

# **THE U.S. AND MICHIGAN OUTLOOK FOR 2019–2021**

**PREPARED FOR PRESENTATION AT THE  
CONSENSUS REVENUE ESTIMATING CONFERENCE**

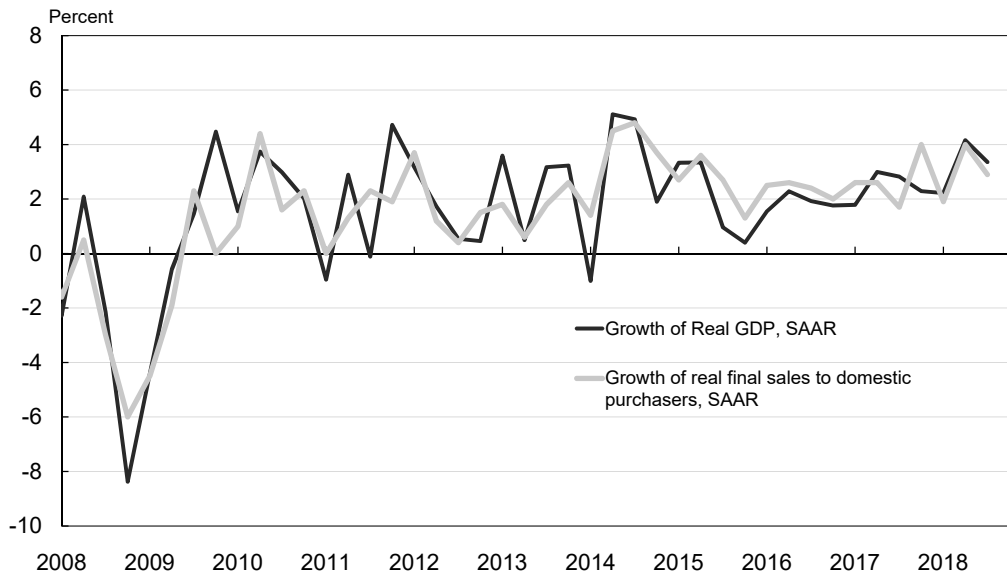
**LANSING, MICHIGAN  
JANUARY 11, 2019**

