



Mark E. Nunnelly  
COMMISSIONER

*The Commonwealth of Massachusetts*  
*Department of Revenue*  
*Office of the Commissioner*  
*P.O. Box 9550*  
*Boston, MA 02114-9550*

December 31, 2015

Mr. Thomas Shack  
Comptroller  
Commonwealth of Massachusetts  
1 Ashburton Place, 9th Floor  
Boston, MA 02108

Re: Sales Tax Holiday for August 15 & 16, 2015

Dear Mr. Shack:

Pursuant to St. 2015, c. 65, the Department of Revenue hereby certifies the amount of forgone sales tax revenue as a result of the sales tax holiday that occurred on August 15 & 16, 2015.

Based on our analysis of the available data, DOR estimates that the amount of forgone sales tax revenue was approximately \$25.51 million. DOR estimates that this forgone revenue had no impact on the MBTA State and Local Contribution Fund, but impacted the amounts going to the School Modernization and Reconstruction Trust Fund (\$4.08 million). Further, DOR estimates that the revenue impact on the Convention Center Fund was slightly higher than \$34,500. The remainder of the revenue impact of the sales tax holiday was a revenue loss from the General Fund. The DOR also estimates (although with less certainty) that the indirectly raised revenues (income, corporate, and other) due to increased economic activity was around \$2.5 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 617-626-2201) 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 "Mark E. Nunnelly".

Mark E. Nunnelly  
Commissioner

cc: Kristen Lepore, Secretary of Administration and Finance  
The Honorable Brian S. Dempsey, Chair, House Committee on Ways and Means  
The Honorable Karen E. Spilka, Chair, Senate Committee on Ways and Means  
The Honorable Jay R. Kaufman, House Chair, Joint Committee on Revenue  
The Honorable Michael J. Rodrigues, Senate Chair, Joint Committee on Revenue

## Massachusetts Department of Revenue Revenue Impact Analysis

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**Title:** Sales Tax Holiday for August 15 & 16, 2015

**Legal Reference:** St. 2015, c. 65

**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 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 15 and 16, 2015, except purchases of telecommunications services, tobacco products, gas, steam, electricity, motor vehicles, motorboats, meals, and any single item the price of which was in excess of \$2,500. Similar to the 2014 sales tax holiday, the *exclusion* of prior sales and layaway sales was in effect during the 2015 sales tax holiday.

**Methodology/Data Source/History:** 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 returns; and (2) credit card and sales tax collections data.

Under the first methodology, we used DOR sales tax return data to generate an estimate of the amount of exempt sales on the dates of the 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 return<sup>1</sup>, labeled “Sales for Resale/Exempt Sales or Other Adjustments”. We analyzed the returns of taxpayers identifying themselves by NAICS<sup>2</sup> 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 methodology somewhat understates the amount of forgone revenues.

The sales tax holiday was not in effect six years ago (August 2009), and so the assessment of the increase in taxes foregone in 2015 compared to 2009 will be meaningful for this year’s analysis (the increase would be due to both the impact from the sales tax holiday in 2015 and other growth factors). However, because many retailers went out of business and many new retailers entered the market since 2009, the number of sales tax filers filing returns in both the current year and 2009 may decline over time, resulting in fewer filers matching over time in our simulations. To reduce the impact of declining number of matched filers on estimation, instead of matching directly 2015 and 2009 sales tax return data, we matched each set of the two consecutive years from 2009 to 2015, to estimate the annual incremental impact of sales tax holiday (there was a sales tax holiday every year from 2010 to 2015), and then added

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<sup>1</sup> See form ST-9, available on DOR’s website:

<http://www.mass.gov/dor/docs/dor/forms/wage-rpt/august-1-09-pdfs/st-9.pdf>

<sup>2</sup> NAICS is the North American Industrial Classification System, under which businesses are supposed to identify their principal industry.

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up all those incremental changes in the revenue impact of sales tax holidays from 2010 to 2015 to arrive at an estimate of revenue impact of sales tax holiday in 2015: This resulted in a revenue loss impact estimate of \$16.88 million based on the first method.

