



Geoffrey E. Snyder
Commissioner

The Commonwealth of Massachusetts
Department of Revenue
Office of the Commissioner
P.O. Box 9550
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December 28, 2022

Mr. William J. McNamara
Comptroller
Commonwealth of Massachusetts
1 Ashburton Place, 9th Floor
Boston, MA 02108

Re: 2022 Sales Tax Holiday (August 13 and 14, 2022)

Dear Mr. McNamara:

Pursuant to G.L. c. 64H, § 6A and St. 2019 c. 49, the Department of Revenue (DOR) hereby certifies the amount of forgone sales tax revenue as a result of the sales tax holiday that occurred on August 13 & 14, 2022.

Based on our analysis of the available data, DOR estimates that the amount of forgone sales tax revenue was approximately \$36.2 million. DOR estimates that the sales tax holiday reduced the amounts deposited into the MBTA State and Local Contribution Fund and the School Modernization and Reconstruction Trust Fund by \$5.78 million each for a total of \$11.56 million. Further, DOR estimates that the revenue impact on the Convention Center Fund was approximately \$58,400. The remainder of the revenue impact of the sales tax holiday was a revenue loss to the General Fund. DOR also estimates, with less certainty, that the indirect tax revenues (income, corporate, and other) due to increased economic activity approximates \$3.4 million.

Attached is a copy of our analysis explaining how we arrived at these estimates and caveats. If you have any questions concerning this matter, please contact me (snyderge@dor.state.ma.us) or Kazim P. Ozyurt, Director of the Office of Tax Analysis (ozyurk@dor.state.ma.us).

Sincerely,

A handwritten signature in dark ink, appearing to read "G. Snyder".

Geoffrey E. Snyder
Commissioner

cc: Michael J. Heffernan, Secretary of Administration and Finance
The Honorable Aaron Michlewitz, Chair, House Committee on Ways and Means
The Honorable Michael J. Rodrigues, Chair, Senate Committee on Ways and Means
The Honorable Mark J. Cusack, House Chair, Joint Committee on Revenue
The Honorable Brendan P. Crighton, Senate Vice Chair, Joint Committee on Revenue

MASSACHUSETTS DEPARTMENT OF REVENUE
REVENUE IMPACT ANALYSIS

Title: 2022 Sales Tax Holiday (August 13 and 14, 2022)

Legal Reference: G.L. c. 64H, § 6A and St. 2019 c. 49¹

Overview: Generally, the state imposes a sales and use tax at the rate of 6.25% on the purchase prices of many “tangible” goods, utilities, and telecommunications services, and on meals served at restaurants. Residential electricity, gas, steam, and certain telecommunications charges are exempt from the sales tax under the current law. The sales/use tax statutes also contain various other product-based exemptions, *i.e.*, food, prescription medicines, certain medical products, and clothing with a sales price of up to \$175.

The sales tax holiday legislation waives the sales tax on otherwise taxable non-businesses purchases made on the “annual sales tax holiday”, except purchases of telecommunications services, tobacco products, marijuana or marijuana products, alcoholic beverages, gas, steam, electricity, motor vehicles, motorboats, meals, and any single item the price of which was in excess of \$2,500. Prior sales and layaway sales are not eligible for the sales tax holiday exemption.

In 2022, the sales tax holiday occurred on August 13 and August 14.²

Data, Assumption, and Methodology: The Department of Revenue does not collect data on the amount of taxable purchases made by businesses versus non-businesses, nor does it track sales of individual items. As a result, we extrapolated estimates using aggregated data that we were able to obtain. We conducted the analysis in two different ways: (1) based on monthly sales tax return data; and (2) credit card transactions and sales tax collections data.

Under the first method, we used DOR sales tax return data to produce an estimate of the amount of exempt sales on the dates of the sales tax holiday. Generally, sales are reported by retailers monthly, so we don’t know how much they sold on any specific day of a particular month. The appropriate place for sales tax filers to report their exempt sales from the sales tax holiday is on line 2 of the sales tax return³, labeled “Sales for Resale/Exempt Sales or Other Adjustments”. We analyzed the returns of taxpayers identifying themselves by NAICS⁴ code as part of the broad category of retailers, although this does leave out some retail sales made by other businesses. By focusing on retailers, we think that the result from this method somewhat understates the amount of forgone revenues.

The sales tax holiday was not in effect in 2009, 2016, and 2017 during the past 12 years. To assess the revenue impact of the 2022 sales tax holiday, the exempt sales in August 2022 was compared to those in August 2016 and 2017 and in May-July 2022 when there was no sales tax holiday, after controlling for the fluctuation of monthly gross sales. Based on this method, the 2022 sales tax holiday was estimated to have reduced sales tax revenue by \$27.1 million.

The estimate produced by this method fails to consider the impacts from businesses that identify themselves in NAICS categories other than principally making retail sales. As a result, this method may exclude the possibility that some transactions in other NAICS categories could be such sales that were

¹ St. 2019 c.49 amends G.L. c. 64H, § 6A to exclude “meals”.

² <https://www.mass.gov/info-details/sales-tax-holiday-frequently-asked-questions#after-the-sales-tax-holiday->

³ See form ST-9, available on DOR’s website: https://www.mass.gov/files/documents/2017/12/12/dor-sales-use-form-st-9.pdf?_ga=2.155491384.22386900.1541626355-212796560.1535490284

⁴ NAICS is the North American Industrial Classification System, under which businesses are supposed to identify their principal industry.

