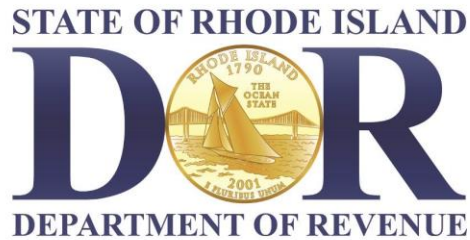


STATE OF RHODE ISLAND  
GOVERNOR DANIEL J. MCKEE



Office of Revenue Analysis

State of Rhode Island Revenue Assessment Report  
FY 2022 Monthly and Year-to-Date as of January 2022

The monthly revenue assessment report compares adjusted revenues, on a monthly and fiscal year-to-date basis, to the Office of Revenue Analysis' monthly and fiscal year-to-date estimates of expected revenues based on the current fiscal year revenue estimates. It should be noted that the fiscal year revenue estimates will vary over the course of the fiscal year as the Revenue Estimating Conference (REC) (see Rhode Island General Laws § 35-16-1 et seq.) convenes and modifies the fiscal year revenue estimates as enacted by the General Assembly.

*The purpose of the Revenue Assessment Report is to give readers a sense of how the state's general revenues compare to those that might be expected if the official revenue estimates were being met in a predictable way. Caution should be exercised when interpreting this report as actual revenues may vary significantly from historical patterns. In addition, it is important for the reader to understand that enacted and adopted revenue estimates are made on an accrual basis, not a cash basis. Revenue accruals are not determined until at least one month after the fiscal year-end in June. Thus, even if the assessment of actual fiscal year-to-date revenues trails the fiscal year-to-date revenue estimates, it is possible for the fiscal year-end accrual to make up any shortfall.*

This monthly revenue assessment report compares adjusted revenues to expected revenues based on the revenue estimates adopted at the November 2021 REC. The principals of the November 2021 REC revised the FY 2022 revenue estimates up by \$273.6 million. The November 2021 REC revised revenue estimates will remain the basis of comparison for all Revenue Assessment Reports through the April 2022 report. For the May 2022 Revenue Assessment Report, the basis of comparison will be revenue estimates adopted at the May 2022 REC. There is no Revenue Assessment Report issued for the month of June. Instead, a Special Report on Preliminary Revenues for FY 2022 will be prepared and issued in September 2022.

**FY 2022 STATE OF RHODE ISLAND REVENUE ASSESSMENT REPORT**  
**Year-to-Date Estimate to Actual**

	YTD January Adjusted Revenues FY 2022		YTD January Estimate of Nov 2021 REC FY 2022 Revenues †	Difference	Variance
<b>Personal Income Tax</b>	\$ 1,063,940,316	a, b	\$ 1,007,469,289	\$ 56,471,027	5.6%
<b>General Business Taxes</b>					
Business Corporation †	124,240,129	b,c,d,e,f	108,793,281	15,446,848	14.2%
Public Utilities Gross Earnings	44,005,964		46,972,412	(2,966,448)	-6.3%
Financial Institutions	19,256,339	d	20,566,305	(1,309,966)	-6.4%
Insurance Company Gross Premiums	69,106,211	f	68,040,804	1,065,407	1.6%
Bank Deposits	2,169,041		1,818,617	350,423	19.3%
Health Care Provider Assessment	21,090,710		21,560,506	(469,797)	-2.2%
<b>Excise Taxes</b>					
Sales and Use	893,583,626		877,286,025	16,297,601	1.9%
Motor Vehicle License and Reg Fees	661,470		625,728	35,742	5.7%
Cigarettes	89,890,077		92,531,561	(2,641,484)	-2.9%
Alcohol	15,430,558		14,113,580	1,316,978	9.3%
Controlled Substances	2,978		2,978 +	-	0.0%
<b>Other Taxes</b>					
Estate and Transfer	21,701,818		24,584,585	(2,882,768)	-11.7%
Racing and Athletics	280,547		296,642	(16,095)	-5.4%
Realty Transfer	14,010,149	g,h	13,803,790	206,358	1.5%
<b>Total Taxes</b>	\$ 2,379,369,931		\$ 2,298,466,102	\$ 80,903,829	3.5%
<b>Departmental Receipts †</b>	\$ 135,921,679	ij	\$ 134,509,115	\$ 1,412,565	1.1%
<b>Taxes and Departmentals</b>	\$ 2,515,291,611		\$ 2,432,975,217	\$ 82,316,394	3.4%
<b>Other General Revenue Sources</b>					
Other Miscellaneous Revenues	4,127,308		4,127,308 +	-	0.0%
Lottery Transfer	190,466,917	k	194,689,393	(4,222,476)	-2.2%
Unclaimed Property	-		-	-	n/a
<b>Total Other Sources</b>	\$ 194,594,225		\$ 198,816,701	\$ (4,222,476)	-2.1%
<b>Total General Revenues</b>	\$ 2,709,885,836		\$ 2,631,791,918	\$ 78,093,918	3.0%

	YTD January Adj. Revenues		YTD January Nov 2021 REC Estimates	Difference	Variance
<b>PIT Component</b>					
Estimated payments	\$ 161,616,761		\$ 175,952,124	\$ (14,335,363)	-8.1%
Final payments †	151,277,917	a	129,596,189	21,681,728	16.7%
Withholding	839,358,171		784,521,632	54,836,539	7.0%
Refunds and Adjustments	(88,312,533)	b	(82,600,656)	(5,711,877)	6.9%
<b>Total</b>	\$ 1,063,940,316		\$ 1,007,469,289	\$ 56,471,027	5.6%

† FY 2022 expected revenues are based on revised estimates adopted at the November 2021 Revenue Estimating Conference. The estimate for personal income final payments, business corporation tax, and departmental receipts were calculated using modified revenue flows to align expected revenues with the actual realization of revenues.

+ Set equal to actual amounts received.