**BY**

**JACOB BURTON  
GABRIEL EHRLICH  
DANIIL MANAENKOV  
MICHAEL MCWILLIAMS  
ADITI THAPAR**

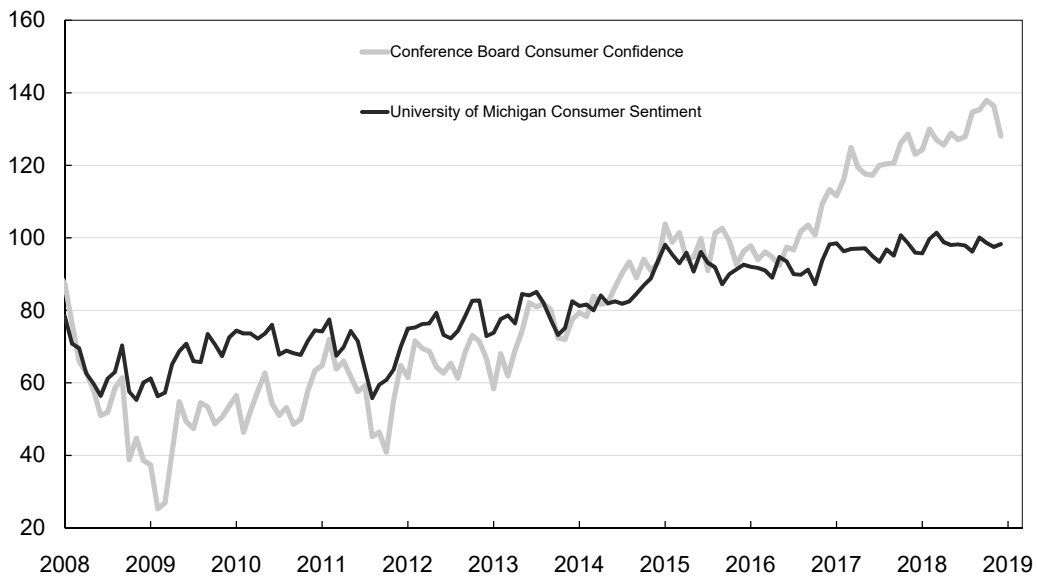


## Real Output Growth



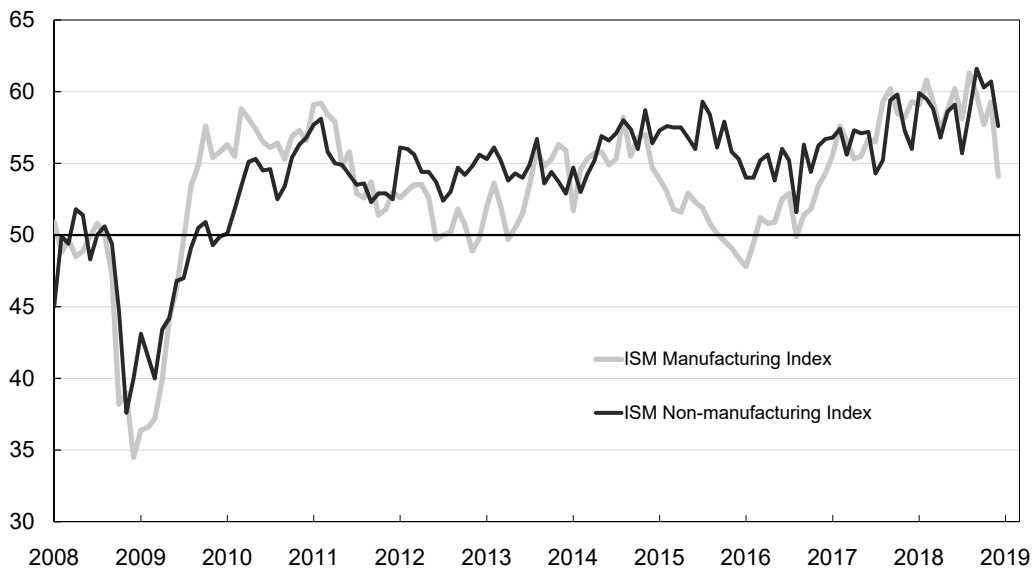
RSQE: January 2019

## Consumer Sentiment High



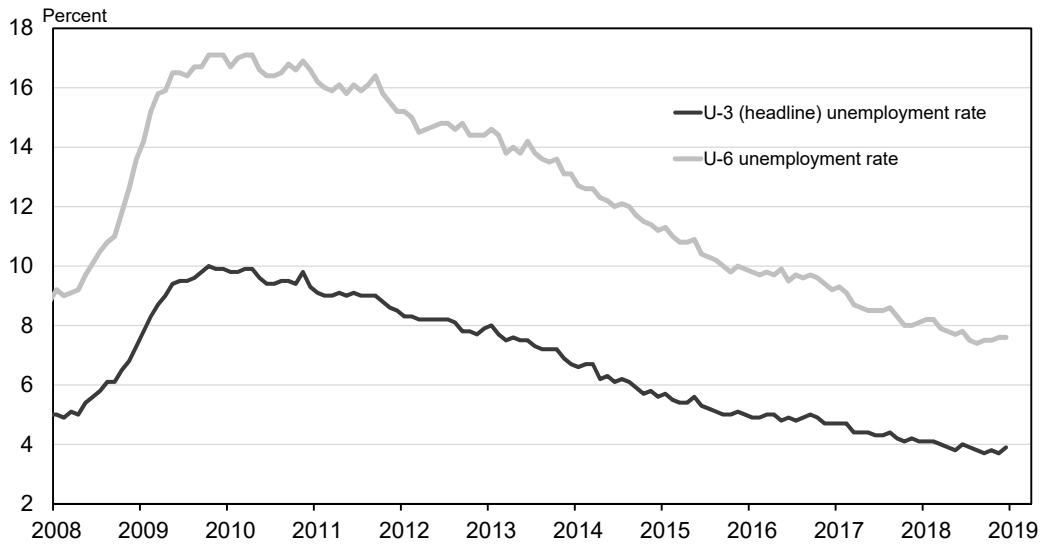
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## Institute of Supply Management Indexes: Growth Slowing



