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<http://munios.com/live/CommonwealthDec2017>

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www.massbondholder.com



The Commonwealth of Massachusetts Bond Financing Programs

December 20, 2017
Commonwealth Credit Review

Disclaimer

This presentation has been prepared by the Commonwealth of Massachusetts to provide summary information relative to the general obligation credit of the Commonwealth. The presentation is incomplete. The presentation is not part of the Commonwealth's Information Statement (Information Statement) and is qualified in all respects by reference to the most recently updated Information Statement that has been filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access (EMMA) system.

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GOVERNOR CHARLES D. BAKER



TREASURER
DEBORAH B. GOLDBERG



Economic Update – Statistical Overview

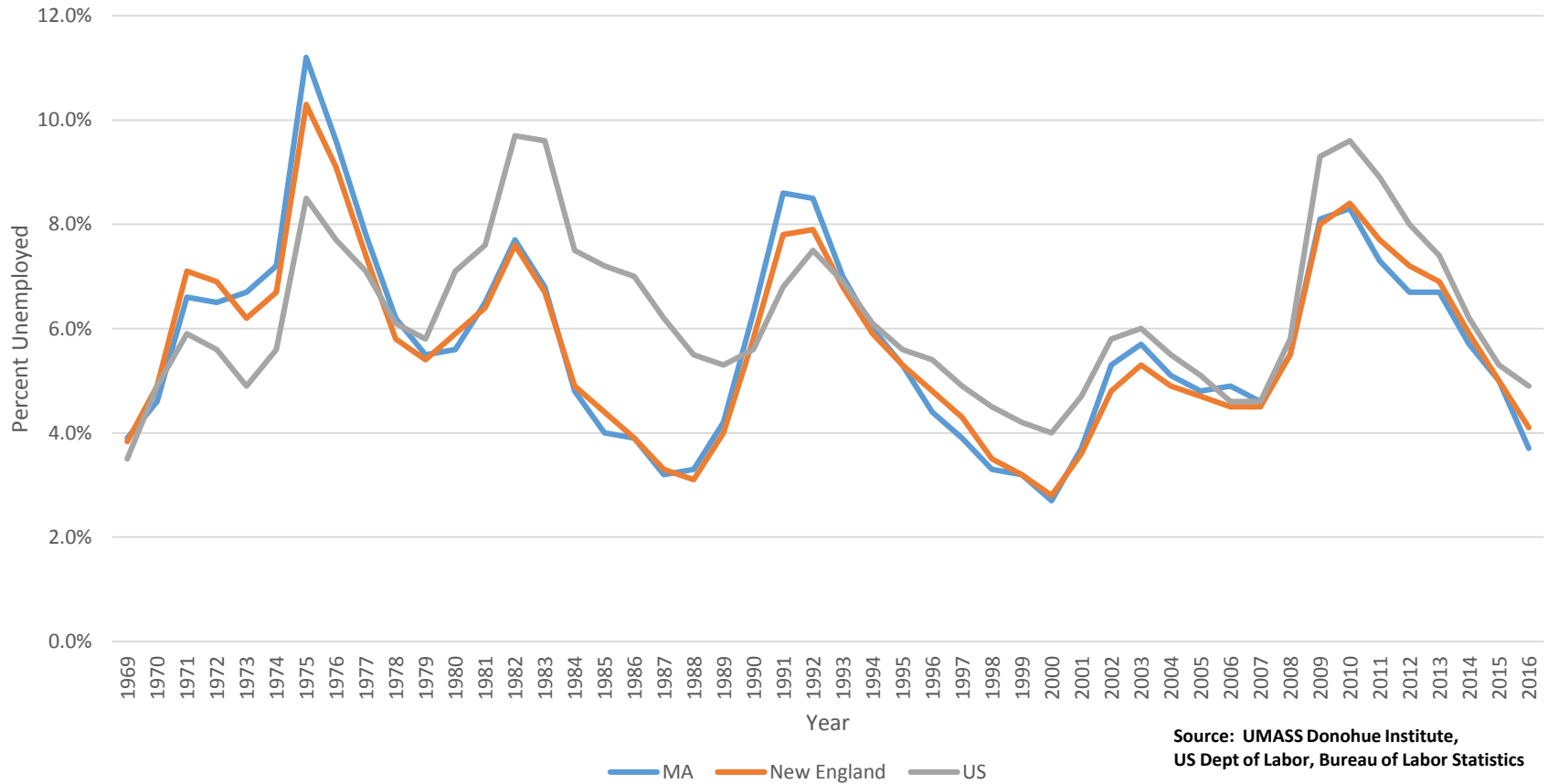
| | <u>Massachusetts</u> | <u>United States</u> |
|--|----------------------|----------------------|
| <u>Population</u> | | |
| July-16 Estimated 6-year percent change | 3.8% | 4.5% |
| <u>Personal Income, Consumer Prices, Poverty</u> | | |
| 2016 Per Capita Personal Income | \$64,235 | \$49,246 |
| 2016 Average Annual Pay, All Industries | \$67,432 | \$53,621 |
| 2015-16 Annual Percent Change in CPI-U | 1.5% | 1.3% |
| Sept-16 to Sept-17 Annual Percent Change in CPI-U | 2.7% | 2.2% |
| 2016 Poverty Rate | 10.4% | 14.0% |
| 2016 Average Weekly Earnings, Manufacturing Production | \$946 | \$856 |
| Annual Percent Change (2015-2016) | 4.5% | 1.6% |
| <u>Employment</u> | | |
| Jan-16 to Jan-17 Percent Change in Nonfarm Employment | 1.7% | 1.9% |
| 2016 Average Annual Unemployment Rate | 3.7% | 4.9% |
| Oct-17 Unemployment Rate | 3.7% | 4.1% |
| <u>Education</u> | | |
| 2016 Expenditure Per Pupil K-12, Public | \$15,789 | \$11,536 |
| 2016 Percent of Adults with at least a Bachelor's Degree | 42.7% | 31.3% |
| <u>Economic Base and Performance</u> | | |
| 2015-16 Percent Change in Gross Domestic Product | 2.0% | 1.5% |
| 2015-16 Percent Change in International Exports | 1.1% | -4.7% |
| 2015-16 Percent Change in Authorized Housing Permits | -6.5% | 2.0% |

