Economic and Revenue Forecasts
FY 2015 * FY 2016 * FY 2017

Consensus Revenue Estimating Conference
January 16, 2015
Outline

- **Economic Forecast** – Jay Wortley, Department of Treasury
- **Revenue Estimates by Fund** – David Zin, Senate Fiscal Agency

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GDP Quarterly Growth Rates

**Real GDP Growth**

<table>
<thead>
<tr>
<th>2007 Q1</th>
<th>2008 Q1</th>
<th>2009 Q1</th>
<th>2010 Q1</th>
<th>2011 Q1</th>
<th>2012 Q1</th>
<th>2013 Q1</th>
<th>2014 Q1</th>
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</thead>
<tbody>
<tr>
<td>0.2%</td>
<td>-2.7%</td>
<td>-1.9%</td>
<td>1.3%</td>
<td>3.9%</td>
<td>4.6%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>3.1%</td>
<td>1.4%</td>
<td>2.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>4.6%</td>
</tr>
<tr>
<td>-8.2%</td>
<td>-5.4%</td>
<td>-1.5%</td>
<td>2.2%</td>
<td>0.8%</td>
<td>1.6%</td>
<td>0.1%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Figures are annualized percent change from preceding quarter in 2005 chained dollars.
Source: Bureau of Economic Analysis.
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**U.S. Employment Increasing**

**U.S. Payroll Employment Thousands**

- **Jan 08**: 138,386
- **Feb 10**: 129,655
- **Dec 14**: 140,347

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**Light Vehicle Sales Highest in 9 Years**

**Millions of Units**

- **Dec 14**: 16.8

Note: Sales rates are shown as an annual average sales rate.
Source: Bureau of Economic Analysis.
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ISM Indices Show Expansion

Source: Institute for Supply Management.
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Housing Starts Increasing From Historical Lows

Source: New Privately Owned Housing Units Started, U.S. Department of Commerce.
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Michigan Employment is Increasing

Michigan Payroll Employment
Thousands of Jobs

Jan-07  Dec-08  Nov-10  Oct-12  Sep-14
3,600  3,800  4,000  4,200  4,400

Mar 10  3,829.8
Nov 14  4,163.7

Source: Bureau of Labor Statistics,
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Real Estate Transfer Tax Reflects Increased Activity

Year-Over-Year Change in 6 Month Trailing Average

Jan-08  Nov-08  Sep-09  Jul-07  May-09  Mar-09  Jan-11  Nov-12  Sep-14
-60%  -40%  -20%  0%  20%  40%  60%  80%  100%

Dec 14  17.3%

Source: Michigan Department of Treasury,
January 2015 Consensus Conference
GDP Forecasts

Annual Percent Change

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Est.</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td></td>
<td>2.3%</td>
<td>3.2%</td>
<td>3.0%</td>
<td>2.9%</td>
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<tr>
<td></td>
<td></td>
<td>2.9%</td>
<td>3.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
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<td>2.8%</td>
<td>2.7%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.0%</td>
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</table>

HFA  SFA  Admin.

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Light Vehicle Sales Forecast

Millions of Units

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Actual</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>16.4</td>
<td>16.8</td>
<td>17.1</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16.8</td>
<td>17.1</td>
<td>17.1</td>
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<tr>
<td></td>
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<td>17.0</td>
<td>17.1</td>
</tr>
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<td></td>
<td></td>
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<td>17.2</td>
</tr>
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</table>

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Vehicle Sales Up, Big 3 Market Share Stabilizes

Source: Automotive News. January 2015 Consensus Conference

MI Motor Vehicle Production & Employment

Inflation Remains Low

Detroit Consumer Price Index
Fiscal Year Growth

2014 Actual
2015 2016 2017

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Michigan Wage and Salary Employment

Annual Percent Change

2014 Actual
2015 2016 2017

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Forecast of Major Taxes

- Individual Income Tax revenue is expected to increase in FY 2015 – FY 2017 due to employment and earnings growth.
- Improving vehicle sales and housing activity will help boost Sales Tax revenue.
- SET grew in FY 2014 for the first time in five years and is expected to continue to grow.
- MBT refunds were larger than expected in FY 2014 and are now expected to top earlier projections for FY 2015 and FY 2016.
Baseline Income Tax Growth

Fiscal Year Growth

-0.4%  3.5%  4.1%  5.5%  3.8%  3.5%  3.9%  4.2%  3.7%  4.5%

2014  2015  2016  2017

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Net Income Tax Revenue Estimates

Fiscal Year
Billions

$8.01  $8.30  $8.33  $8.44  $8.63  $8.62  $8.77  $9.00  $8.94  $9.15

2014  2015  2016  2017

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Baseline Sales Tax Growth

Fiscal Year Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Actual</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.6%</td>
<td>3.9%</td>
<td>3.7%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

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Net Sales Tax Revenue Estimates

Fiscal Year

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Actual</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tr>
<td></td>
<td>$7.36</td>
<td>$7.61</td>
<td>$7.88</td>
<td>$8.18</td>
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</table>