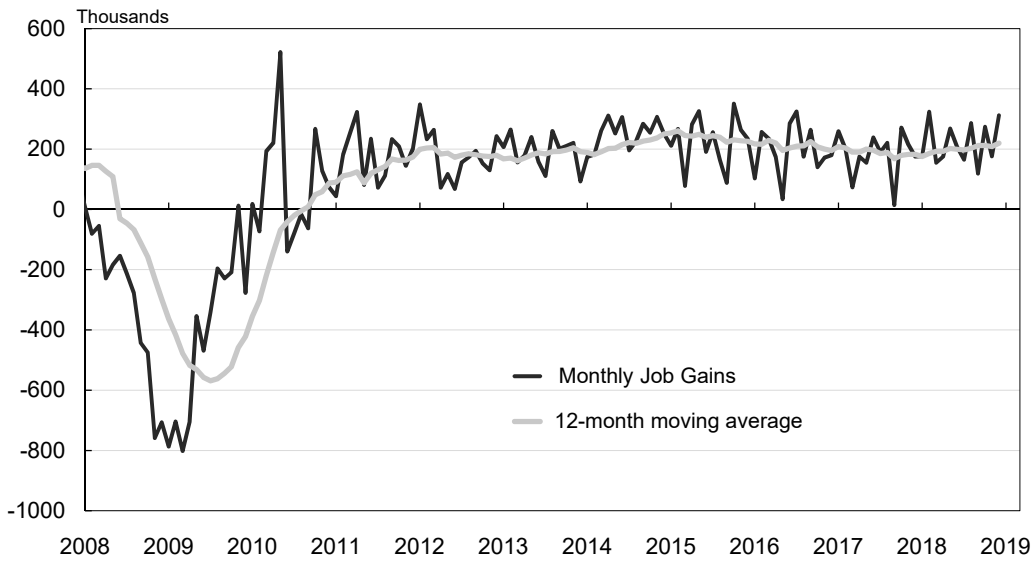
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## Unemployment Rates: Likely Still Trending Down



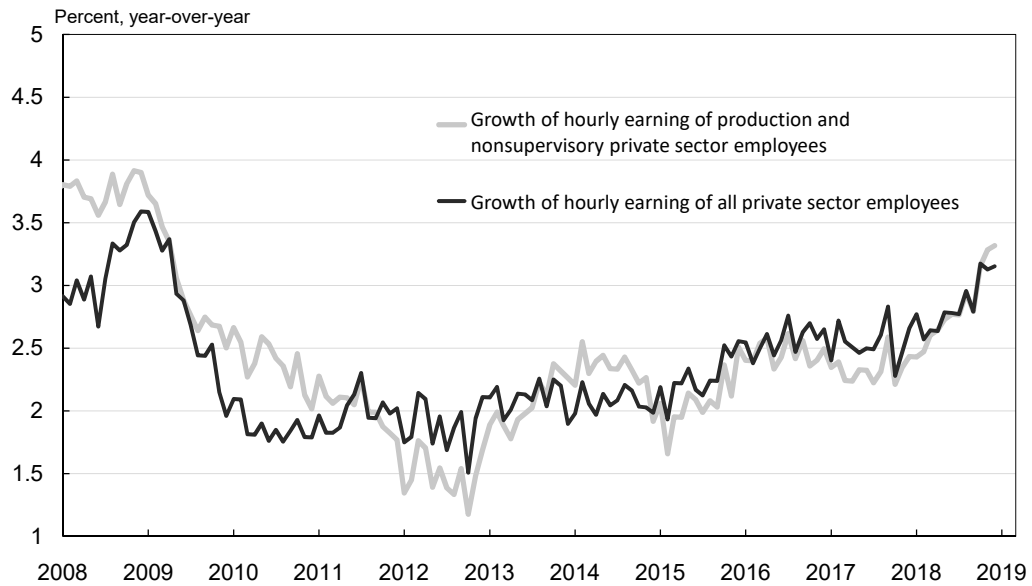
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## Solid Monthly Payroll Job Gains