Source: UMASS Donahue Institute



Economic Update – Unemployment

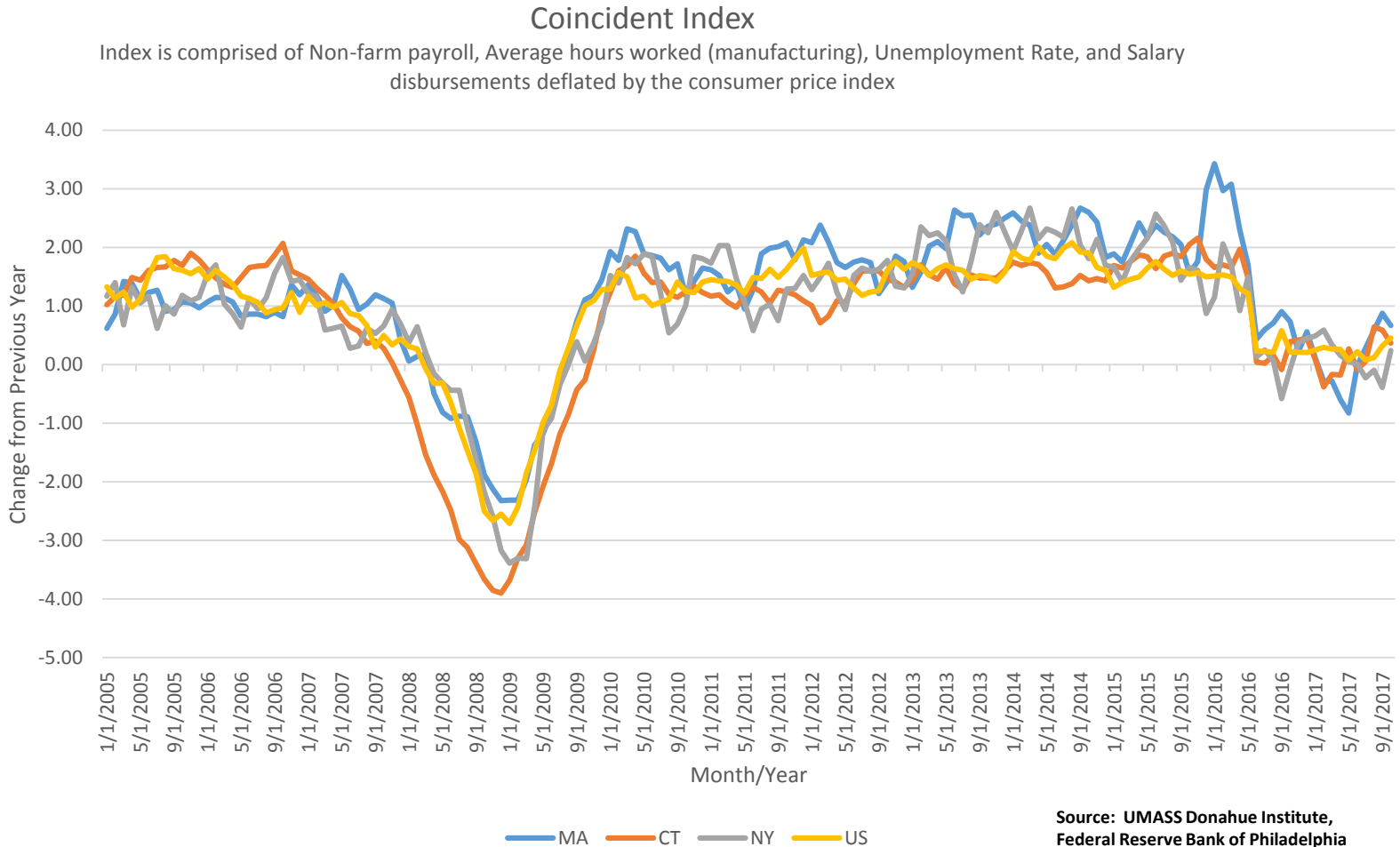
Average Annual Unemployment Rate
Massachusetts, New England and United States



