



Christopher C. Harding
COMMISSIONER

The Commonwealth of Massachusetts

Department of Revenue

Office of the Commissioner

P.O. Box 9550

Boston, MA 02114-9550

December 31, 2019

Mr. Andrew W. Maylor
Comptroller
Commonwealth of Massachusetts
1 Ashburton Place, 9th Floor
Boston, MA 02108

Re: 2019 Sales Tax Holiday (August 17 and 18)

Dear Mr. Maylor:

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 17 & 18, 2019.

Based on our analysis of the available data, DOR estimates that the amount of forgone sales tax revenue was approximately \$27.8 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 \$4.45 million each for a total of \$8.9 million. Further, DOR estimates that the revenue impact on the Convention Center Fund was slightly higher than \$45,200. The remainder of the revenue impact of the sales tax holiday was a revenue loss from the General Fund. DOR also estimates, with less certainty, that the indirectly raised revenues (income, corporate, and other) due to increased economic activity was around \$2.7 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 (at 617-626-3235) or Kazim P. Ozyurt, Director of the Office of Tax Policy Analysis (at 617-626-2121).

Sincerely,

A handwritten signature in black ink, appearing to read "CCH", written over a light blue horizontal line.

Christopher C. Harding
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 Adam G. Hinds, Senate Chair, Joint Committee on Revenue

MASSACHUSETTS DEPARTMENT OF REVENUE
REVENUE IMPACT ANALYSIS

Title: 2019 Sales Tax Holiday (August 17, 18, 2019)

Legal Reference: G.L. c. 64H, § 6A, and St. 2019 c. 49

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 waived the sales tax on otherwise taxable non-businesses purchases made on August 17 and 18, 2019, except purchases of telecommunications services, tobacco products, marijuana or marijuana products, alcoholic beverages, gas, steam, electricity, motor vehicles, motorboats, meals¹, and any single item the price of which was in excess of \$2,500. Similar to the 2018 sales tax holiday, the *exclusion* of prior sales and layaway sales was in effect during the 2019 sales tax holiday.

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 on a monthly basis, 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 return², labeled “Sales for Resale/Exempt Sales or Other Adjustments”. We analyzed the returns of taxpayers identifying themselves by NAICS³ 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 11 years. To assess the revenue impact of the 2019 sales tax holiday, the exempt sales in August 2019 was compared to those in August 2016 and 2017 and in May-July 2019 when there was no sales tax holiday, after controlling for the fluctuation of monthly gross sales. Based on this method, the 2019 sales tax holiday was estimated to have reduced sales tax revenue by \$20.0 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 affected by the sales tax holiday. Ignoring this possibility may understate the amount of forgone revenue.

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

² 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

³ NAICS is the North American Industrial Classification System, under which businesses are supposed to identify their principal industry.

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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 2018 in order 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 people behaviors averaged for both years would be still valid in 2019 as well. 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. We then applied this share to DOR's sales tax collections for that month. The estimated total tax impact from this methodology was \$35.7 million.

Then, our final midpoint estimate turns out to be \$27.8 million. The static revenue loss figures reported in the table in the following section appear to represent a reasonable range of values for the amount of forgone revenue attributable to the August 17 & 18 sales tax holiday in 2019.

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 event⁴. In this report, however, we provide a revenue loss estimate only for the 2019 sales tax holiday.

Sales Tax Revenue Loss Due to the 2019 Sales Tax Holiday (\$ millions)

Fiscal Year	Lower Bound	Midpoint	Upper Bound
2020	\$20.0	\$27.8	\$35.70

Revenues Forgone by Fund:

Regular sales tax revenue is currently deposited into the General Fund, the MBTA State and Local Contribution Fund⁵, the School Modernization and Reconstruction Trust Fund⁶, and the Convention Center Fund⁷. In FY13 and previous fiscal years, a portion of regular sales tax revenue was deposited into the Commonwealth Transportation Fund⁸. However this is not the case under the current law⁹. 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 \$4.45 million each for a total of \$8.9 million. The impact on the Convention Center Fund was slightly higher than \$45,200. The remainder of the impact was on the General Fund.

Additional Revenues Collected Due to Increased Sales Activity:

⁴ See G.L. c 64H § 6A.

⁵ See Chapter 127 of the Acts of 1999.

⁶ See Chapter 210 of the Acts of 2004.

⁷ See Chapter 152 of the Acts of 1997, as amended.

⁸ See Chapter 35 of the Acts of 2009.

⁹ See Chapter 46 of the Acts of 2013, Section 25 and 26.

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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 impact of indirectly generated additional revenues due to the sales tax holiday would probably be about \$2.7 million, provided that the state government does not reduce the spending by the static revenue impact reported earlier accordingly.¹⁰ However, the true value of the indirectly raised revenues could probably be quite different from this amount. Some studies (Tax Foundation¹¹, ITEP¹²) 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 study¹³ reports that is not really the case. Findings from another study¹⁴ 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 \$2.7 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 activities, 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.

¹⁰ 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.

¹¹ <http://taxfoundation.org/article/sales-tax-holidays-politically-expedient-poor-tax-policy-2015>

¹² <http://www.itep.org/pdf/salestaxholiday2013.pdf>

¹³ 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

¹⁴ Harper, Hawkins, Martin, and Sjolander, Price Effects around a Sales Tax Holiday: An Exploratory Study, *Public Budgeting & Finance*, Winter 2003.