz, House Ways and Means Committee
Chairman Mark Cusack, Joint Revenue Committee, House Co-Chair
Professor Michelle Hanlon, Governor's Appointee

List of Documents:

1. Meeting Agenda
2. Draft Minutes – February 25, 2022 Meeting
3. Draft Reports of Tax Expenditures:

1.102	Treatment of Incentive Stock Options
1.103	Exemption of Earnings on Stock Bonus Plans or Profit-Sharing Trusts
1.202	Deduction of Capital Losses Against Interest and Dividend Income
3.304	Exemption for Materials, Tools, Fuels, and Machinery Used in Furnishing Power, Water, and Steam
3.418	Exemption for Fuels, Supplies, and Repairs for Vessels Engaged in Interstate or Foreign Commerce
3.601	Exemption for Casual or Isolated Sales
3.604	Exemption for Certain Bed and Breakfast Establishments from Sales Tax on Meals and Room Occupancy Excise
3.310	Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting

Members were asked to announce themselves and a quorum was recognized by Chairman Brown. The meeting via teleconference was called to order at 10:05AM.

Chairman Brown put the Commission and public on notice that the meeting is recorded for purposes of minutes. The recording of the meeting will be kept for public record.

Chairman Brown requested that Commission members provide any changes to the February 25, 2022 draft meeting minutes. Hearing none, members voted unanimously to approve the February 25, 2022 meeting minutes.

Jacob Blanton led a discussion on the Treatment of Incentive Stock Options. This tax expenditure was adopted in 1954 and has a current annual revenue impact of $4.3 million per year during FY19-FY23 with no sunset date. Massachusetts adopts the federal tax treatment of incentive stock options as provided in the Internal Revenue Code (the "Code") as amended on January 1, 2005. Under the federal rules, and therefore for Massachusetts purposes as well, no tax consequences result when employees are granted or exercise options to purchase company stock. Employees are taxed only when they sell the stock acquired through the exercise. This results in a deferral of tax for both federal and Massachusetts tax purposes which constitutes a tax expenditure. States that adopt the definition of income under the Code follow the federal rules for incentive stock options unless they specifically decouple. Only Pennsylvania has decoupled. DOR assumes that the goal of the tax expenditure is to promote hiring and retention of employees. Members discussed the potential administrative burdens Massachusetts would face if decoupled from the Code. Members voted to approve the Treatment of Incentive Stock Options evaluation template as presented with the addition of adding "competitiveness" under business goals.

Professor Weinzierl led a discussion on the Exemption of Earnings on Stock Bonus Plans or Profit-Sharing Trusts. This tax expenditure was adopted in 1973 and has a current annual revenue impact of $786 - $1,333.1 million per year during FY19-FY23 with no sunset date. Employee stock bonus plans, employee pension plans and employee profit-sharing plans are retirement vehicles exempt from the Massachusetts personal income tax under M.G.L. c. 62, § 5(b). The expenditure allows amounts contributed to these plans to grow free of Massachusetts tax until they are distributed to retirees. The distributions are then treated as taxable income to the employees. The exemption of stock bonus plans, pension plans and profit-sharing plans from the personal income tax results in a deferral of state tax on income earned by the plans. The deferral is temporary to the extent that employees remain in Massachusetts after retirement as those employees will be subject to Massachusetts personal income tax on their retirement income. However, the deferral is permanent for employees who retire outside the Commonwealth as states are generally prohibited from taxing nonresidents on their income from retirement plans. No state taxes the income of employee stock bonus plans, employee pension plans or employee profit-sharing plans. DOR assumes that the policy goal is to promote the growth of assets in retirement funds by allowing investment income to accumulate tax-free until distribution. The Internal Revenue Code (the "Code") contains a similar exemption in Section 401(a). Massachusetts conforms with federal definitions. This simplifies tax compliance and administration by allowing the same general definitions to be used for state and federal purposes. However, apart from the use of the federal definitions, M.G.L. c. 62, § 5(b) stands as an independent provision of state law. Members discussed retirees moving out of state and how this may impact revenue loss estimates. Members voted to approve the Exemption of Earnings on Stock Bonus Plans or Profit-Sharing Trusts evaluation template as presented with the addition of a comment addressing permanent deferrals and associated cost estimates.