Source: UMASS Donohue Institute,
US Dept of Labor, Bureau of Labor Statistics



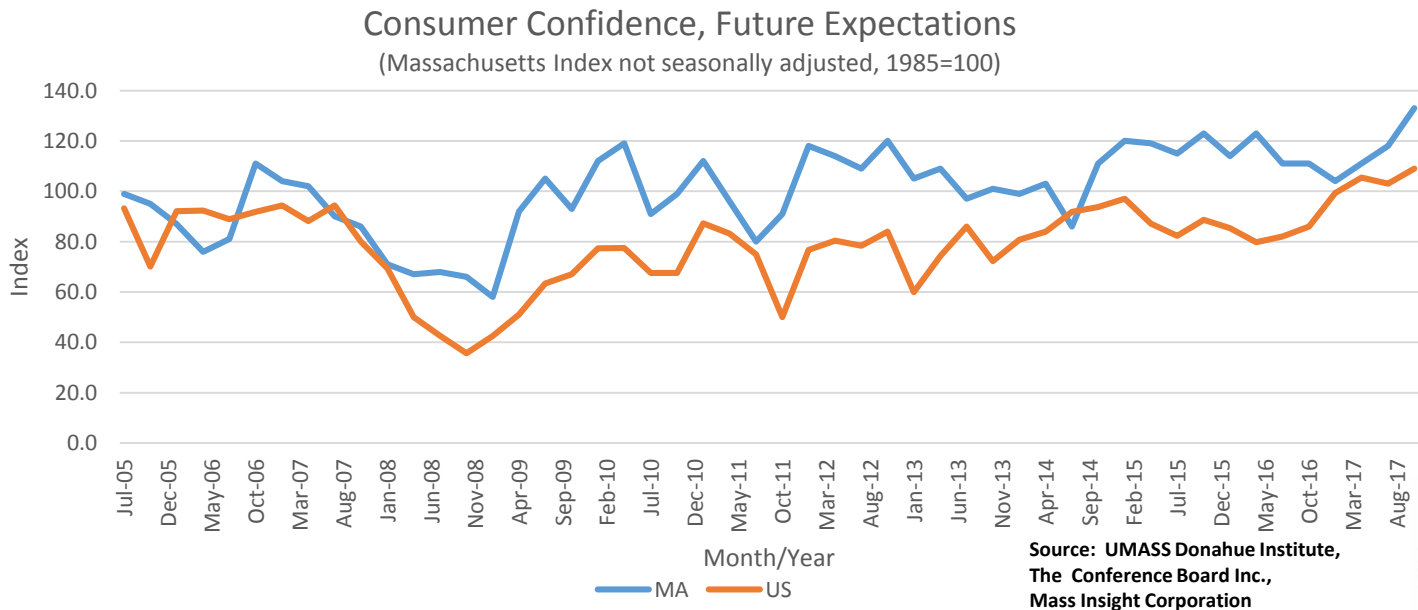
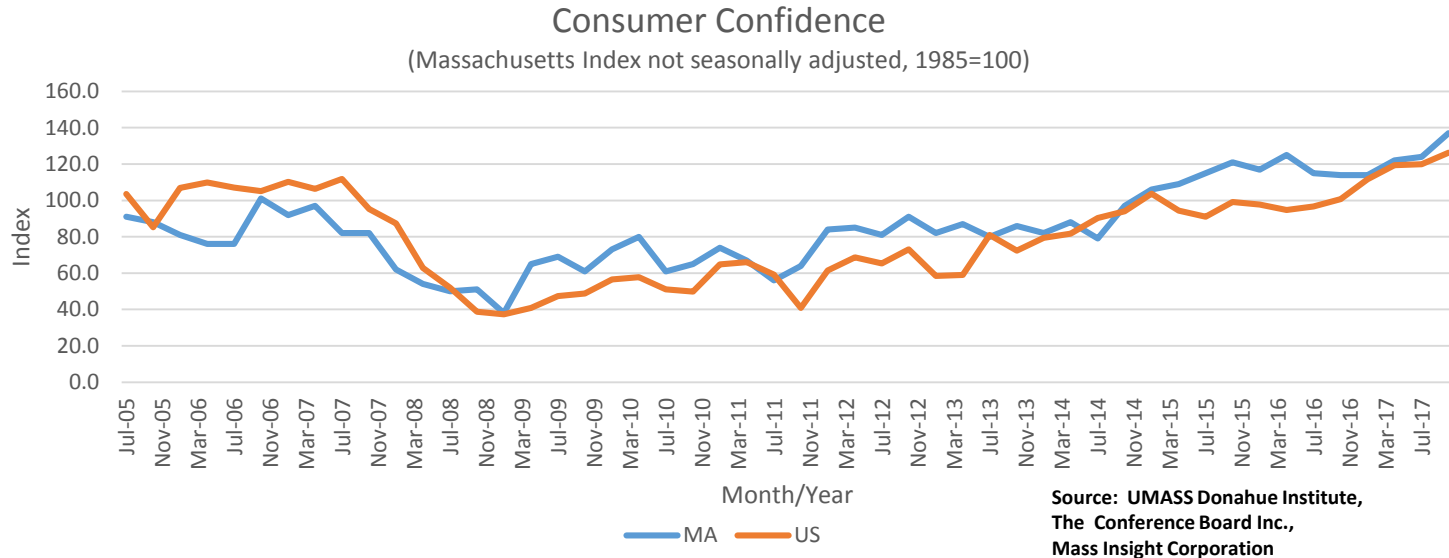
Economic Update – Coincident Index