Detailed notes on the following page

**FY 2021 STATE OF RHODE ISLAND REVENUE ASSESSMENT REPORT**  
**Year-to-Date Estimate to Actual**

- <sup>a</sup> Adds to personal income tax final payments \$95,777,724 in net revenues from pass-through entities made on behalf of shareholders received in FY 2022 year-to-date and recorded as business corporation tax payments.
- <sup>b</sup> Includes an adjustment of \$496,379 for net transfers between business corporation tax and personal income tax refunds and adjustments for payment(s) received in prior periods. The offsetting adjustment of \$(496,379) is included in business corporation tax.
- <sup>c</sup> Subtracts \$95,777,724 in business corporation tax payments made by pass-through entities for the personal income tax of shareholders received in FY 2022 year-to-date that were transferred to personal income tax final payments.
- <sup>d</sup> Includes an adjustment of \$775,000 for transfer(s) from business corporation tax to financial institutions tax for payment(s) received in FY 2021. The offsetting transfer of \$(775,000) is included in business corporation tax.
- <sup>e</sup> Business corporation tax includes large, infrequently occurring payment(s) of \$6.9 million.
- <sup>f</sup> Includes an adjustment of \$114,000 for net transfers between business corporation tax and insurance company gross premiums tax for payment(s) received in prior periods. The offsetting adjustment of \$(114,000) is included in insurance company gross premiums tax.
- <sup>g</sup> Subtracts \$787,681 that is designated for transfer to the Housing Resources Commission. The amount reflects the January 2022 transfer that will occur in February 2022.
- <sup>h</sup> Includes \$282,501 in late real estate conveyance tax payment(s) for real estate transactions that occurred in FY 2020 and \$574,257 in late controlling interest realty transfer tax payment(s) received in August 2021 for transactions in FY 2021.
- <sup>i</sup> Subtracts \$154,547,050 of FY 2021 hospital licensing fee payments received in FY 2022 year-to-date and accrued back to FY 2021.
- <sup>j</sup> Includes large, infrequently occurring payment(s) to license and fees state assent application fees account of \$803,750 received in September 2021.
- <sup>k</sup> Subtracts \$3,358,186 of revenues that were transferred in October 2021 but accrued back to FY 2021.

**FY 2022 STATE OF RHODE ISLAND REVENUE ASSESSMENT REPORT**  
**Monthly Estimate to Actual**

	January 2022 Adjusted Revenues FY 2022		January 2022 Estimate of Nov 2021 REC FY 2022 Revenues †		Difference	Variance
<b>Personal Income Tax</b>	\$ 208,790,528	a, b	\$ 193,798,899		\$ 14,991,628	7.7%
<b>General Business Taxes</b>						
Business Corporation †	8,278,726	b, c, d	6,636,165		1,642,561	24.8%
Public Utilities Gross Earnings	865,016		493,250		371,766	75.4%
Financial Institutions	2,219		(319,429)		321,648	-100.7%
Insurance Company Gross Premiums	52,837	d	1,079,790		(1,026,953)	-95.1%
Bank Deposits	1,450		(5,720)		7,170	-125.4%
Health Care Provider Assessment	2,893,929		3,190,693		(296,765)	-9.3%
<b>Excise Taxes</b>						
Sales and Use	134,258,388		133,077,582		1,180,806	0.9%
Motor Vehicle License and Reg Fees	73,925		77,306		(3,381)	-4.4%
Cigarettes	9,642,107		12,240,003		(2,597,897)	-21.2%
Alcohol	3,268,587		1,998,562		1,270,024	63.5%
Controlled Substances	-		-	+	-	n/a
<b>Other Taxes</b>						
Estate and Transfer	999,234		2,044,223		(1,044,989)	-51.1%
Racing and Athletics	34,009		40,804		(6,795)	-16.7%
Realty Transfer	2,239,001	e	2,127,801		111,200	5.2%
<b>Total Taxes</b>	\$ 371,399,954		\$ 356,479,930		\$ 14,920,025	4.2%
<b>Departmental Receipts †</b>	\$ 36,645,448	f	\$ 37,363,614		\$ (718,166)	-1.9%
<b>Taxes and Departmentals</b>	\$ 408,045,402		\$ 393,843,544		\$ 14,201,859	3.6%
<b>Other General Revenue Sources</b>						
Other Miscellaneous Revenues	1,344,033		1,344,033	+	-	0.0%
Lottery Transfer	29,413,420		30,414,057		(1,000,637)	-3.3%
Unclaimed Property	-		-	+	-	n/a
<b>Total Other Sources</b>	\$ 30,757,453		\$ 31,758,090		\$ (1,000,637)	-3.2%
<b>Total General Revenues</b>	\$ 438,802,855		\$ 425,601,634		\$ 13,201,221	3.1%

PIT Component	January 2022 Adj. Revenues		January 2022 Nov 2021 REC Estimates		Difference	Variance
Estimated payments	\$ 47,647,210		\$ 65,202,680		\$ (17,555,470)	-26.9%
Final payments †	37,882,046	a	27,085,316		10,796,730	39.9%
Withholding	139,901,891		114,624,780		25,277,111	22.1%
Refunds and Adjustments	(16,640,620)	b	(13,113,877)		(3,526,743)	26.9%
<b>Total</b>	\$ 208,790,528		\$ 193,798,899		\$ 14,991,628	7.7%

† FY 2022 expected revenues are based on revised estimates adopted at the November 2021 Revenue Estimating Conference. The estimate for personal income tax final payments, business corporation tax, and departmental receipts were calculated using modified revenue flows to align expected revenues with the actual realization of revenues.