January 2015 Consensus Conference
Net SET Revenue Estimates

Fiscal Year
Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Actual</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<td>$1.80</td>
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<td>$1.85</td>
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<td>$1.84</td>
<td>$1.83</td>
<td>$1.90</td>
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<td>$1.87</td>
<td>$1.90</td>
<td>$1.97</td>
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</table>

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Net CIT/MBT Revenue Estimates

Fiscal Year
Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>2014 Actual</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
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<tbody>
<tr>
<td>HFA</td>
<td>$0.18</td>
<td>$0.33</td>
<td>$0.47</td>
<td>$0.49</td>
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<tr>
<td>SFA</td>
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<td>$0.28</td>
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<td>$0.48</td>
<td>$0.18</td>
<td>$0.37</td>
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January 2015 Consensus Conference
**Net CIT Revenue Estimates**

**Fiscal Year**
**Billions**

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
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<tbody>
<tr>
<td>Actual</td>
<td>$0.91</td>
<td>$0.93</td>
<td>$0.96</td>
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<td></td>
<td>$1.01</td>
<td>$1.02</td>
<td>$1.01</td>
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</table>

HFA □ SFA □ Admin.

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**Net MBT Revenue Estimates**

**Fiscal Year**
**Billions**

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>Actual</td>
<td>-$0.72</td>
<td>-$0.60</td>
<td>-$0.68</td>
<td>-$0.72</td>
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<tr>
<td></td>
<td>-$0.62</td>
<td>-$0.50</td>
<td>-$0.50</td>
<td>-$0.62</td>
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</table>

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Michigan Business Tax & Certificated Credits

- The MBT was repealed in 2012 for most business taxpayers and replaced with the CIT.
- Taxpayers awarded certificated credits before 2012 may still pay the MBT and claim their credits.
- In FY 2014, MBT revenue totaled a negative $723 million (refunds/credits exceeded payments).
- MBT revenue was $171 million below the May estimate because certificated credits were much larger than expected.

What are Certificated Credits?

- Certificated credits were awarded to specific businesses who must then meet certain employment and/or investment increases in order to actually claim the credits.
- Certificated credits are refundable and include MEGA, battery and others.
- Most are multi-year credits: Existing MEGA credits will last past 2030.
- MEDC awarded credits through 2011; in addition, some existing credits have been amended since 2011.
Timing of Certificated Credits is Uncertain

- Certificated credits are awarded and claimed for particular tax years.
- Credits are claimed by businesses and certified by MEDC after the tax year is over.
- MEDC audits all claims for credits to make sure credit requirements are met.
- If credit requirements are met, MEDC grants the credit and issues a certificate.

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Timing of Certificated Credits Continued

- To receive a credit payment, a business must claim the credit on their MBT tax return, attach the certificate and file it with Treasury.
- Very difficult to predict:
  - If and when businesses will claim a credit with MEDC.
  - The amount of time MEDC needs to audit a credit claim.
  - In which fiscal year a business will file a tax return and credit certificate with Treasury (example: 2013 returns filed in FY 2014 or FY 2015).

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Projected MBT Credits

- The cost of current MEGA credits is expected to increase over the next few years due to:
  -- Employment gains and increased investment activity that will boost credits for TY 2015 and beyond.
  -- Some large outstanding credits from prior years are expected to be claimed and paid.
- Remaining battery credits will be paid off in FY 2015 – FY 2018.

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Projected MBT Credits Continued

- In FY 2015, MBT net refunds are expected to total $681 million, $252 million larger than the May estimate.
- In FY 2016, MBT net refunds will total an estimated $807 million, $351 million larger than in May.

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GF-GP and School Aid Fund Revenue

- Growth rate comparisons.
- Level comparisons.
- Budget Stabilization Fund calculation.
- Constitutional Revenue Limit calculation.

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GF-GP and School Aid Revenue

Baseline Growth Rates Before Tax Changes

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Average Agency Forecasts
GF-GP Net Revenue Growth

Fiscal Year Growth

2014 Actual 2015 2016 2017

-5.7% 4.9% 6.5% 5.9% 3.8% 3.0% 2.3% 2.2% 1.0% 2.8%

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GF-GP Net Revenue Estimates

Fiscal Year Billions

2014 Actual 2015 2016 2017

$9.02 $9.45 $9.62 $9.55 $9.80 $9.90 $9.77 $10.02 $10.00 $10.05

HFA SFA Admin.