Source: UMASS Donahue Institute, Federal Reserve Bank of Philadelphia



Economic Update – Consumer Confidence



Department of Revenue

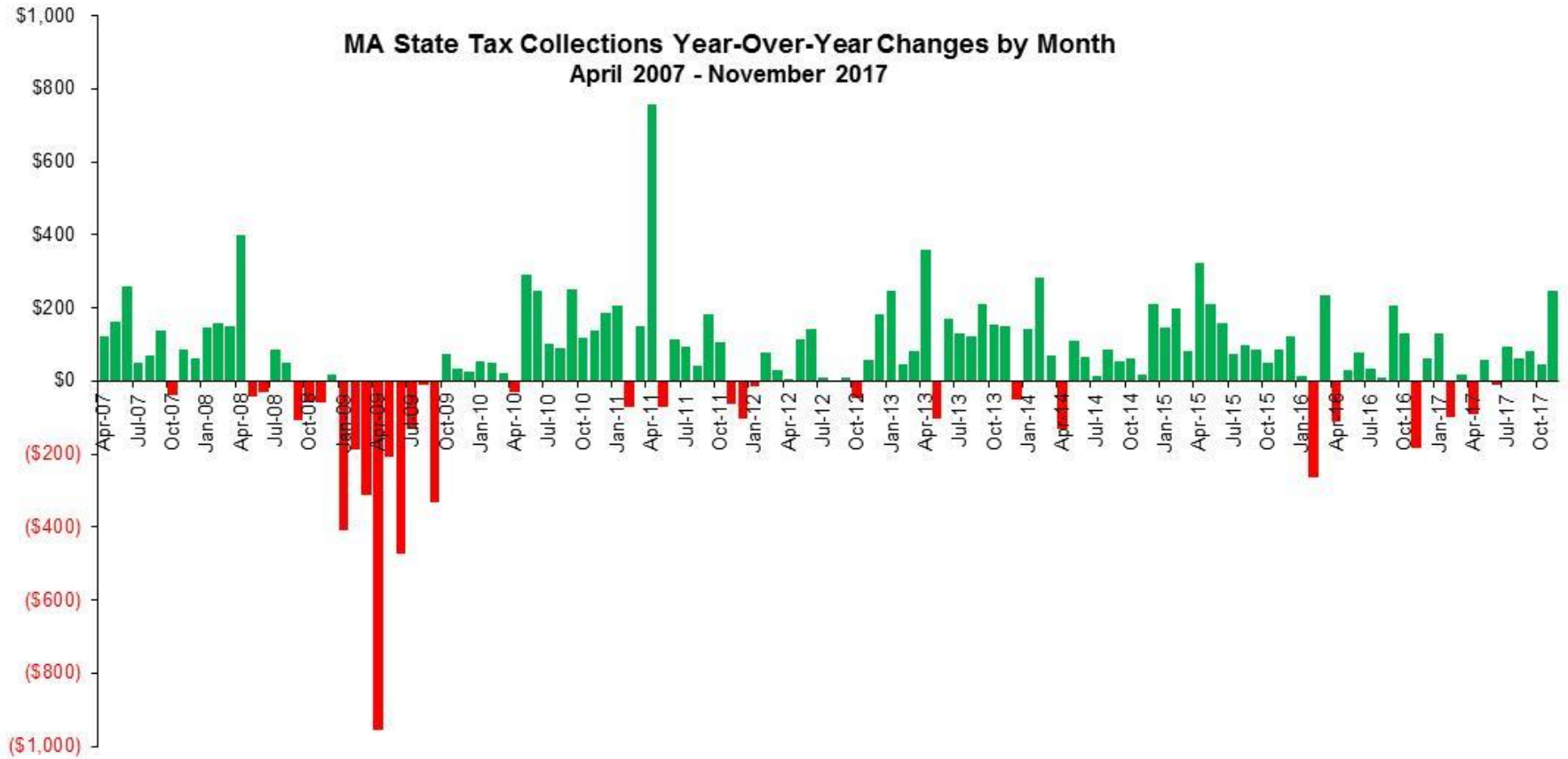
Dr. Kazim P. Özyurt

Chief Economist,

Director, Office of Tax Policy & Analysis



Monthly year-over-year changes in collections:



FY18 Year-to-Date (Through November) Tax Collections Update

November 2017 Tax Collection Summary (in \$ millions)

Preliminary as of December 5, 2017

| | Month of November | | | | | | FY18 YTD as of November | | | | | |
|---|----------------------------|-----------------------------------|----------------------------------|--|---|--------------------------------------|--------------------------------|---|--|--|---|--|
| | 11/2017 Actual Collections | 11/2017 v. 11/2016 \$ Fav/(Unfav) | 11/2017 v. 11/2016 % Fav/(Unfav) | 11/2017 Actual vs Benchmark \$ Fav/(Unfav) | 11/2017 Actual vs Benchmark % Fav/(Unfav) | 11/2017 v. 11/2016 Baseline % Change | 11/2017 YTD Actual Collections | 11/2017 YTD v. 11/2016 YTD \$ Fav/(Unfav) | 11/2017 YTD v. 11/2016 YTD % Fav/(Unfav) | 11/2017 YTD Actual vs Benchmark \$ Fav/(Unfav) | 11/2017 YTD Actual vs Benchmark % Fav/(Unfav) | 11/2017 YTD v. 10/2016 YTD Baseline % Change |
| Income | | | | | | | | | | | | |
| Income Withholding | 1,001 | 108 | +12.1% | (0) | -0.04% | +4.5% | 4,947 | 263 | +5.6% | 97 | +2.0% | +6.3% |