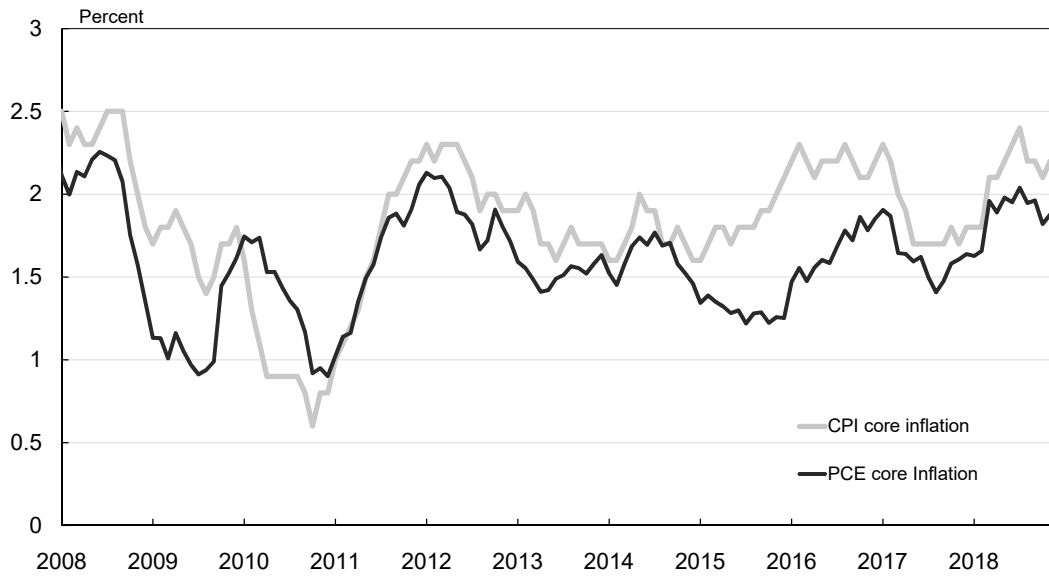
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## Wage Growth Finally Here



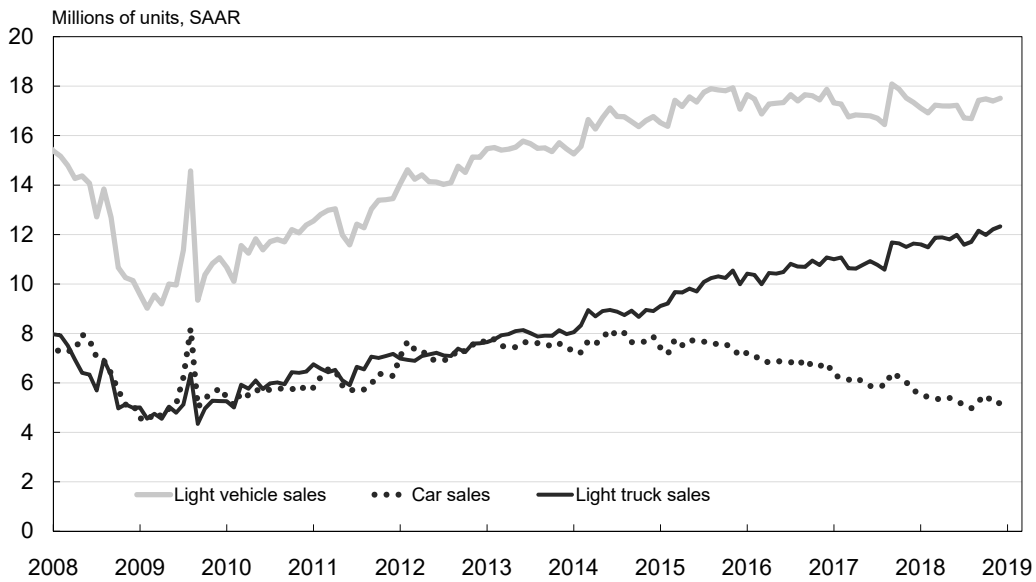
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### Core Inflation: Not a Concern