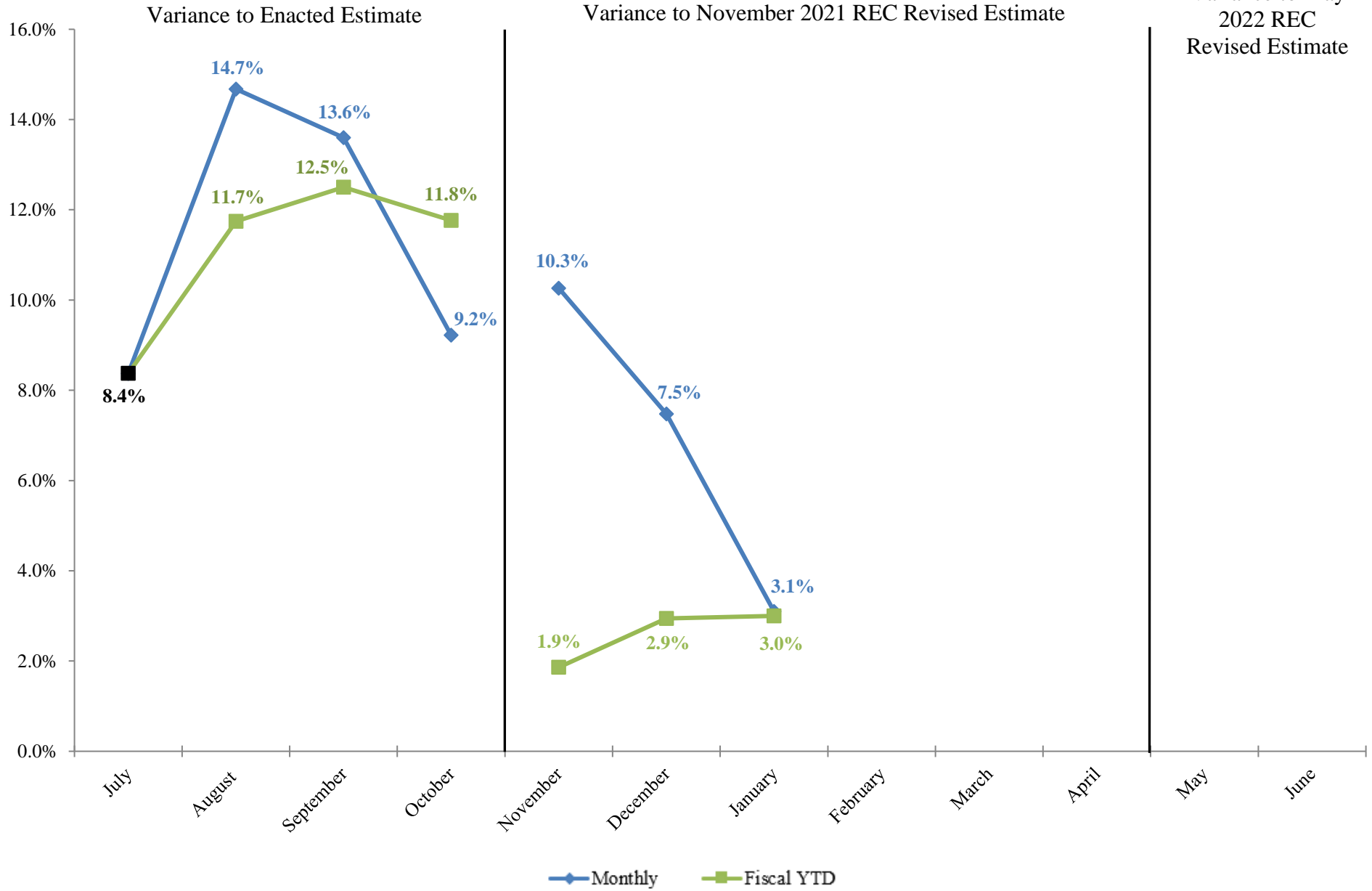
+ Set equal to actual amounts received.

Detailed notes on the following page

**FY 2022 STATE OF RHODE ISLAND REVENUE ASSESSMENT REPORT**  
**Monthly Estimate to Actual**

- <sup>a</sup> Adds to personal income tax final payments \$31,666,575 in net revenues from pass-through entities made on behalf of shareholders received in January 2022 and recorded as business corporation tax payments.
- <sup>b</sup> Includes an adjustment of \$(114,000) for transfer(s) from personal income tax to business corporation tax for payment(s) received in prior periods. The offsetting transfer(s) of \$114,000 is included in business corporation tax.
- <sup>c</sup> Subtracts \$31,666,575 in business corporation tax payments made by pass-through entities for the personal income tax of shareholders received in January 2022 that were transferred to personal income tax final payments.
- <sup>d</sup> Includes an adjustment of \$(114,000) for transfer(s) from insurance company gross premiums tax to business corporation tax for payment(s) received in prior periods. The offsetting transfer(s) of \$114,000 is included in business corporation tax.
- <sup>e</sup> Subtracts \$42,129 that is designated to the Housing Resources Commission. The amount reflects the difference between the December 2021 transfer that occurred in January 2022 and the January 2022 transfer that will occur in February 2022.
- <sup>f</sup> Subtracts \$2,008,910 of FY 2021 hospital licensing fee payment(s) received in January 2022 and accrued back to FY 2021.

# FY 2022 Variance of Adjusted Revenues to Estimate



## **Prologue to the Revenue Assessment Report for FY 2022**

Beginning with the July 2021 Revenue Assessment Report, the Department of Revenue, Office of Revenue Analysis (ORA) has restructured the report. Section I. of the report contains the results for the fiscal year-to-date and monthly periods. Section II. of the report contains a discussion of ORA's new methodology for determining expected revenues on a fiscal year-to-date and monthly basis. Section III. of the report contains a description and the associated revenue projections of law changes enacted in the 2021 session of the General Assembly and included in the revenue estimates adopted at the November REC that impact general revenues.

It should be noted that as of May 21, 2021, Rhode Island businesses are allowed to operate at full capacity. At this time, there are no restrictions in place due to the COVID-19 pandemic that impact the adjusted or expected revenues in this report.

### **I. Summary of Results**

#### **Results for Revised FY 2022 Revenues through January**

The table, *Year-to-Date Estimate to Actual*, gives the results for FY 2022 year-to-date. The Department of Revenue finds that FY 2022 adjusted total general revenues through January exceeded the revised FY 2022 expected total general revenues estimate through January by \$78.1 million, a variance of 3.0%. In total taxes, fiscal year-to-date adjusted revenues were more than the revised FY 2022 year-to-date expected revenues estimate by \$80.9 million, a difference of 3.5%. For departmental receipts, FY 2022 through January adjusted revenues led the revised FY 2022 expected fiscal year-to-date revenues estimate by \$1.4 million, a variance of 1.1%. For other general revenue sources, adjusted FY 2022 year-to-date revenues were below the revised FY 2022 expected fiscal year-to-date revenues by \$4.2 million, a variance of -2.1%.

Six revenue items had adjusted revenues in FY 2022 through January that exceeded the expected FY 2022 revised revenue estimates by more than \$1 million.

- Personal income tax adjusted revenues in year-to-date FY 2022 were \$56.5 million more than expected FY 2022 through January personal income tax revenues, a variance of 5.6%.
  - Adjusted fiscal year-to-date personal income tax withholding payments revenues were \$54.8 million more than the \$784.5 million of expected FY 2022 year-to-date personal income tax withholding payments, a variance of 7.0%.
  - Adjusted FY 2022 year-to-date personal income tax final payments revenues were \$21.7 million, or 16.7%, more than expected FY 2022 year-to-date personal income tax final payments revenues.
    - Adjusted FY 2022 personal income tax final payments revenues through January include \$856,848 of reimbursed Historic Structures Tax Credits (HSTCs) versus an unknown amount of HSTC redemptions included in revised FY 2022 personal income tax final payments.
    - Adjusted fiscal year-to-date personal income tax final payments revenues also include \$95.8 million of personal income tax payments

received from pass-through entities that were made on behalf of shareholders compared to an expected amount of \$82.0 million.