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affected by the sales tax holiday. Ignoring this possibility may understate the amount of forgone revenue. To account for this possibility or to confirm the estimate generated by this method, we used a second method based on credit card transaction data as in previous years.

Under the second methodology, we obtained data on credit card sales transactions which occurred in Massachusetts from a major credit card company for the month of August 2005 and August 2018⁵ to determine the percentage of credit card sales volume attributable to transactions during the sales tax holiday compared to the total transactions for the month as a whole. We assumed that such percentage on average would be still valid in August 2022 and applied it to DOR's sales tax collections for that month. The estimated total tax impact from this methodology was \$45.2 million. Note that although not all sales were exempt on the sales tax holiday weekend, for the purposes of this analysis we assumed that they were, and thus our estimate under this methodology is expected to somewhat overstate the amount of forgone revenue.

Our final midpoint estimate turns out to be \$36.2 million. The static revenue loss figures reported in the table in the following section appear to represent a reasonable range of values for the forgone revenue attributable to the sales tax holiday on August 13 and 14, 2022.

State Fiscal Year Revenue Loss Estimate: Under the current law, the sales tax holiday is no longer scheduled as a one-time event but a permanent annual event⁶. In this report, however, we provide a revenue loss estimate only for the 2022 sales tax holiday.

Sales Tax Revenue Loss Due to the 2022 Sales Tax Holiday (\$ millions)

Fiscal Year	Lower Bound	Midpoint	Upper Bound
2023	\$27.1	\$36.2	\$45.2

Revenues Forgone by Fund:

Regular sales tax revenue is currently deposited into the General Fund, the MBTA State and Local Contribution Fund⁷, the School Modernization and Reconstruction Trust Fund⁸, and the Convention Center Fund⁹. In FY13 and previous fiscal years, a portion of regular sales tax revenue was deposited into the Commonwealth Transportation Fund¹⁰. However, this is not the case under the current law¹¹. We estimate that the sales tax holiday lowered the amounts deposited into the MBTA State and Local Contribution Fund and the School Modernization and Reconstruction Trust Fund by \$5.78 million each for a total of \$11.56 million. The impact on the Convention Center Fund was approximately \$58,400. The remainder of the impact was on the General Fund.

⁵ Most recently available credit card data is for 2018.

⁶ See G.L. c 64H § 6A.

⁷ See Chapter 127 of the Acts of 1999.

⁸ See Chapter 210 of the Acts of 2004.

⁹ See Chapter 152 of the Acts of 1997, as amended.

¹⁰ See Chapter 35 of the Acts of 2009.

¹¹ See Chapter 46 of the Acts of 2013, Section 25 and 26.

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Additional Revenues Collected Due to Increased Sales Activity:

DOR is required by the statute to provide an estimate of new revenues raised from personal and corporate income taxes and other sources as a result of the sales tax holiday. It is theoretically possible that sales tax holidays increase overall economic activities. Although these activities may cause, for example, employment to increase somewhat through increased sales, DOR does not have direct data to estimate this impact. Also, the literature and studies conducted on the topic do not provide any definitive guidance in estimating such an impact. Although we attempted to determine the impact of the sales tax holiday on economic activity based on the literature research and a general equilibrium analysis, our finding is not definitive. We estimated that the indirectly generated additional revenues due to the sales tax holiday would be about \$3.4 million, provided that the state government does not reduce the spending by the static revenue impact reported earlier accordingly.¹²

Studies conducted by Tax Foundation¹³ and Institute on Taxation and Economic Policy (ITEP)¹⁴ indicate that increased sales during sales tax holidays are more likely to be the result of consumers shifting their planned purchases rather than net increase in consumer purchases, while a recent study¹⁵ reports that is not really the case. Findings from another study¹⁶ imply that net price reductions to consumers may be less than the statutory sales tax rate reduction resulting from the holiday (businesses tend to offer less generous mark-downs and/or increase their prices during the sales tax holiday than they would in the absence of a holiday), and therefore stimulated fewer consumer purchases than expected. Because of these reasons, the net impact of sales tax holiday on the overall economic activity is uncertain and hard to quantify, and the \$3.4 million indirect impact figure should be used with caution.

Confidence Level: The after-the-fact static sales tax revenue impact figures are generally close to the forecast estimate we conducted prior to the implementation of the sales tax holiday. We are reasonably confident that the true amount of forgone sales tax revenue lies within the range provided.

As mentioned above, there is a much greater uncertainty as to how a sales tax holiday affects economic activity, and the existing literature and studies do not provide a clear guidance on estimating such indirect impacts. Therefore, the indirectly raised revenue figure mentioned above should be used with caution.

¹² When estimating the indirect impact, DOR usually does not consider the balanced budget requirement. If considering the balanced budget requirement, the size of net indirect impact would be significantly reduced.

¹³ <http://taxfoundation.org/article/sales-tax-holidays-politically-expedient-poor-tax-policy-2015>

¹⁴ <http://www.itep.org/pdf/salestaxholiday2013.pdf>

¹⁵ Agarwal, Marwell, and McGranahan, Consumption Responses to Temporary Tax Incentives: Evidence from State Sales Tax Holidays, *American Economic Journal: Economic Policy*, 2017, 9(4): 1–27

¹⁶ Harper, Hawkins, Martin, and Sjolander, Price Effects around a Sales Tax Holiday: An Exploratory Study, *Public Budgeting & Finance*, Winter 2003.