| Income Est. Payments | 28 | 12 | +68.5% | 11 | +61.4% | +68.3% | 644 | 1 | +0.1% | (1) | -0.1% | +0.7% |
| Income Returns/Bills | 31 | 2 | +7.0% | 1 | +5.1% | +6.2% | 251 | 16 | +6.7% | 27 | +12.1% | +12.4% |
| Income Refunds Net (outflow) | (55) | 27 | +32.7% | 27 | +32.9% | +31.9% | (291) | (22) | -8.3% | (11) | -3.8% | -4.5% |
| Subtotal Income | 1,006 | 148 | +17.3% | 39 | +4.0% | +9.2% | 5,552 | 258 | +4.9% | 113 | +2.1% | +5.9% |
| Sales & Use | | | | | | | | | | | | |
| Sales - Regular | 354 | 14 | +4.2% | 1 | +0.3% | +2.2% | 1,825 | 53 | +3.0% | 14 | +0.8% | +2.6% |
| Sales - Meals | 98 | 4 | +4.6% | (1) | -1.4% | +3.1% | 519 | 22 | +4.5% | (2) | -0.3% | +4.2% |
| Sales - Motor Vehicles | 73 | 21 | +41.7% | 2 | +2.4% | +2.6% | 348 | 6 | +1.7% | 6 | +1.8% | +1.0% |
| Subtotal Sales & Use | 524 | 40 | +8.2% | 1 | +0.3% | +2.4% | 2,693 | 81 | +3.1% | 18 | +0.7% | +2.7% |
| Corporate & Business - Total | 18 | 56 | +145.9% | (12) | -40.0% | +11.3% | 714 | 82 | +13.0% | 52 | +7.9% | +8.4% |
| All Other | 190 | 3 | +1.7% | (3) | -1.7% | -1.5% | 962 | 31 | +3.3% | 20 | +2.1% | +2.3% |
| Total Tax Collections | 1,737 | 247 | +16.6% | 25 | +1.5% | +5.6% | 9,921 | 452 | +4.8% | 204 | +2.1% | +4.8% |

Notes: (1) The figures above exclude Tax-Related Settlements & Judgments exceeding \$10 million each. These totaled \$0.0 million in November 2017 and \$0.0 million during FY18 YTD.