The estimate generated by this method does not consider the impacts from businesses that identify themselves in NAICS categories other than principally making retail sales. As a result, this methodology may not reflect the possibility that some transactions in other NAICS categories could also be such sales that were affected by the sales tax holiday. Ignoring this possibility may understate the correct amount of forgone revenue. To account for this or to confirm this estimate, we decided to use a second methodology.

Under the second methodology, we attempted to obtain data on credit card sales transactions occurring in Massachusetts from a major credit card company for the month of August 2015 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. Unfortunately, we do not have the data for 2015. However, we do have credit card sales volume data for August 2005, which also had a two-day sales tax holiday. We assumed that the proportion of sales transactions during the sales tax holiday weekend to monthly sales did not change from 2005 (10.11%). 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. (Examples of sales that would not have been exempt would be items purchased by businesses and items costing more than \$2,500). We then applied this share to DOR's sales tax collections for that month. The estimated total exempted amount using this method represents \$546.1 million of exempt sales, for a maximum tax impact of about \$34.13 million for this year.

The average of these two estimates is our final mid-point estimate of \$25.51 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 15 & 16 sales tax holiday in 2015.

**State Fiscal Year Static Revenue Loss Estimate:** Since under the current law the sales tax holiday is scheduled as a one-time event, occurring only during the state fiscal year 2016, the estimate below shows a revenue loss impact only for that fiscal year.

### **Sales Tax Revenue Forgone Due to Sales Tax Holiday (\$ millions)**

	<u>Lower Bound</u>	<u>Midpoint</u>	<u>Upper Bound</u>
FY2016	16.88	25.51	34.13

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### *Revenues Forgone by Fund:*

Regular sales tax revenue is currently deposited into the General Fund, the MBTA State and Local Contribution Fund<sup>3</sup>, the School Modernization and Reconstruction Trust Fund<sup>4</sup>, and the Convention Center Fund<sup>5</sup>. In FY13 and previous fiscal years, a portion of regular sales tax revenue was deposited into the Commonwealth Transportation Fund<sup>6</sup>. However this is not the case under the current law<sup>7</sup>. Under the relevant statutes, we estimated that the sales tax holiday did not lower the amount going to the MBTA State and Local Contribution Fund, but it did lower the amounts going to the School Modernization and Reconstruction Trust Fund (\$4.08 million). The impact on the Convention Center Fund was slightly higher than \$34,560. The remainder of the impact was on the General Fund.

### *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 activity. Although this activity may have, for example, increased employment due to 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 \$2.5 million, provided that the state government does not reduce the spending by the static revenue impact reported earlier accordingly.<sup>8</sup> However, the true value of the indirectly raised revenues could probably be quite different from this amount. Some recent studies (Tax Foundation<sup>9</sup>, ITEP<sup>10</sup>) indicate that increased sales during sales tax holidays are more likely to be the result of consumers shifting the timing of their planned purchases than net increase in consumer purchases. Findings from another study<sup>11</sup> imply that net price reductions to consumers may have been 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 may be uncertain and hard to quantify, and the \$2.5 million indirect impact figure should be used with caution.

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<sup>3</sup> See Chapter 127 of the Acts of 1999.

<sup>4</sup> See Chapter 210 of the Acts of 2004.

<sup>5</sup> See Chapter 152 of the Acts of 1997, as amended.

<sup>6</sup> See Chapter 35 of the Acts of 2009.

<sup>7</sup> See Chapter 46 of the Acts of 2013, Section 25 and 26.

<sup>8</sup> 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.

<sup>9</sup> <http://taxfoundation.org/article/sales-tax-holidays-politically-expedient-poor-tax-policy-2015>

<sup>10</sup> <http://www.itep.org/pdf/salestaxholiday2013.pdf>

<sup>11</sup> Harper, Hawkins, Martin, and Sjolander, *Price Effects around a Sales Tax Holiday: An Exploratory Study*, Public Budgeting & Finance, Winter 2003.

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**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.