- Adjusted fiscal year-to-date personal income tax estimated payments revenues were \$14.3 million less than expected year-to-date FY 2022 personal income tax estimated payments, a variance of -8.1%.
- Adjusted FY 2022 personal income tax refunds and adjustments revenues through January were \$5.7 million, or 6.9%, more than expected personal income tax refunds and adjustments for FY 2022 year-to-date.
- FY 2022 year-to-date sales and use tax adjusted revenues were \$16.3 million more than expected fiscal year-to-date sales and use tax revenues based on the revised estimate, a difference of 1.9%.
- Adjusted fiscal year-to-date revenues from business corporation tax were up \$15.4 million, or 14.2%, over expected business corporation tax revised revenues for FY 2022 year-to-date.
  - Business corporation tax adjusted revenues include large, infrequently occurring payment(s) of \$6.9 million received in November 2021.
- Adjusted fiscal year-to-date revenues from departmental receipts were up \$1.4 million, or 1.1%, over expected departmental receipts revised revenues for FY 2022 year-to-date.
- Adjusted fiscal year-to-date alcohol excise tax revenues were up \$1.3 million, or 9.3%, over expected alcohol excise tax revised revenues for FY 2022 year-to-date.
- Adjusted FY 2022 year-to-date insurance company gross premiums tax revenues were \$1.1 million more than expected fiscal year-to-date insurance company gross premiums tax revised revenues, a difference of 1.6%.
  - The fiscal year-to-date gross premiums tax revenues from property, casualty, and life insurance companies were \$834,172 more than expected for FY 2022 through January.
  - The fiscal year-to-date revenues from health insurers were \$231,235 more than expected.

FY 2022 adjusted revenues through January for bank deposits tax, realty transfer tax, and motor vehicle license and registration fees were above the expected FY 2022 year-to-date revised revenue estimates but by less than \$1.0 million each.

On the negative side, five revenue items had adjusted revenues through January that fell short of the expected FY 2022 revised revenue estimates by \$1 million or more.

- Adjusted FY 2022 year-to-date lottery transfer revenues were \$4.2 million less than expected fiscal year-to-date revised revenues from the lottery transfer, a difference of -2.2%.
  - The transfer of net terminal income from video lottery terminals (VLTs) in FY 2022 through January was \$6.0 million less than expected.
  - The transfer of operating income from table games was below expectations by \$39,608 in FY 2022 through January.



- The transfer of gross profits from remote sports betting was \$170,630 more than expected for FY 2022 through January. The transfer of gross profit from on-site sports wagering in FY 2022 through January was \$959,470 more than expected fiscal year-to-date revenues.
- The transfer of net income from traditional lottery games (i.e., scratch tickets, Daily Numbers, Powerball, etc.) and lottery monitor games (i.e., Keno, etc.) in FY 2022 through January was \$693,465 more than expected.
- Public utilities gross earnings tax adjusted revenues in year-to-date FY 2022 were \$3.0 million, or 6.3%, less than revised public utility gross earnings tax expected fiscal year-to-date revenues.
- Estate and transfer tax adjusted revenues in year-to-date FY 2022 were \$2.9 million, or 11.7%, below revised estate and transfer tax expected fiscal year-to-date revenues.
- Cigarette and other tobacco products (OTP) taxes adjusted revenues in year-to-date FY 2022 were \$2.6 million, or 2.9%, below revised cigarette and OTP taxes expected fiscal year-to-date revenues.
  - The fiscal year-to-date cigarette excise tax adjusted revenues were \$2.6 million less than expected for FY 2022 through January.
  - The fiscal year-to-date revenues from OTP excise tax were \$89,497 less than expected.
- Financial institutions tax adjusted revenues for FY 2022 year-to-date were less than the expected fiscal year-to-date financial institutions tax revised revenues by \$1.3 million, a difference of -6.4%.

FY 2022 adjusted revenues through January for health care provider assessment and racing and athletics tax were below their expected FY 2022 year-to-date revised revenue estimates by less than \$1 million each.

### **Results for Month of January**

The table, *Monthly Estimate to Actual*, gives the results for January 2022. The Department of Revenue finds that January adjusted total general revenues exceeded the revised FY 2022 expected total general revenues estimate for January by \$13.2 million, a variance of 3.1%. In total taxes, January adjusted revenues were more than the revised FY 2022 expected revenues estimate for January by \$14.9 million, a difference of 4.2%. For departmental receipts, January adjusted revenues fell short of the revised FY 2022 expected monthly revenues estimate by \$718,166, a variance of -1.9%. For other general revenue sources, adjusted January revenues were below the expected January revised revenues by \$1.0 million, a variance of -3.2%.

Four revenue items had adjusted revenues in January that exceeded the FY 2022 expected monthly revised revenue estimates by more than \$1 million.

- Personal income tax adjusted revenues in January were \$15.0 million more than expected monthly personal income tax revenues, a variance of 7.7%.

- Adjusted January personal income tax withholding payments revenues were \$25.3 million more than the \$114.6 million of expected January personal income tax withholding payments, a variance of 22.1%.
- January adjusted personal income tax final payments revenues were \$10.8 million, or 39.9%, more than expected monthly personal income tax final payments revenues.
  - January adjusted personal income tax final payments revenues include \$31.7 million of personal income tax payments received from pass-through entities that were made on behalf of shareholders compared to an expected \$22.6 million.
  - January adjusted personal income tax final payments revenues include \$35,153 of reimbursed Historic Structures Tax Credits (HSTCs).
- Adjusted January personal income tax estimated payments revenues were \$17.6 million less than expected January personal income tax estimated payments, a variance of -26.9%.
- January adjusted personal income tax refunds and adjustments revenues were \$3.5 million more than expected monthly personal income tax refunds and adjustments revenues, a difference of 26.9%.
- Adjusted January revenues from business corporation tax were up \$1.6 million, or 24.8%, compared to expected business corporation tax revised revenues for January.
- Alcohol excise tax adjusted January revenues were up \$1.3 million, or 63.5%, over expected alcohol excise tax revised revenues for January.
- January sales and use tax adjusted revenues were \$1.2 million more than expected monthly sales and use tax revenues based on the revised estimate, a difference of 0.9%.