(2) The November benchmark reflects the full Fiscal Year 2018 benchmark of \$26.504 billion. The FY18 revenue benchmark of \$26.504 billion was used in building the signed FY18 General Appropriations Act.



FY18 Year-to-Date (Through November) Tax Collections Update

- Five months into the fiscal year
 - Moderate revenue growth
 - Near or moderately above benchmark
- Totaled \$9.9B
 - Ahead of last year by \$452M, or +4.8% (growth could normalize in the coming months), and
 - Ahead of Year-to-Date benchmark by \$204M or 2.4%
 - *Better than expected performances in:*
 - *income tax withholding*
 - *income returns/bills payments*
 - *regular sales & use tax*
 - *corporate & business taxes*
 - *all other taxes*
 - *One-time revenue events (\$60M+) helped withholding and corporate & business tax performance*



FY18 Year-to-Date (Through November) Tax Collections Update

More specifically:

- *Withholding*: \$4.9B, +\$263M, +5.6% actual, +6.3% baseline, and \$97M or 2.0% above benchmark
- *Non-withholding* is \$16M or 2.7% above FYTD benchmark (Dec/Jan and next filing season performance is critical)
- *Sales & use tax* collections: \$2.7B, +\$81M, +3.1% actual, +2.7% baseline; very close to the target, \$18M or 0.7% over benchmark
- *Corporate and business* tax collections: \$714M, +\$82M, +13.0% actual, +8.4% baseline; \$52M or 7.9% over benchmark, more than half is due to one-time revenue events
- *All Other* taxes: \$962M, +\$31M, +3.3% actual, +2.3% baseline; 20M or 2.1% over benchmark, mostly due to volatile estate tax category



Executive Office for Administration & Finance

Michael Heffernan

Secretary

Jennifer Sullivan

*Assistant Secretary for
Capital Finance*

Catharine Hornby

*Assistant Secretary and Budget
Director*

Heath Fahle

Finance Director



Fiscal Year 2018: Update

Budget:

- The fiscal 2018 budget, as approved by the Governor, totals approximately \$39.4 billion, after accounting for \$193 million in net line-item vetoes, and excluding transfers to the Medical Assistance Trust Fund.
- The fiscal 2018 budget as approved by the Governor is approximately \$652 million, or 1.7%, greater than fiscal 2017 estimated spending levels at the time of its approval, and is based on a projection of \$26.504 billion in tax revenue, excluding large tax-related settlements and judgments.
- Currently, the fiscal 2018 budget also projects a deposit of approximately \$70 million to the Stabilization Fund in fiscal 2018.
- Current estimates indicate that the variance between revenues and spending in fiscal 2018 is less than 1%. The Executive Office for Administration and Finance (A&F) will continue to monitor revenues and spending and implement measures as necessary to ensure that the Commonwealth's budget for fiscal 2018 will achieve statutory balance.



Revenue:

- Preliminary tax revenues (including large tax-related settlements) for the first five months of fiscal 2018, ending November 30, 2017, totaled \$9.921 billion, an increase of approximately \$438.6 million, or 4.6%, over the same period in fiscal 2017.
- Year-to-date fiscal 2018 tax collections through November, 2017 were approximately \$204 million above the year-to-date benchmark associated with the fiscal 2018 tax revenue estimate of \$26.504 billion.



Budget Process:

- On December 6, 2017, the Secretary of Administration and Finance and the House and Senate Ways and Means Committees conducted a hearing on state tax revenue estimates for fiscal 2019.
- On or before January 15 of each year, the Secretary is required to develop jointly with the House and Senate Committees on Ways and Means a consensus tax revenue forecast for the following fiscal year.
- The legislative budgetary process begins in late January with the Governor's budget submission to the Legislature for the fiscal year commencing in the following July.



