Outline

• Economic Forecast
  David Zin, Senate Fiscal Agency

• Revenue Estimates for Major Taxes
  Eric Bussis, Department of Treasury

• Revenue Estimates by Fund
  Jim Stansell, House Fiscal Agency
Per Capita Personal Income Growth

Yearly Percent Change

Source: Bureau of Economic Analysis

May 2018 Consensus Conference
Retail Sales Trending Up

Year-Over-Year Change

Source: Bureau of the Census.

May 2018 Consensus Conference
Michigan Debt and Average Hourly Earnings

Total Debt Balance
Per Capita
2017Q4: 3.6%

Average Hourly Earnings,
Private Sector
2017Q4: 3.2%


May 2018 Consensus Conference
Coincident Economic Activity Index for Michigan

Source: Federal Reserve Bank of St. Louis

May 2018 Consensus Conference
GDP Forecasts

Annual Percent Change

<table>
<thead>
<tr>
<th>Year</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>2.7%</td>
<td>2.7%</td>
<td>2.8%</td>
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<tr>
<td>2019</td>
<td>2.8%</td>
<td>2.5%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2020</td>
<td>1.9%</td>
<td>1.9%</td>
<td>1.9%</td>
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Actual
Light Vehicle Sales Forecast

Millions of Units

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
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<tbody>
<tr>
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<td>17.1</td>
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<tr>
<td>2018</td>
<td>16.9</td>
<td>16.9</td>
<td>17.0</td>
<td></td>
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<tr>
<td>2019</td>
<td>16.8</td>
<td>16.7</td>
<td>16.8</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>16.7</td>
<td>16.7</td>
<td>16.8</td>
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</table>

May 2018 Consensus Conference
Vehicle Sales at Historically High Levels

Source: Automotive News.

May 2018 Consensus Conference  Average Agency Forecasts
MI Motor Vehicle Production & Employment

May 2018 Consensus Conference
Inflation Expected to Increase

Detroit Consumer Price Index
Fiscal Year Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
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<tbody>
<tr>
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<td>2.0%</td>
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<tr>
<td>2018</td>
<td>2.3%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2019</td>
<td>1.6%</td>
<td>1.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>2020</td>
<td>2.3%</td>
<td>1.9%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Actual

May 2018 Consensus Conference
Michigan Wage and Salary Employment

Annual Percent Change

- 2017: 1.2%
- 2018: 1.2% 1.1% 1.1% 1.2%
- 2019: 0.7% 0.9% 0.9% 0.8% 0.7%
- 2020: Actual

HFA | SFA | Admin.
---|---|---
0.7%| 0.9%| 0.8%| 0.7%

May 2018 Consensus Conference
Michigan Job Gains Expected Through 2020

Change in Michigan Wage and Salary Employment
Thousands

Average Agency Forecasts

May 2018 Consensus Conference
Forecast of Major Taxes

- Strong FY18 year-to-date income tax collections.
- Sales tax and use tax combined growth rates strong in FY18 and solid in FY19 and FY20.
- CIT/MBT remains the most volatile major taxes for both economic and non-economic reasons.
IIT Withholding & Sales Tax FY Growth Rates

Source: Michigan Department of Treasury
Baseline Income Tax Growth

Fiscal Year Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
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<tbody>
<tr>
<td>2017</td>
<td>0.9%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>8.1%</td>
<td>8.4%</td>
<td>8.2%</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>2.3%</td>
<td>1.9%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>3.4%</td>
<td>4.4%</td>
<td>2.8%</td>
<td></td>
</tr>
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</table>

May 2018 Consensus Conference
Net Income Tax Revenue Estimates

Fiscal Year
Billions

2017  2018  2019  2020

Actual

$9.45 $10.19 $10.22 $10.20 $10.15 $10.15 $10.12 $10.44 $10.54 $10.35

HFA  SFA  Admin.
Baseline Sales Tax Growth

Fiscal Year Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin</th>
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<tbody>
<tr>
<td>2017</td>
<td>6.9%</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2018</td>
<td>2.9%</td>
<td>3.3%</td>
<td>2.9%</td>
<td>-</td>
</tr>
<tr>
<td>2019</td>
<td>2.7%</td>
<td>3.5%</td>
<td>3.0%</td>
<td>-</td>
</tr>
<tr>
<td>2020</td>
<td>2.4%</td>
<td>2.8%</td>
<td>2.8%</td>
<td>-</td>
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May 2018 Consensus Conference
Net Sales Tax Revenue Estimates

Fiscal Year
Billions

2017 2018 2019 2020

$7.80 $8.04 $8.07 $8.02 $8.28 $8.37 $8.28 $8.51 $8.56 $8.52

Actual

May 2018 Consensus Conference
Net SET Revenue Estimates

Fiscal Year
Billions

2017 2018 2019 2020

$1.96 $2.02 $2.04 $2.10 $2.11 $2.12 $2.14 $2.21 $2.18

Actual

HFA  SFA  Admin.