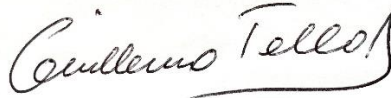
January 2022 adjusted revenues for public utilities gross earnings tax, financial institutions tax, realty transfer tax, and bank deposits tax were above the expected January revised revenue estimates by less than \$1 million each.

On the negative side, four revenue items had adjusted revenues for January that fell short of the expected monthly revenue estimates based on the revised revenue estimates by \$1 million or more.

- January cigarette and other tobacco products (OTP) taxes adjusted revenues were \$2.6 million, or 21.2%, below revised cigarette and OTP taxes expected monthly revenues.
  - The January cigarette excise tax adjusted revenues were \$2.6 million less than expected for the month.
  - Revenues from OTP excise tax were \$7,429 less than expected for January.
- Estate and transfer tax adjusted revenues for January were \$1.0 million, or 51.1%, below revised estate and transfer tax expected monthly revenues.
- January insurance company gross premiums tax revenues were \$1.0 million less than expected monthly insurance company gross premiums tax revised revenues, a difference of -95.1%.

- The monthly gross premiums tax revenues from property, casualty, and life insurance companies were \$1.0 million less than expected for January.
- January revenues from health insurers were \$151 less than expected.
- Adjusted January lottery transfer revenues were \$1.0 million less than expected monthly revised revenues from the lottery transfer, a difference of -3.3%.
  - The transfer of gross profits from remote sports betting was \$424,944 less than expected for January. The transfer of gross profit from on-site sports wagering in January was \$694,175 less than expected monthly revenues.
  - The transfer of net terminal income from video lottery terminals (VLTs) in January was \$577,035 less than expected.
  - The transfer of net income from traditional lottery games (i.e., scratch tickets, Daily Numbers, Powerball, etc.) and lottery monitor games (i.e., Keno, etc.) in January was \$638,595 more than expected.
  - The transfer of operating income from table games was above expectations by \$56,922 in January.

January adjusted revenues for departmental receipts, health care provider assessment, racing and athletics tax, and motor vehicle license and registration fees were below their expected January revised revenue estimates by less than \$1 million each.



Guillermo L. Tello, Director  
Department of Revenue  
February 21, 2022

## II. Methodology Used to Estimate Expected Monthly and Year-to-Date FY 2022 Revenues

To determine the expected monthly and fiscal year-to-date revenues for the fiscal year, ORA first calculated, for each revenue item and fiscal year, the percentage of total fiscal year revenues that each month in the fiscal year comprised. ORA then took the historical revenue data and used different weighting methods to calculate moving averages to find the method that preformed the “best” in predicting the monthly distribution of the historical data. The best method was determined by calculating the standard error for each weighting method.<sup>1</sup> The weighting method that minimized the standard error for the revenue stream was selected. By undertaking this analysis, ORA was able to choose the weighting methodology that most accurately distributes total revenue over the months using history as a guide.

The methods tested included, but were not limited to:<sup>2</sup>

- A three-year moving average of the monthly share of total revenue, in which each year is weighted equally (i.e., 33⅓% per year).
- A five-year moving average of the monthly share of total revenue, in which each year is weighted equally (i.e., 20% per year).
- A five-year moving average of the monthly share of total revenue, in which each year is weighted using an exponentially decreasing order, with the most recent year ( $\alpha$ ) weighted at 50%, followed by 25% for the second most recent year, 12.5% for the third most recent year, and 6.25% each for the fourth and fifth most recent years.
- Lastly, a five-year moving average of the monthly share of total revenue, in which the Microsoft Excel Solver add-in program was used to determine alpha ( $\alpha$ ), which is the weight for the most recent year. The calculation of alpha by Excel Solver was subject to the following constraints: Minimize the sum of squared errors; the value of  $\alpha$  must be greater than zero and less than one; and the weight of each year must be lower than the previous year’s weight. The weights of the subsequent years were calculated according to the following equations:
  - The weight of the second year =  $\alpha(1-\alpha)$ ;
  - The weight of the third year =  $\alpha(1-\alpha)^2$ ;
  - The weight of the fourth year =  $\alpha(1-\alpha)^3$ ; and
  - The weight of the fifth year =  $1-(\alpha + \alpha(1-\alpha) + \alpha(1-\alpha)^2 + \alpha(1-\alpha)^3)$ .

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<sup>1</sup> The standard error was measured as the root mean squared error (RMSE) of the weighting method divided by the average revenue value across all months of history. This statistic measures the average “miss” for each monthly prediction.

<sup>2</sup> A ten-year moving average, in which each year is weighted equally, was also tested for the estate and transfer tax.

A table depicting the weights used in each method tested is below:

<b>Fiscal Year</b>	<b>3-year Moving Average, Equal Weights</b>	<b>5-year Moving Average, Equal Weights</b>	<b>10-year Moving Average, Equal Weights</b>	<b>5-year Moving Average, Exponentially Declining Weights Starting with <math>\alpha=50\%</math></b>	<b>Solver Determined <math>\alpha</math>, Exponentially Declining Weights</b>
<b>2021</b>	33 $\frac{1}{3}$ %	20%	10%	50%	$\alpha$
<b>2020</b>	33 $\frac{1}{3}$ %	20%	10%	25%	$\alpha(1-\alpha)$
<b>2019</b>	33 $\frac{1}{3}$ %	20%	10%	12.5%	$\alpha(1-\alpha)^2$
<b>2018</b>	n/a	20%	10%	6.25%	$\alpha(1-\alpha)^3$
<b>2017</b>	n/a	20%	10%	6.25%	1-sum of others
<b>2016</b>	n/a	n/a	10%	n/a	n/a
<b>2015</b>	n/a	n/a	10%	n/a	n/a
<b>2014</b>	n/a	n/a	10%	n/a	n/a
<b>2013</b>	n/a	n/a	10%	n/a	n/a
<b>2012</b>	n/a	n/a	10%	n/a	n/a

After testing, the best fit models for each revenue item were determined as follows:

<b>Best Fit Model</b>	<b>Revenue Items</b>
3-Year Moving Average Equal Weight	Sales and Use Tax
5-Year Moving Average Equal Weight	<u>Personal Income Tax</u> Estimated Payments; Final Payments Financial Institutions Tax Health Care Provider Assessment Motor Vehicle License Fees Cigarette Excise Tax Racing and Athletics Tax Lottery Transfer
5-Year Moving Average Exponentially Declining Weights ( $\alpha = 50\%$ )	<u>Personal Income Tax</u> Withholding Payments; Refunds and Adjustments Bank Deposits Tax Other Tobacco Products Excise Tax Alcohol Excise Tax Realty Transfer Tax Departmental Receipts
5-Year Moving Average Exponentially Declining Weights ( $\alpha$ determined by Excel Solver)	Business Corporation Tax Public Utilities Gross Earnings Tax Insurance Company Gross Premiums Taxes
10-Year Moving Average Equal Weight	Estate and Transfer Tax

ORA then applied the weights associated with the best fit model for each revenue item to the percentage of adjusted revenues that occurred in a given month over the previous five fiscal years, except for estate and transfer taxes for which the previous ten fiscal years were used.<sup>3</sup> The results were added to obtain a single monthly percentage of expected revenue. These percentages were then applied to the revised FY 2022 revenue estimate for each revenue item. For the fiscal year-to-date estimates, the monthly percentages were summed and then applied to the revised FY 2022 revenue estimate for each revenue item.

For FY 2022 monthly and fiscal year-to-date expected personal income tax final payment revenues, the expected revenues were determined using the above methodology for all revenues except for the pass-through entity payments. ORA then added the estimated pass-through entity payments to realized personal income tax final payments to yield adjusted personal income tax final payments revenues. The adjusted personal income tax final payments are then compared to the revised FY 2022 personal income tax final payments expected revenues, which include estimated pass-through entity payments.

#### ***Adjustments Due to the November 2021 Revenue Estimating Conference***

After the November REC, ORA sets expected revenues equal to adjusted revenues for the months of July through October, including all adjustments and reimbursements of redeemed tax credits, acknowledging that the revised revenue estimates adopted at the November REC are based on actual revenues through October. ORA then subtracts the actual revenues from the revised November 2021 REC estimates for FY 2022 to determine the amount of the remaining revised estimate that will be realized in November through June. ORA takes the monthly percentage noted above and divides it by the sum of the monthly percentages for November through June. This percentage is then multiplied by the amount of remaining revised estimate to yield the monthly expected revenues. Fiscal year-to-date expected revenues are then determined by summing the modified monthly percentages and applying this sum to the remaining revised estimate. For controlled substances and other miscellaneous revenues, the actual monthly and fiscal year-to-date revenues are used in place of an estimate due to the discrete and unpredictable nature in the timing of these receipts.

Table A provides the average percentages used to determine expected monthly and fiscal year-to-date revenues for January. Monthly and fiscal year-to-date average percentages were determined as noted above.

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<sup>3</sup> The previous five fiscal years are FY 2017 through FY 2021, and the previous ten fiscal years are FY 2012 through FY 2021.

<b>Revenue Item</b>	<b><u>Percent Received</u></b>		<b>Revenue Item</b>	<b><u>Percent Received</u></b>	
	<b>Jan.</b>	<b>YTD</b>		<b>Jan.</b>	<b>YTD</b>
Personal Income Taxes			Sales and Use Taxes	9.4 %	60.6 %
Estimated Payments	24.5 %	62.8 %	Motor Vehicles Fees	8.4 %	59.4 %
Final Payments	6.9 %	30.1 %	Cigarettes Taxes	7.9 %	60.4 %
Withholding Payments	8.4 %	56.6 %	Alcohol Excise Taxes	8.7 %	60.3 %
Refunds/Adjustments	3.2 %	19.7 %	Estate and Transfer	5.1 %	64.4 %
Business Corporation Taxes	3.8 %	42.0 %	Racing and Athletics	8.3 %	58.6 %
Utilities Gross Earnings Taxes	0.5 %	50.8 %	Realty Transfer	10.4 %	64.2 %
Financial Institutions Taxes	-1.6 %	23.0 %	Departmental Receipts	14.6 %	55.4 %
Insurance Co. Gross Premiums	0.8 %	47.8 %	Lottery Transfer	7.7 %	49.5 %
Bank Deposits	-0.2 %	41.3 %	Other Misc. Revenues	n/a	n/a
Health Care Provider Assessment	8.4 %	58.6 %	Unclaimed Property	0.0 %	0.0 %

The health care provider assessment consists of an assessment on nursing homes. Motor vehicle license and registration fees are comprised of fees paid to issue updated or duplicate operators' licenses. Racing and athletics taxes consist of a tax on wagers placed on out-of-state greyhound and horse races that are broadcast to Rhode Island via closed circuit television. The "Percent Received" for monthly and year-to-date departmental receipts is calculated excluding hospital licensing fee revenues, which are large and generally made only once in the fiscal year. The lottery transfer does not begin in a given fiscal year until August, and fiscal year-to-date percentages reflect gaming activity from July through the prior month, while monthly percentages reflect the prior month's gaming activity. The unclaimed property transfer occurs only in June of each fiscal year.

The revised FY 2022 estimates by revenue item as adopted at the November 2021 REC are as follows:

<b>Table B. FY 2022 Revised Revenue Estimates by Major Revenue Item</b>			
<b>Revenue Item</b>	<b>Revised FY 2022 Estimate</b>	<b>Revenue Item</b>	<b>Revised FY 2022 Estimate</b>
Personal Income Taxes		Sales and Use Taxes	\$ 1,432,000,000
Estimated Payments	\$ 275,000,000	Motor Vehicles Fees	1,000,000
Final Payments <sup>a</sup>	404,000,000	Cigarettes Taxes	153,800,000
Withholding Payments	1,375,900,000	Alcohol Excise Taxes	23,200,000
Refunds/Adjustments	(415,300,000)	Estate and Transfer	39,800,000
Business Corporation Taxes <sup>b</sup>	209,900,000	Racing and Athletics	500,000
Public Utilities Gross Earnings	94,300,000	Realty Transfer	20,500,000
Financial Institutions Taxes	35,700,000	Departmental Receipts <sup>c</sup>	419,200,000
Insurance Co. Gross Premiums	137,500,000	Lottery	393,300,000
Bank Deposits	3,800,000	Other Misc. Revenues	11,300,000
Health Care Provider Assessment	37,200,000	Unclaimed Property	14,700,000
		<b>Total General Revenues *</b>	<b>\$ 4,684,300,000</b>

\* Total general revenues estimate includes a personal income tax net accrual of \$17,000,000.