William Burke led a discussion on the Deduction of Capital Losses Against Interest and Dividend Income. This tax expenditure was adopted in 1973 and has a current annual revenue impact of $14.1 million per year during FY19-FY23 with no sunset date. Generally, for both Massachusetts and federal income tax purposes, capital losses can be deducted only against capital gains. Losses in excess of gains may be carried forward and deducted from gains in subsequent taxable years. However, this tax expenditure allows a Massachusetts personal income tax deduction of up to $2,000 of capital losses against interest and dividend income. See M.G.L. c. 62, § 2(c)(2). There is a similar Internal Revenue Code (Code) provision that allows a deduction of up to $3,000 of net capital loss against ordinary income (which for federal purposes includes interest and dividend income). See Code § 1211. However, Massachusetts does not follow that Code provision and, instead, adopts its own deduction. States that base their income tax on federal adjusted gross income generally conform to the federal deduction allowing up to $3,000 of capital loss to offset ordinary income. Such states include California, Connecticut, Maine, New York, Rhode Island, and Vermont. DOR assumes that the tax expenditure is intended to encourage investment by allowing investors to offset a limited amount of interest and dividends with capital losses, thereby increasing the amount of capital loss that can be deducted in the year of the loss. DOR estimates that approximately 282,000 households benefit $48 in accelerated tax savings per year during FY19-FY23. Members voted to approve the Exemption of Deduction of Capital Losses Against Interest and Dividend Income evaluation template with the addition of "competitiveness" under business goals, a change from Strongly Disagree to Somewhat Disagree for Claimed by Broad Group of Taxpayers, and an additional comment addressing the history of this tax expenditure.

Chairman Brown led a discussion on the Exemption for Materials, Tools, Fuels, and Machinery Used in Furnishing Power, Water, and Steam. This tax expenditure was adopted in 1968 and has a current annual revenue impact of $47.2 - $60.1 million per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels, and machinery, including replacement parts, used in furnishing gas, water, steam, or electricity to consumers through mains, lines, or pipes, as long as such items are consumed or directly used in furnishing the water or power. Most purchasers of these items are utility businesses and contractors acting as agents of utilities. The exemption of these items reduces utilities' costs of providing water and power and prevents the tax from being incorporated in charges to customers. The exemption does not require that the purchaser be a particular person or entity, but rather the items purchased are required to be consumed and used in a particular manner. Most states adopt a full or partial exemption for materials and equipment used to furnish water, gas, steam, or electricity to consumers. DOR assumes that the tax expenditure is intended to support the provision of gas, water, steam, and electricity to consumers, and to avoid the cost of taxes on inputs being passed on to the ultimate consumers. Members discussed the difficulty in determining the cost and benefit of this tax expenditure as some utilities are owned by the state and municipalities. Members voted to approve the Exemption for Materials, Tools, Fuels, and Machinery Used in Furnishing Power, Water, and Steam evaluation template with a change from Somewhat Disagree to Somewhat Agree for Meaningful Incentive and an additional comment addressing indirect beneficiaries. Chairman Brown agreed to provide this comment.

Professor Weinzierl led a discussion on the Exemption for Fuels, Supplies, and Repairs for Vessels Engaged in Interstate or Foreign Commerce. This tax expenditure was adopted in 1967 and has a current annual revenue impact of $1.43 - $1.72 million per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales and use tax for sales in Massachusetts of fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce. Absent the exemption afforded by this tax expenditure, sales in Massachusetts of fuels, supplies, and repairs for vessels engaged in interstate or foreign commerce would be taxable when purchased. There are many variations of exemptions for commercial sea vessels in other states, often including exemptions for fuels and purchases related to the maintenance of these vessels. DOR assumes that the tax expenditure is intended to further interstate and foreign commerce. Many of the states that have sales and use tax exemptions for maritime activities are states with seaports. These exemptions encourage the continuation of maritime businesses, including shipbuilding and interstate commercial activities. Further, they may help make Massachusetts port facilities more attractive to water transport companies, increasing overall business activity in the state. Members discussed the scope of this tax expenditure;

this exemption would apply to purchases made in MA, not only MA businesses. Members voted to approve the Exemption for Fuels, Supplies, and Repairs for Vessels Engaged in Interstate or Foreign Commerce evaluation template as presented with an edit to the comment section addressing fuels. Chairman Brown agreed to provide this edit.