Office of the State Comptroller

FY17 Statutory Basis Financial Report (SBFR)

Howard Merkowitz

Deputy Comptroller



Fiscal 2017 Statutory Basis Financial Report (SBFR)

- The SBFR is presented on a budgetary or statutory basis – cash receipts and expenditures, including two months accounts payable and receivable period; excludes trust funds and most activity of so-called business-type activities such as unemployment insurance and the Institutions of Higher Education
- The SBFR excludes “component units” such as Massachusetts School Building Authority (MSBA), some of the Massachusetts Department of Transportation (MassDOT), and Massachusetts Development Finance Agency (MassDevelopment)
- SBFR determines whether the budget is balanced according to state finance law. Determines the calculation of the “consolidated net surplus” and the end of year transfer to the Stabilization Fund



Fiscal 2017 Statutory Basis Financial Report (SBFR)

- FY17 budget ended in balance according to state finance law
- FY17 operating loss of \$34 million in the budgeted funds, compared to an \$89 million loss in FY16
- Budgeted fund ending balance of approximately \$1.448 billion, of which \$1.301 billion is in the Stabilization Fund
- Total budgeted fund revenue (prior to transfers between budgeted funds) increased by \$802 million, or 2.0%, to \$41.167 billion
- Budgeted fund tax revenue up \$211 million, or 0.9%, from FY16, with healthy employment growth (above U.S. growth) offset by a decline in corporate tax revenue and capital gains taxes.
- Budgeted fund expenditures and other uses (prior to transfers between budgeted funds) totaled \$41.20 billion, up \$747 million, or 2.7%
 - Medicaid expenditures totaled \$15.252 billion, up \$401 million, or 2.7%.



Fiscal 2017 Statutory Basis Financial Report (SBFR)

- Budgetary fund debt service was up \$110 million, or 5.1%, from FY16, but about unchanged after taking into account \$113 million in one-time FY16 savings from debt service paid from a non-budgeted fund capitalized with FY16 surplus revenues
- Net increase of \$9 million in Stabilization Fund balance in FY17
 - no withdrawals in FY17 and increases of \$9 million from investment earnings and withholding on certain transfer of Lottery prizes.



Fiscal 2017 Statutory Basis Financial Report (SBFR)

- \$25 million deposit to the State Retirement Benefits Trust Fund (SRBTF) to fund Other Post Employment Benefits (OPEB)
 - 10% of tobacco master settlement proceeds received in FY17

FY17 Stabilization Fund Activity (in \$ Thousands)

| | |
|---|--------------------|
| Stabilization Fund Balance as of July 1, 2016 | \$1,291,514 |
| Certain Lottery Withholding Taxes | \$377 |
| Investment Earnings | \$8,787 |
| Stabilization Fund Balance as of June 30, 2017 | \$1,300,678 |



Fiscal 2017 Comprehensive Annual Financial Report (CAFR)

- FY17 Comprehensive Annual Financial Report (CAFR) expected to be issued in early to mid-January 2018
- Fund Perspective
 - Similar focus to the SBFR in terms of fund coverage, but also includes trust funds not covered in the SBFR, and MSBA is incorporated into the statements as a blended component unit.
 - Purpose is to measure a government's ability to meet obligations from currently available resources
 - Uses a "modified accrual" basis of accounting, which is GAAP compliant, and takes into account short-term accruals (within one year). No long-term accruals or capital assets, depreciation, or adjustment for pension or OPEB liabilities.



Fiscal 2017 Comprehensive Annual Financial Report (CAFR)

- CAFR Government-Wide Perspective
 - Treats government according to accounting rules similar to private business
 - Includes business-type activities such as Unemployment Insurance and the Institutions of Higher Education within the Commonwealth's net position (formerly net assets)
 - Full accrual accounting for long-term assets and liabilities, including long-term debt, pensions, OPEB, capital assets, and compensated absences
 - Includes so-called "component units" such as MassDOT, Health Insurance Connector, and the Massachusetts Clean Water Trust, all of which have a close relationship to the Commonwealth

Other Post-Employment Benefits (OPEB) Actuarial Valuation

- New GASB Standard (GASB 74) implemented in FY17 requires changes in the way OPEB is accounted for:
 - GASB 74 requires the Commonwealth to use a “blended” discount rate based on a weighted average of the AA municipal bond rate as of June 30 (3.58%) and the Commonwealth’s expected long-term rate of return on plan assets (currently 7.5%).
- The most recent actuarial evaluation as of January 1, 2017 was released on November 17, 2017, and estimated the Commonwealth’s unfunded OPEB liability at \$19.4B (using a blended discount rate of 3.63%), an increase of approximately \$3.1 billion from January 1, 2016, when the discount rate used was 4.5%.
- OPEB is substantially funded on a pay-as-you-go basis; the value of plan assets as of January 1, 2017 was \$817M vs. a \$20.3B total liability.
- GASB 75 to be implemented in FY18 requires the full unfunded OPEB liability calculated under GASB 74 to be reflected on the Commonwealth’s balance sheet (statement of net position).