*Additional Footnotes to Table B:*

<sup>a</sup> Personal income tax final payments revised revenue estimate includes a revised estimate of \$120 million of estimated pass-through entity payments. Personal income tax final payments were modified by adding in the estimated pass-through entity payments as allocated by the percentage received in each month in FY 2021 separately from the estimated revenues from all other personal income tax final payments.

Final payments also include a revised estimate of \$14,885,051 for the impact of taxing Paycheck Protection Program (PPP) loans greater than \$250,000 that were or will be forgiven in TY 2021. Also included is the revenue impact of \$(2,707) from exempting refunds from the Wavemaker Fellowship Program from state personal income tax. The revenue impacts from PPP loan forgiveness and the Wavemaker exemption are expected to be realized during the months of January through June 2022.

ORA will assess adjusted November through December personal income tax final payments revenue flows less pass-through entity payments against “base” personal income tax final payments revenues of \$269,117,656. ORA will assess adjusted January through June personal income tax final payments revenue flows less pass-through entity payments against “base” personal income tax final payments revenues of \$284,000,000.

<sup>b</sup> Business corporation tax revenue estimate includes a revised estimate of \$32,921,369 for the impact of taxing Paycheck Protection Program (PPP) loans greater than \$250,000 that were or will be forgiven in TY 2021, which is expected to impact revenues in December through June.

ORA will assess adjusted November business corporation tax revenue flows against “base” business corporation tax revenues of \$176,978,631 and December through June business corporation revenue flows against “base” business corporation tax revenues of \$209,900,000.



<sup>c</sup> Departmental receipts revenues estimate includes hospital licensing fee revenues of \$170,246,830. These revenues will be booked as a receivable in June. Also included in the departmental receipts revised revenue estimate is \$946,892 from the increase in the pesticide registration fee, \$90,000 from the expansion of eligibility for engineer licensing, and \$(3,440,000) from the delay in motor vehicle license plate reissuance. These enacted changes included in the revised revenues estimate are expected to impact revenues during the period of July 2021 through June 2022. The principles of the November 2021 REC removed from the departmental receipts revenues estimate \$2,715,925 from the increase in the sales representative license fee for broker dealers, \$366,300 from the imposition of a new licensing fee on marine shellfish processors as these amounts are not expected to be received in FY 2022.

A restructuring of work release fees is expected to increase departmental receipts revenues by \$18,880 during the months of August 2021 through June 2022. An increase in Misquamicut beach fees is expected to have a revenue impact of \$595,372 during the months of August through September 2021 and June 2022. Additionally, there is an estimated revenue impact of \$100,000 from the transfer of CDL road test fees to the Division of Motor Vehicles and \$(341,620) from the elimination of sales tax permit fees. Both items are expected to impact departmental receipts revenues during the months of January through June 2022. Finally, the increase in Coastal Resources Management Council fines revenue impact of \$15,000 is expected to impact revenues during the months of March through June 2022.

ORA will assess adjusted October through December departmental receipts revenue flows against “base” departmental receipts revenues of \$248,584,418, January through February departmental receipts revenue flows against “base” departmental receipts revenues of \$248,342,798, March through May departmental receipts revenue flows against “base” departmental receipts revenues of \$248,357,798, and June departmental receipts revenue flows against “base” departmental receipts revenues of \$248,953,170.

### **III. Law Changes Enacted in the 2021 Session That Impact General Revenues**

In the 2021 session, the General Assembly enacted several changes to the state’s general laws that impact general revenues that were included in the estimates adopted at the November 2021 REC. These changes can be categorized as follows: (1) changes that reclassify revenues that were previously not considered to be general revenues to general revenues and (2) changes that impact FY 2022 general revenues that will be realized through monthly revenue flows. The changes in state law that impact monthly revenue flows will generally exhibit seasonality in the receipt of the revenue. The Office of Revenue Analysis (ORA) attempts to model the seasonality in such revenue flows in order to better align the expected receipt of revenues with the actual receipt of revenues. A more specific discussion of these items is provided below.

#### ***Revenue Changes That Reclassify General Revenues***

##### **Departmental Receipts**

The 2021 General Assembly approved of the transfer of the Commercial Driver’s License (CDL) road test program from the Community College of Rhode Island (CCRI) to the Department of Revenue, Division of Motor Vehicles (DMV). This transfer takes effect on January 1, 2022 and reclassifies restricted receipts revenues from when CCRI administered the program to general revenues when DMV administers the program. The projected revenue impact of \$100,000 is expected to occur evenly in the period of January 2022 through June 2022 and was included in the revised FY 2022 estimate of departmental receipts adopted at the November 2021 REC.

## ***Revenue Changes That Will Be Realized Through Monthly Revenue Flows***

### **Personal Income Tax Final Payments**

The 2021 General Assembly enacted legislation adding a new modification increasing a taxpayer's federal adjusted gross income (AGI) for the calculation of the Rhode Island personal income tax. This modification adds to federal AGI any amount of Paycheck Protection Program (PPP) loan forgiveness greater than \$250,000 received in TY 2021. For FY 2022, the impact of this change was revised up by the principles of the November 2021 REC from \$14,368,622 to \$14,885,051.

Additionally, there is an estimated revenue impact of \$(2,707) from the exemption from Rhode Island personal income tax of any refunds issued under the Stay Invested in RI Wavemaker Fellowship tax credit program, which was included in the November 2021 REC revised estimate for personal income tax.<sup>4</sup> This change is applicable to tax years beginning on or after January 1, 2021.

The revenue impacts from these two legislative changes are expected to be realized in the period from January 2022 through June 2022, but primarily in the months of March and April.

### **Business Corporation Tax**

The 2021 General Assembly passed legislation adding to the amount of net income for the purposes of calculating the business corporation tax any amount of PPP loan forgiveness greater than \$250,000 received in TY 2021. For FY 2022, the impact of this change was revised up by the principles of the November 2021 REC from \$31,809,821 to \$32,921,369. The revenue impacts from this legislative change are expected to be realized in the period from December 2021 through June 2022.