Sue Perez led a discussion on the Exemption for Casual or Isolated Sales. This tax expenditure was adopted in 1968 and has a current annual revenue impact of $34.6 - $39.2 million per year during FY19-FY23 with no sunset date. Certain sales made outside a seller's regular course of business are exempt from the Massachusetts sales and use tax. Such sales are referred to as "casual and isolated" sales and include: (i) non-recurring sales by schools, churches, and other non-profits for fundraising purposes (such as a church bizarre); (ii) non-recurring sales by individuals (such as a garage sale); (iii) non-recurring sales by businesses of used business equipment and fixtures (such as a store selling its used cash registers); and (iv) bulk sales of assets when an entire business is sold to new owners. Sales of motor vehicles, trailers, boats, or airplanes do not qualify for this exemption, unless they are between family members. Most states that impose sales and use tax have an exemption for sales outside the seller's regular course of business. States that have an exemption similar to Massachusetts' include California, Connecticut, Rhode Island, and Vermont. These states do not allow the exemption for sales of motor vehicles, trailers, boats, or airplanes. Maine has an exemption that applies to all items, including motor vehicles, trailers, boats, and airplanes. New York does not have an exemption for sales outside the regular course of business. DOR assumes that the goal of the tax expenditure is to promote sales and use tax efficiency by reducing the compliance burden on sellers that are not in a trade or business or that make sales outside their usual course of business. Members discussed the scope of this tax expenditure in comparison to online marketplaces such as Facebook and Craigslist and recent changes to Massachusetts tax laws. Members voted to approve the Exemption for Casual or Isolated Sales evaluation template with a change from Somewhat Disagree to Somewhat Agree for Benefit Justifies Fiscal Cost and an addition of a comment addressing the scope of this tax expenditure. Chairman Brown agreed to provide this comment.

Auditor Bump led a discussion on the Exemption for Certain Bed and Breakfast Establishments from Sales Tax on Meals and Room Occupancy Excise. This tax expenditure was adopted in 1988 and has a current annual revenue impact of $0.07 million per year during FY19-FY23 with no sunset date. The tax expenditure exempts meals provided by bed and breakfast businesses from sales tax on meals unless (i) they are provided by a bed and breakfast that has four or more rooms; and (ii) the meals are included in rent subject to the room occupancy excise. Therefore, such bed and breakfasts generally do not incur the administrative and tax responsibilities unique to restaurants. No neighboring state exempts meals sold by bed and breakfast businesses from a sales tax on meals. DOR assumes that the tax expenditure aims to reduce the tax and compliance burdens on bed and breakfast businesses. According to the 2017 Economic Census, there were 154 bed and breakfast businesses in Massachusetts. Based on this data, DOR estimates the average benefit per taxpayer in FY23 is $506 per establishment. Members discussed the scope of this tax expenditure. The Public Registry of Lodging Operators indicates that there are 471 Bed and Breakfast operators in Massachusetts. However, it is unknown which of the establishments registered via this portal would actually fall within the scope of the tax expenditure #3.604. In addition, the public registry portal does not capture dollar value of taxable meals tax that would be exempted under this expenditure. Therefore, DOR relied on external sources to estimate the revenue loss impact of this expenditure, including the U.S. Census figure of 154 B&B establishments. Members voted to approve the Exemption for Certain Bed and Breakfast Establishments from Sales Tax on Meals and Room Occupancy Excise evaluation template with the addition of "administrative compliance" under the business goals, removing "progressivity" under individual goals, a change from Strongly Disagree to

Somewhat Disagree for Benefit Justifies Fiscal Cost, and a change from Strongly Disagree to Somewhat Disagree for Measuring Overall Benefit.

Chairman Brown led a discussion on the Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting. This tax expenditure was adopted in 1968 and has a current annual revenue impact of $6.8 million per year during FY19-FY23 with no sunset date. The tax expenditure provides for an exemption from the sales and use tax for sales of materials, tools, fuels and machinery, including replacement parts, used in commercial radio and television broadcasting. In 2017, buyers of exempt items included 55 radio broadcasting firms and 35 television broadcasting firms in Massachusetts. Most purchasers of these items are radio and television businesses and contractors acting as agents of these businesses. The expenditure does not require that the purchaser be a particular person or entity, but rather the items purchased are required to be consumed and used in a particular manner. DOR is not aware of any other state with a similar tax expenditure. Members agreed it is difficult to determine the beneficiaries of this tax expenditure. Due to industry changes, it is difficult to determine who exactly is a broadcaster. Members voted to approve the Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting evaluation template with a change from Somewhat Agree to Somewhat Disagree for Amount Claimed per Taxpayer.