May 2018 Consensus Conference
Net CIT/MBT Revenue Estimates

Fiscal Year
Billions

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>HFA</th>
<th>SFA</th>
<th>Admin.</th>
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<tbody>
<tr>
<td>2017</td>
<td>$0.40</td>
<td></td>
<td></td>
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<tr>
<td>2018</td>
<td>$0.08</td>
<td>$0.04</td>
<td>$0.09</td>
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<tr>
<td>2019</td>
<td>$0.32</td>
<td>$0.18</td>
<td>$0.33</td>
</tr>
<tr>
<td>2020</td>
<td>$0.31</td>
<td>$0.24</td>
<td>$0.32</td>
</tr>
</tbody>
</table>

Actual

May 2018 Consensus Conference
GF-GP and School Aid Fund Revenue

- Growth rate comparisons.
- Level comparisons.
- Budget Stabilization Fund calculation.
- Constitutional Revenue Limit calculation.
GF-GP and School Aid Revenue

Baseline Growth Rates Before Tax Changes

May 2018 Consensus Conference
GF-GP Net Revenue Estimates

Fiscal Year
Billions

2017 Actual 2018 2019 2020

$10.19 $10.44 $10.49 $10.43 $10.36 $10.44 $10.46 $10.59 $10.47

HFA SFA Admin.
School Aid Fund Net Growth

Fiscal Year Growth

- Actual
- HFA
- SFA
- Admin.

May 2018 Consensus Conference
School Aid Fund Net Revenue Estimates

Fiscal Year
Billions

2017 | 2018 | 2019 | 2020
--- | --- | --- | ---
$12.69 | $13.20 | $13.63 | $13.87
$13.26 | $13.22 | $13.54 | $13.98
$13.83 | $13.51 | $13.87 | $13.98

HFA  SFA  Admin.

May 2018 Consensus Conference
FY 2018 Changes Since January Consensus Estimates

 Millions

GF-GP

School Aid

$133.5  $159.8  $178.1  $180.0  $135.1

HFA  SFA  Admin

May 2018 Consensus Conference
FY 2019 Changes Since January Consensus Estimates

Millions

GF-GP
- HFA $93.6
- SFA $25.0
- Admin $102.3

School Aid
- HFA $49.9
- SFA $165.0
- Admin $74.6

May 2018 Consensus Conference
FY 2020 Changes Since January Consensus Estimates

Millions

GF-GP

HFA $49.8
SFA $180.6
Admin $60.7

School Aid

HFA $9.3
SFA $153.7
Admin $47.3
## Revenue Forecast Comparison

**Millions**

<table>
<thead>
<tr>
<th>Revenue</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treasury</td>
<td>House Fiscal</td>
<td>Senate Fiscal</td>
</tr>
<tr>
<td>GF-GP</td>
<td>$10,485.8</td>
<td>$10,441.2</td>
<td>$10,467.5</td>
</tr>
<tr>
<td>School Aid Fund</td>
<td>$13,219.6</td>
<td>$13,201.3</td>
<td>$13,264.5</td>
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</table>

**Difference from May**

<table>
<thead>
<tr>
<th>Revenue</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treasury</td>
<td>House Fiscal</td>
<td>Senate Fiscal</td>
</tr>
<tr>
<td>GF-GP</td>
<td>$178.1</td>
<td>$133.5</td>
<td>$159.8</td>
</tr>
<tr>
<td>School Aid Fund</td>
<td>$145.1</td>
<td>$116.8</td>
<td>$180.0</td>
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<tr>
<td>Combined</td>
<td>$313.2</td>
<td>$250.3</td>
<td>$339.8</td>
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Budget Stabilization Fund

- In FY 2018, the Agencies estimate no pay-ins.
- In FY 2019, the Agencies estimate pay-ins ranging from $4 to $51 million.
- In FY 2020, the Agencies estimate pay-ins ranging from $0 to $73 million.
- No BSF pay-outs are estimated by any of the Agencies during FY 2018 through FY 2020.
Constitutional Revenue Limit Calculation

Average Agency Forecasts

May 2018 Consensus Conference
Forecast Risks

• International Uncertainty
  – Trade Policy
  – Oil Prices
• How tight are labor markets?
• Monetary policy: How will Fed respond if inflation pressures appear?
• Housing: How will it respond to higher interest rates?
• CIT volatility
Economic and Revenue Forecasts

FY 2018 * FY 2019 * FY 2020

Consensus Revenue Estimating Conference
May 16, 2018

May 2018 Consensus Conference