January 2015 Consensus Conference
School Aid Fund Net Growth

Fiscal Year Growth

<table>
<thead>
<tr>
<th></th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
</tr>
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<tbody>
<tr>
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<td>2016</td>
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<td>3.2%</td>
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<tr>
<td>2017</td>
<td></td>
<td></td>
<td>3.1%</td>
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School Aid Fund Net Revenue Estimates

Fiscal Year
Billions

<table>
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<th>SFA</th>
<th>Admin.</th>
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<tbody>
<tr>
<td>2014 Actual</td>
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<td>$11.52</td>
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<td>2015</td>
<td></td>
<td></td>
<td>$11.87</td>
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<td>2016</td>
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<td>$11.85</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td>$11.88</td>
</tr>
</tbody>
</table>

$12.19 $12.23 $12.28 $12.56 $12.56 $12.70

January 2015 Consensus Conference
FY 2014 Changes Since May

Change From May Consensus Estimates
Millions

- $300.8

GF-GP

School Aid

Preliminary Actual

January 2015 Consensus Conference

FY 2015 Changes Since May

Change From May Consensus Estimates
Millions

- $380.3

GF-GP

- $208.7

- $274.9

$18.9

$23.0

- $3.6

School Aid

HFA
SFA
Admin.

January 2015 Consensus Conference
FY 2016 Changes Since May

Change From May Consensus Estimates
Millions

$_{-}$-$444.0$  
$_{-}$-$341.8$  
GF-GP

$_{-}$-$471.8$

$_{-}$-$63.6$

$_{-}$-$30.8$

- $21.9$

School Aid

□ HFA □ SFA □ Admin.

January 2015 Consensus Conference

FY 2015 GF/GP & SAF Revenue Estimates

New Non-Economic Changes Since May 2014 Consensus
Millions

<table>
<thead>
<tr>
<th>Non-Economic Changes</th>
<th>GF/GP</th>
<th>SAF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxpayer Offer in Compromise</td>
<td>($4.3)</td>
<td>($3.2)</td>
<td>($7.5)</td>
</tr>
<tr>
<td>Tobacco Tax Reimbursement &amp; Earmark</td>
<td>($4.1)</td>
<td>($2.2)</td>
<td>($6.3)</td>
</tr>
<tr>
<td>Driver Responsibility Fee Changes</td>
<td>($11.6)</td>
<td>$0.0</td>
<td>($11.6)</td>
</tr>
<tr>
<td>Updated MBT Credit Data</td>
<td>($251.8)</td>
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<td>($251.8)</td>
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<tr>
<td>PPT Reform</td>
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<td>($10.0)</td>
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<tr>
<td>Total</td>
<td>($271.8)</td>
<td>($15.4)</td>
<td>($287.2)</td>
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</table>

* Average of Agency Estimates

January 2015 Consensus Conference
### FY 2016 GF/GP & SAF Revenue Estimates

#### New Non-Economic Changes Since May 2014 Consensus

**Millions**

<table>
<thead>
<tr>
<th>Non-Economic Changes</th>
<th>GF/GP</th>
<th>SAF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxpayer Offer in Compromise</td>
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</tr>
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<td>Tobacco Tax Reimbursement &amp; Earmark</td>
<td>($3.0)</td>
<td>$0.0</td>
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<td>($12.3)</td>
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<td>PPT Reform</td>
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<td><strong>Total</strong></td>
<td>($411.6)</td>
<td>($24.1)</td>
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* Average of Agency Estimates

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### Revenue Forecast Comparison

#### Millions

<table>
<thead>
<tr>
<th>Revenue</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>House</td>
<td>Senate</td>
<td>House</td>
</tr>
<tr>
<td>GF-GP</td>
<td>Treasury</td>
<td>Fiscal</td>
<td>Agency</td>
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<tr>
<td></td>
<td>$9,551</td>
<td>$9,446</td>
<td>$9,617</td>
</tr>
<tr>
<td>School Aid</td>
<td>$11,876</td>
<td>$11,872</td>
<td>$11,830</td>
</tr>
<tr>
<td>Combined</td>
<td>$21,427</td>
<td>$21,318</td>
<td>$21,467</td>
</tr>
<tr>
<td>Difference From May</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GF-GP</td>
<td>($293)</td>
<td>($380)</td>
<td>($203)</td>
</tr>
<tr>
<td>School Aid</td>
<td>$25</td>
<td>($19)</td>
<td>($4)</td>
</tr>
<tr>
<td>Combined</td>
<td>($252)</td>
<td>($399)</td>
<td>($212)</td>
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</table>

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Budget Stabilization Fund

- In FY 2015, the Agencies estimate pay-ins from $72 to $195 million.
- In FY 2016, the Agencies estimate pay-ins ranging from $57 to $97 million.
- In FY 2017, the Agencies estimate pay-ins ranging from $88 to $102 million.
- No BSF pay-outs are estimated by any of the Agencies during FY 2015, FY 2016 or FY 2017.

Constitutional Revenue Limit Calculation

Billions

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Average Agency Forecasts

22
Forecast Risks

- Slower economic growth in Europe, Brazil, India, China.
- Oil price decline.
- When will Fed raise rates and by how much?
- How will financial markets, consumers react to Fed action?
- Housing: will more consumers take on financial commitment?
- MBT certificated credits: uncertainty on number, dollar amount and timing.

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Economic and Revenue Forecasts

FY 2015 * FY 2016 * FY 2017

Consensus Revenue Estimating Conference
January 16, 2015

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