### **Insurance Company Gross Premiums Tax**

The 2021 General Assembly enacted initiatives that will impact the monthly revenue flows for insurance company gross premiums tax for health insurers and were included in the revised FY 2022 estimate of insurance company gross premiums tax revenues adopted at the November 2021 REC. An initiative to offer improved long-term care options via the Medicaid Long-Term Services and Supports (LTSS) system is expected to increase insurance company gross premiums tax revenues by \$97,386. This initiative includes the Governor's recommended changes to expand home and community-based services to delay entry into a nursing home. It includes rate increases for assisted living and shared living services, specialized residential placements, and home care services. This initiative has an effective date of July 1, 2021, and the increased revenues from it are expected to be realized in accordance with the monthly flow of all other insurance company gross premiums taxes paid by health insurers.

Additionally, an initiative to offer perinatal doula services through Medicaid is expected to increase insurance company gross premiums tax revenues by \$9,560. This initiative is also effective July 1, 2021, and the revenues generated by the initiative are expected to be realized in

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<sup>4</sup> For details on the Stay Invested in RI Wavemaker Fellowship see R.I. Gen. Laws Chapter 42-64.26.

accordance with the monthly flow of revenues of all other insurance company gross premiums taxes paid by health insurers.

Effective October 1, 2021 is the imposition of a nursing home minimum staffing requirement, which has an expected revenue increase of \$3,769 in insurance company gross premiums tax paid by health insurers. The projected revenue increase from this proposal is expected to be realized in the period of October 2021 through June 2022 in accordance with the monthly flow of revenues of all other insurance company gross premiums taxes paid by health insurers during this period.

#### Health Care Provider Assessment

The LTSS system initiative noted under insurance company gross premiums tax is projected to decrease health care provider assessment revenues by \$196,534, which was included in the revised FY 2022 estimate of health care provider assessment revenues adopted at the November 2021 REC. The initiative has an effective date of July 1, 2021, and the decreased revenues are expected to be realized in accordance with the monthly flow of health care provider assessment revenues.

The nursing home minimum staffing requirement noted under the insurance company gross premiums tax is projected to increase health care provider assessment revenues by \$72,552 and was included in the revised FY 2022 estimate of health care provider assessment revenues adopted at the November 2021 REC. This requirement takes effect on October 1, 2021, and the revenue impact from this initiative is expected to be realized in the October 2021 through June 2022 period in the same manner as all other health care provider assessment revenues.

The 2021 General Assembly also enacted the authorization for Medicaid reimbursement for services provided by community health workers. This initiative was included in the revised estimate of health care provider assessment revenues adopted at the November 2021 REC and is projected to increase health care provider assessment revenues by \$53,194. The authorization for this reimbursement is effective October 1, 2021, and the revenue impact is expected to be realized in the period of October 2021 through June 2022 in accordance with the receipts of all other health care provider assessment revenues.

#### Realty Transfer Tax

Legislation was enacted in the 2021 session that created an affordable housing development exemption from the realty transfer tax for real estate transactions or transfers of acquired real estate companies that were either financed by federal low incoming housing tax credits or were completed by non-profit entities or entities owned by a non-profit entity exempt from tax under § 501(c)(3) of the Internal Revenue Code provided that the development falls under a qualifying affordable housing program. Realty transfer tax revenues are projected to be reduced under this initiative by \$30,194, which was included in the realty transfer tax revenues estimate adopted at the November 2021 REC. The legislative change is effective July 1, 2021, and the revenue impact is expected to be realized in accordance with the monthly flow of all other realty transfer tax revenues.

It should be noted that the 2021 General Assembly passed legislation that imposes an additional \$2.30 tax for each \$500 value, or fractional part thereof, above \$800,000 that is paid for the purchase of property or the interest in an acquired real estate company. The amount of additional realty transfer tax collected from this surcharge will be deposited in the Housing Production Fund, a restricted receipt account. Thus, there is no impact on general revenues from this legislative change.

### Departmental Receipts

The 2021 General Assembly passed legislation enacting several law changes that impact the FY 2022 revenue flows for departmental receipts. The revenue impacts noted below were included in the revised FY 2022 estimate for departmental receipts adopted at the November 2021 REC.

Technical changes to the credentialing and licensure requirements for professional engineers and the creation of an engineering technologists license were enacted in the 2021 session. These changes are projected to increase departmental receipts by \$90,000 in FY 2022.

Also, during the 2021 session, legislation was enacted to increase the pesticide registration fee by \$100 and the commercial fertilizer registration fee by \$28, both as of July 1, 2021. The anticipated revenue increase from these two registration fee increases is \$946,892.

The 2021 General Assembly enacted legislation that delays the reissuance of the state's standard motor vehicle license plate (the "Wave" plate) until July 1, 2022. The estimated revenue impact of this delay in motor vehicle plate reissuance is \$(3,440,000). The revenue impacts from each of the above departmental receipts legislative changes are expected to be realized during the period of July 2021 through June 2022 in the same manner as the already existing fees in the case of an increase in existing fees or in accordance with the flow of aggregate departmental receipts revenues in the case of new initiatives.

Additionally, during the 2021 session the General Assembly approved the Governor's proposal to restructure the work release fees for participation in the work release program for incarcerated individuals, effective July 1, 2021. This enacted change is projected to increase departmental receipts by \$18,880 in the period between August 2021 and June 2022.

The 2021 General Assembly also approved the Governor's proposal to increase beach fees at Misquamicut State Beach, effective July 1, 2021. The projected revenue impact of \$595,372 is anticipated to be realized in the months of August and September 2021 and June 2022.

Effective July 1, 2021, the maximum fines and penalties that can be assessed by the Coastal Resources Management Council (CRMC) increased from \$2,500 to \$10,000. The revenue impact from this change of \$15,000 is expected to be realized in the months of March 2022 through June 2022.

The 2021 General Assembly approved the Governor's proposal to eliminate the \$10 administrative fee for the issuance of sales tax permits by the Department of Revenue. The elimination of this

fee is effective as of January 1, 2022. The projected decrease in departmental receipts revenues of \$341,620 is anticipated to be realized in January 2022 through June 2022.

Additionally, the 2021 General Assembly approved the Governor's proposal to increase the sales representative license fee for broker dealers from \$75 to \$100, effective July 1, 2021. Also, a new license fee will be imposed on marine shellfish processors, with an effective date of July 1, 2021. Prior to the November 2021 REC, these fee increases are projected to increase departmental receipts revenues by \$2,715,925 and by \$366,300, respectively, in FY 2022. However, the principles of the November 2021 REC determined that these revenues are not expected to be realized in FY 2022.