Financial Information on Comptroller's and Related Web Sites

Topic

- Statutory Basis Financial Report
- Comprehensive Annual Financial Report
- Pension Actuarial Valuations
- OPEB Actuarial Valuations
- Workers Comp Actuarial Valuations
- Stabilization Fund History

Web Link

- <http://www.mass.gov/comptroller/publications-and-reports/financial-reports/sbfr.html>
- <http://www.mass.gov/comptroller/publications-and-reports/financial-reports/cafr-reports.html>
- <http://www.mass.gov/perac/forms-pubs/commonwealth-reports.html>
- <http://www.mass.gov/comptroller/publications-and-reports/financial-reports/valuations.html>
- <http://www.mass.gov/comptroller/publications-and-reports/financial-reports/valuations.html>
- <http://www.mass.gov/comptroller/publications-and-reports/research-and-statistics/commonwealth-stabilization-fund.html>



Office of the State Treasurer

Debt / Capital Presentation

Sue Perez

Deputy Treasurer



Financing Update

- The State Treasurer’s Office (TRE) continues to issue debt periodically to fund the state’s capital budget, following the guidelines of the Executive Office for Administration & Finance’s (A&F) Debt Affordability Analysis.
- Since the October call, the Commonwealth has sold competitively \$815.2 million of GO new money and refunding bonds and \$142.7 million Federal Highway Grant Anticipation Notes also both new money and refunding, and issued \$593.3 million of Commonwealth Transportation Fund new money and refunding bonds through a negotiated sale.

| Series | Par Amount | Sale Date | Award/Bookrunner | Maturity Range | Avg Life | All-In-TIC |
|----------------|------------|------------|-------------------------------|----------------|----------|------------|
| GO 2017 E | \$300MM | 10/18/2017 | Bank of America Merrill Lynch | 2018-2036 | 11.7 | 2.87% |
| GO 2017 F | \$300MM | 10/18/2017 | Bank of America Merrill Lynch | 2037-2046 | 24.5 | 3.78% |
| GO 2017 E Ref | \$215MM | 10/18/2017 | Jefferies | 2022-2027 | 7.6 | 1.81% |
| GANS 2017 A | \$143MM | 11/1/2017 | Wells Fargo | 2021-2027 | 7.3 | 2.15% |
| CTF 2017 A | \$350MM | 11/6/2017 | Bank of America Merrill Lynch | 2019-2047 | 18.9 | 3.60% |
| CTF 2017 A Ref | \$243MM | 11/6/2017 | Bank of America Merrill Lynch | 2027-2043 | 19.0 | 3.29% |



Plan of Finance *

| Month | Par Amount | Structure ** | Type | Credit | Method of Sale |
|--------|------------|---|-------------|--------|----------------|
| Jan-18 | \$600MM | Fixed Rate Tax Exempt | New Money | GO | Competitive |
| Feb-18 | \$120MM | SIFMA Index Bonds (Direct Placement) | Remarketing | GO | Negotiated |
| May-18 | \$600MM | Fixed Rate Tax Exempt | New Money | GO | Competitive |

*Preliminary and subject to change

** Bond Series Structure TBD



Issuance Timeline*

- The Commonwealth expects to sell
 - 2018 Series A & B on January 9th
- Our current Information Statement is available at www.massbondholder.com. The Preliminary Official Statements will be also available on the website as they are released.
- To receive email notifications of our investor events please send us an email at: massbondholder@tre.state.ma.us or follow us on Twitter **@BuyMassBonds**

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* Preliminary, subject to change



QUESTIONS



Questions/Answers December 2017 Commonwealth Investor Call

1. Q: Why are the Statutory Basis Financial Reports (SBFR) reviewed and not audited while the Comprehensive Annual Financial Reports (CAFR) are audited? As the CAFR is based on the same numbers as the SBFR it is surprising that they are not both audited. Is it a question of tradition or timing?

A: Prior to 2009, the SBFRs were audited. After that date, a change in statute required the SBFRs to be reviewed and not audited. The CAFR is based on SBFR numbers that is then converted to a full GAAP basis. It is highly unlikely the audit of the CAFR would result in a change in SBFR numbers.

2. Q: At the end of the auditor's review of the SBFR, there is a statement that the report is "intended solely for the information and use of management and elected and appointed officials of the Commonwealth of Massachusetts." The caller states he was unable to find statutory disclosure for other states and therefore was unable to determine if this was standard language that the auditors include in their review of SBFRs.

A: Our auditors (KPMG) add this statement because the SBFR is not audited nor is it a GAAP report and therefore hard to use as a basis of comparison to other states. The purpose of GAAP is to have a standard set of accounting rules to allow for comparisons. Some states do issue SBFRs, also called budgetary basis reports, however, as previously noted, there has never been a material change to the SBFR resulting from an audit of the CAFR. The numbers in the SBFR are included in our information statements and we attest to the validity of the report.