Chairman Brown led a discussion on the next TERC report and the year three tax expenditure review schedule. In the coming weeks, DOR will draft a report to address evaluations reviewed during the year two evaluation cycle. This report includes 36 tax expenditures that were reviewed between October 7, 2021 and May 6, 2022. The report and DOR’s tentative year three proposal will be distributed to members for review. Members agreed to have a follow-up meeting to vote on the final report and to finalize the year three review schedule. Chairman Brown concluded the meeting at 12:13PM.

Appendix F
Economic Analysis and Its Use in TERC Reports

In this appendix, we explain why we use an economic impact analysis model for the evaluation of a tax expenditure. As explained below, a tax expenditure generates not only direct impact, but also multiplier impact or multiplier effect. An economic impact analysis model is used to measure the total impact including the direct impact and the multiplier impact.

On the one hand, a tax expenditure generates direct benefits to some taxpayers in the form of lower production or capital cost, or higher disposable income, or lower consumer price, etc. On the other hand, because the Commonwealth must balance its budget, spending on a tax expenditure means fewer funds available to spend on other expenditure items if there is no increase in state revenues. Reduced spending on other expenditure items means forgone benefits from those items. This is a direct cost[1] to the Commonwealth, which is ultimately borne by the Massachusetts residents or businesses that would have benefitted from additional spending on those other expenditure items. The direct costs to the Commonwealth in the form of other foregone benefits are equal to the direct benefits to taxpayers of the particular tax expenditure.

Besides the direct costs and benefits, there are indirect and induced costs and benefits associated with a tax expenditure. The indirect impact (cost or benefit) is felt by the chain of businesses that provide intermediate products and services to the directly impacted businesses. The induced impact (cost or benefit) is felt by the chain of businesses that benefit when the employees working for the directly impacted businesses spend their wages and salaries to buy goods and services. Accordingly, the total benefits and/or costs to the whole economy are larger than the initial direct impacts. This phenomenon is called the "Multiplier Effect".[2]

To measure these indirect and induced costs and benefits, economists often need to utilize models of economic impact analysis. There are three widely-utilized such models: (1) REMI (Regional Economic Models, Inc.); (2) RIMS-II (Regional Input-Output Modeling System); and (3) IMPLAN (Impact Analysis for Planning). The citation in footnote 2 provides a comparison of these three models. DOR has used REMI models for economic and fiscal

[1] Called "Opportunity Cost" in economics.
[2] For an illustration of "Multiplier Effect", see Slide 4 of: https://www.ilw.com/seminars/JohnNeillCitation.pdf

impact analysis for years. So, for the evaluation of a tax expenditure, we used REMI's Tax-PI model.[3]

Besides the indirect and induced costs and benefits, there may also be externalities to consider when evaluating this tax expenditure. A negative or positive externality occurs when the production and/or consumption of a good or service exerts a negative or positive effect on a third party independent of the transaction. Below are examples of negative and positive externalities associated with tax expenditures that have been evaluated by the Commission.

Examples of Negative Externalities

1. 3.302 Exemption for Materials, Tools, Fuels and Machinery Used in Manufacturing
    - Manufacturing plants may cause noise and air pollution during the manufacturing process. By encouraging manufacturing activities, this tax expenditure may aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset the impact.
2. 3.108 Exemption for Certain Precious Metals
    - In order to mint coins and bullion of precious metals, ore must first be extracted from mines. The extraction process for these ores can create dust, land erosion, and possible run-off to local waterways, all of which are detrimental to the environment. By encouraging these activities, this tax expenditure may aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset such negative externalities.
3. 3.609 Exemption for Vessels or Barges of 50 Tons or Over
    - A shipyard involved in the building of large vessels may cause noise and air pollution during the building process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.
4. 3.109 Exemption for Cement Mixers
    - Water, sand, gravel (or crushed stone), and the binder of cement combine to produce concrete. To acquire these aggregates involves quarrying, which in turn create large amounts of dust, and the kilns that are used in the process that ultimately produces cement require significant amounts of energy as they need to reach a temperature of approximately 1,500 degrees centigrade. A by-product of this process is large amounts of carbon dioxide ($CO2$). By encouraging these activities, this tax expenditure will aggravate the problem of negative externality such as noise and pollution if there are no other policies to offset the impact. On the other hand, by encouraging the construction of infrastructure, such as roads, bridges, airports, and other products that are often viewed as "public goods", this exemption generates positive externalities.

[3] REMI's Tax-PI is a versatile tool for evaluating the total fiscal and economic impacts of tax policy changes. Tax-PI is a ready-to-use dynamic fiscal and economic impact model which captures the direct, indirect, and induced fiscal and economic impacts of taxation and other policy changes over multiple years. The model integrates input-output, computable general equilibrium, econometric and economic geography methodologies. For an introduction of Tax-PI, please see the following linked file: https://www.remi.com/wp-content/uploads/2020/07/Estimating-Economic-Fiscal-Impacts-in-Tax-PI.pdf

5. 3.304 Exemption for Materials, Tools, Fuels, and Machinery Used in Furnishing Power, Water, and Steam
    - According to the U.S. Environmental Protection Agency, nearly all parts of the electricity system can affect the environment, and the size of these impacts will depend on how and where the electricity is generated and delivered. In general, the environmental effects can include air and water pollution, solid waste, use of land and water resources, etc. Similarly, burning natural gas emits carbon dioxide. Constant introduction of carbon dioxide into atmosphere will lead to climate change and global warming. In addition, some of the potential problems associate with natural gas pipelines and infrastructure include destruction of thousands of acres of vital habitat, forest, and pristine lands. Loss of the valuable water and air filtering that forests provide.
6. 3.418 Exemption for Fuels, Supplies, and Repairs for Vessels Engaged in Interstate or Foreign Commerce
    - A greater movement of vessels engaged in interstate and foreign commerce may impact the life of some aquatic (endangered) species and may create some water and air pollution during the repairing and fueling process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.
7. 3.306 Exemption for Materials, Tools, Fuels, and Machinery Used in Newspaper Printing
    - The newspaper publishing industry may produce significant amounts of volatile organic compounds (VOCs) along with heavy metals from ink which may cause air and soil pollution. By indirectly encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.
8. 3.411 Exemption for Certain Sales by Typographers, Compositors and Color Separators
    - The printing industry may produce significant amounts of volatile organic compounds (VOCs) along with heavy metals from ink which may cause air and soil pollution. By indirectly encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.
9. 2.101 Deferral of Tax on Certain Shipping Companies
    - A shipyard involved in the building or repairing of vessels may cause noise and air pollution during the building/repairing process. By encouraging this activity, this tax expenditure may aggravate these negative externalities if there are no offsetting policies to dampen the impact.

Examples of Positive Externalities

1. 3.303 Exemption for Materials, Tools, Fuels and Machinery Used in Research and Development
    - o Research and development conducted by a company can have positive externalities. Research and development increases the private profits of a company but also has the added benefits of increasing the general level of knowledge within a society and promoting economic growth through its positive effect on innovation and productivity. Since positive externalities cannot be paid for through the market, government intervention, such as subsidy (or public funding to research and development), is often viewed as necessary.

2. 3.310 Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting
   - Radio and television broadcasting firms produce and broadcast comprehensive coverage of news and current affairs, sports, and other entertainments, the benefits of which extend beyond individual consumers. Hence, the society at large could benefit from a thriving radio and television broadcasting sector. Please note, this exemption would apply to traditional broadcasters and to cable broadcasters, but presumably not to Internet streaming or other Internet services.
3. 3.405 Exemption for Certain Energy Conservation Equipment
   - By encouraging the use of clean energy, this expenditure seeks to support a cleaner environment, curb climate change, and enhance public health, which would generate positive externalities. Such positive externalities are often difficult to quantify.
4. 3.601 Exemption for Casual or Isolated Sales
   - This expenditure results in a positive externality because it incentivizes the sale of used items, which may reduce the demand for new goods and therefore pollution associated with the manufacturing of such new goods, especially for textiles. In addition, resale of used items may reduce solid waste if the used items would otherwise be disposed.
5. 3.610 Exemption for Rental Charges for Refuse Containers
   - By encouraging proper refuse disposal, including the re-use of refuse containers, this expenditure helps create a cleaner and safer environment, which would generate positive externalities.

Appendix G

Background: Current and Previous Studies of Massachusetts Tax Expenditures

There has been considerable interest in the last decade regarding the Commonwealth's tax expenditures. The current TERC, which was created by the Acts of 2018, follows up on the work of an earlier *ad hoc* Tax Expenditure Commission, formed pursuant to Acts 2011, section 160, that issued an extensive report to the Legislature on April 30, 2012. Indeed, the formation of the current TERC may be seen as an implementation of certain recommendations of the previous Commission, which advocated for the periodic review of tax expenditures to ensure their continued relevance and effectiveness. The current TERC represents an institutionalization of such an ongoing review process.

The 2012 Report, along with its multiple appendices, provides a wealth of information regarding state and federal tax expenditures. Additionally, the Tax Expenditure Budget, published annually by the Commissioner of Revenue, provides current cost estimates associated with tax expenditures applicable to the particular fiscal year. Readers are referred to these sources for background information related to Massachusetts tax expenditures. The 2012 Report, with associated materials, is available at: https://www.mass.gov/lists/2011-2012-tax-expenditure-commission-materials. The annual Tax Expenditure Budget is available at: https://www.mass.gov/lists/tax-expenditure-budget.

The current Tax Expenditure Review Commission was created under Chapter 207 of the Acts of 2018 to review each tax expenditure in the Tax Expenditure Budget every five years; to consider the purpose, goal, and effectiveness of each Tax Expenditure in this review; and to report its findings biennially to the Legislature. The full text of Chapter 207, which is now codified at Chapter 14, section 14 of the General Laws, is reproduced at **Appendix A.**

The TERC is chaired by the Commissioner of the Department of Revenue or designee. Other members include the State Auditor; the State Treasurer; the chair of the House Committee on Ways and Means; the chair of the Senate Committee on Ways and Means; the House and Senate chairs of the Joint Committee on Revenue; the Minority Leader of the House of Representatives; the Minority Leader of the Senate; and 3 members to be appointed by the governor, who have expertise in economics or tax policy. The 3 members appointed by the governor will serve 4-year terms. The statutory TERC members listed above may appoint designees. Recent participating members of the Commission, including designees, are identified in **Appendix B.**

In March 2021 the Tax Expenditure Review Commission released a report to the legislature. The report provided the Commission's review of certain tax expenditures pertaining to commerce, energy and research & development which the Commission had reviewed in the prior year.

Appendix H

Legislative Changes to Tax Expenditures Reviewed by the Commission

In March 2021 the Tax Expenditure Review Commission released its first annual report to the legislature. The report provided the Commission's review of tax expenditures pertaining to commerce, energy and research & development. The final fiscal year 2022 state budget included the following tax expenditure changes:

- Medical Device User Fee Credit: repealed.
- Harbor Maintenance Credit: repealed.
- Film Incentives Credit: 2023 sunset repealed. For taxable years beginning on or after January 1, 2022, a taxpayer must incur at least 75% of its production expenses in Massachusetts for a film project to qualify for the credit. A 50% threshold applies to prior taxable years.
- Historical Rehabilitation Credit: 2022 sunset extended to 2027.

Appendix I

Cumulative Distribution of TERC's Ratings for All Tax Expenditures

Below is the cumulative distribution of TERC's ratings for all tax expenditures evaluated to date. The Commission has reviewed a total of 62 tax expenditures pertaining to commerce, energy and research & development.

ALL TAX EXPENDITURES EVALUATED BY TERC	*Strongly Disagree*	*Somewhat Disagree*	*Somewhat Agree*	*Strongly Agree*	*Not Applicable*
We can measure the overall benefit toward achieving the goal(s)	12	27	14	8	1
The TE's benefit justifies its fiscal cost	8	13	26	15	0
The TE is claimed by its intended beneficiaries	4	4	20	34	0
The TE is claimed by a broad group of taxpayers	26	9	8	19	0
The TE amount claimed per taxpayer is meaningful as an incentive/benefit	10	12	34	6	0
The TE is relevant today	8	7	16	31	0
The TE is easily administered	2	7	28	25	0
Business only -The TE is beneficial to smaller businesses	7	6	27	13	9
Individuals only -The TE benefits lower income taxpayers	20	7	14	0	21
TOTALS	**97**	**92**	**187**	**151**	**31**

Appendix J

All Tax Expenditures Evaluated by Year

Below is the list of all tax expenditures that TERC has evaluated to date. The Commission has reviewed a total of 62 tax expenditures pertaining to commerce, energy, and research & development.

2021

- 1.019 Exclusion from Employee Income of Business-Related Meals and Entertainment
- 1.020 Exemption of Income from the Sale, Lease, or Transfer of Certain Patents
- 1.201 Capital Gains Deduction for Collectibles
- 1.413 Exemption of Interest on Savings in Massachusetts Banks
- 1.421 Deduction for Clean Fuel Vehicles and Certain Refueling Property
- 1.601 Renewable Energy Source Credit (tax credit)
- 2.001 Small Business Corporations
- 2.203 Net Operating Loss Carryover
- 2.401 Unequal Weighting of Sales, Payroll, and Property in Apportionment Formula
- 2.502 Exemption for Property Subject to Local Taxation
- 2.602 Investment Tax Credit
- 2.604 Research Credit
- 2.607 Harbor Maintenance Tax Credit
- 2.701 Exemption of Credit Union Income
- 3.106 Exemption for Newspapers and Magazines
- 3.201 Exemption for Alcoholic Beverages
- 3.202 Exemption for Motor Fuels
- 3.302 Exemption for Materials, Tools, Fuels, and Machinery Used in Manufacturing
- 3.303 Exemption for Materials, Tools, Fuels, and Machinery Used in Research and Development
- 3.309 Exemption for Vessels, Materials, Tools, Fuels, and Machinery Used in Commercial Fishing
- 3.602 Exemption for Vending Machine Sales
- 1.603 & 2.605 EDIP/Economic Development Incentive Program
- 1.610 & 2.610 Credit Massachusetts Historic Rehabilitation Tax Credit
- 1.613 & 2.615 Medical Device User Fee Credit
- 2.617 & 3.005 Life Sciences Tax Incentive Program
- 1.611 & 2.611 & 3.004 Film Production Incentives

2022

- 1.018 Exemption of Meals and Lodging Provided at Work
- 1.022 Exemption for Capital Gains at Time of Death
- 1.102 Treatment of Incentive Stock Options
- 1.103 Exemption of Earnings on Stock Bonus Plans or Profit-Sharing Trusts
- 1.106 Exemption for Capital Gains at Time of Gift

- 1.202 Deduction of Capital Losses Against Interest and Dividend Income
- 1.501 Favorable Tax Treatment of Qualified Small Business Stock (QSBS) Gain
- 2.101 Deferral of Tax on Certain Shipping Companies
- 2.205 Deduction for Certain Dividends of Cooperatives
- 2.312 Expensing of Certain Expenditures for Alternative Energy Sources
- 2.501 Nontaxation of Certain Energy Property
- 2.703 Exemption for Regulated Investment Companies
- 3.108 Exemption for Certain Precious Metals
- 3.109 Exemption for Cement Mixers
- 3.112 Exemption for Aircraft & Aircraft Parts
- 3.301 Exemption for Items Used in Making Clothing
- 3.304 Exemption for Materials, Tools, Fuels, and Machinery Used in Furnishing Power, Water, and Steam
- 3.306 Exemption for Materials, Tools, Fuels, and Machinery Used in Newspaper Printing
- 3.310 Exemption for Materials, Tools, Fuels, and Machinery Used in Radio and TV Broadcasting
- 3.405 Exemption for Certain Energy Conservation Equipment
- 3.410 Exemption for Containers
- 3.411 Exemption for Certain Sales by Typographers, Compositors and Color Separators
- 3.418 Exemption for Fuels, Supplies, and Repairs for Vessels Engaged in Interstate or Foreign Commerce
- 3.421 Exemption for Films
- 3.601 Exemption for Casual or Isolated Sales
- 3.604 Exemption for Certain Bed and Breakfast Establishments from Sales Tax on Meals and Room Occupancy Excise
- 3.606 Exemption for Trade-in Allowances for Motor Vehicles and Trailers
- 3.609 Exemption for Vessels or Barges of 50 Tons or Over
- 3.610 Exemption for Rental Charges for Refuse Containers
-
- 3.611 Exemption for Honor Trays
- 1.303 & 2.307 Modified Accelerated Depreciation on Buildings (other than Rental Housing)
- 1.304 & 2.305 Modified Accelerate Cost Recovery System (MACRS) for Equipment
- 1.305 & 2.306 Expense Deduction for Excess First-Year Depreciation
- 1.306 & 2.304 Election to Deduct and Amortize Business Startup Costs
- 1.308 & 2.309 Expensing of Exploration and Development Costs
- 1.309 & 2.308 Expensing of Research and Development Expenditures in One Year