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### Vehicle Sales Steady

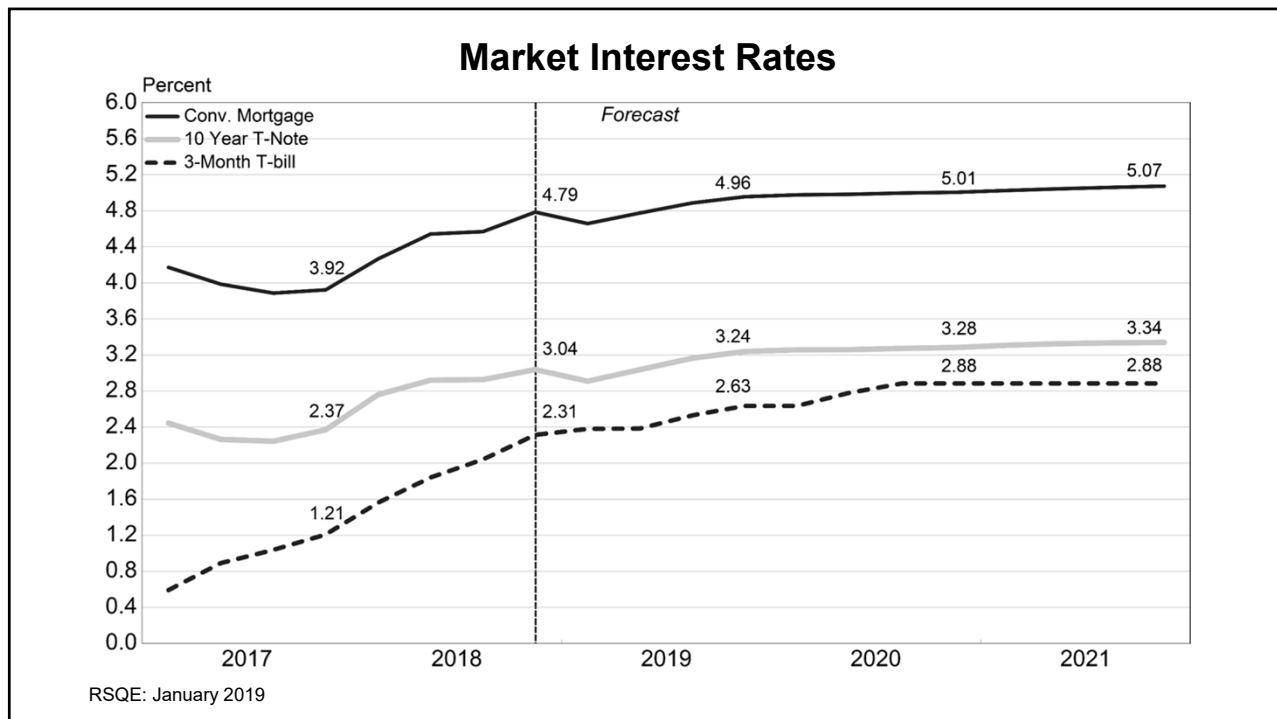


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# Key Inputs into the Forecast

## Monetary Policy: Still Tightening

- No hint of runaway inflation, despite solid wage growth
- Federal funds rate path consistent with our outlook:
  - Latest rate hike in December 2018
  - One more 25 basis point hike in each of 2019 and 2020.
  - We are about one 25bps hike behind FOMC December'18 "dot plot"
- Continued winding down of the Fed's balance sheet
- Still two open seats at the Board of Governors
  - Michelle Bowman confirmed at the end of November'18



## Fiscal Policy – Back to Gridlock

- Only five of twelve appropriations bills are in place for FY2019
  - Largely funded in line with Bipartisan Budget Act of 2018, with large spending increases for fiscal 2019
- Funding for ~25% of federal government lapsed Dec 21, 2018
  - Continuing resolution in place before, funding at FY2018 levels
  - Ramp-up to BBA'18 levels for fiscal 2019 is uncertain
  - ~380,000 employees furloughed, ~420,000 working without pay
- Fiscal 2020 and 2021 will require action to avoid \$120 billion in sequestration cuts. Major policy action unlikely

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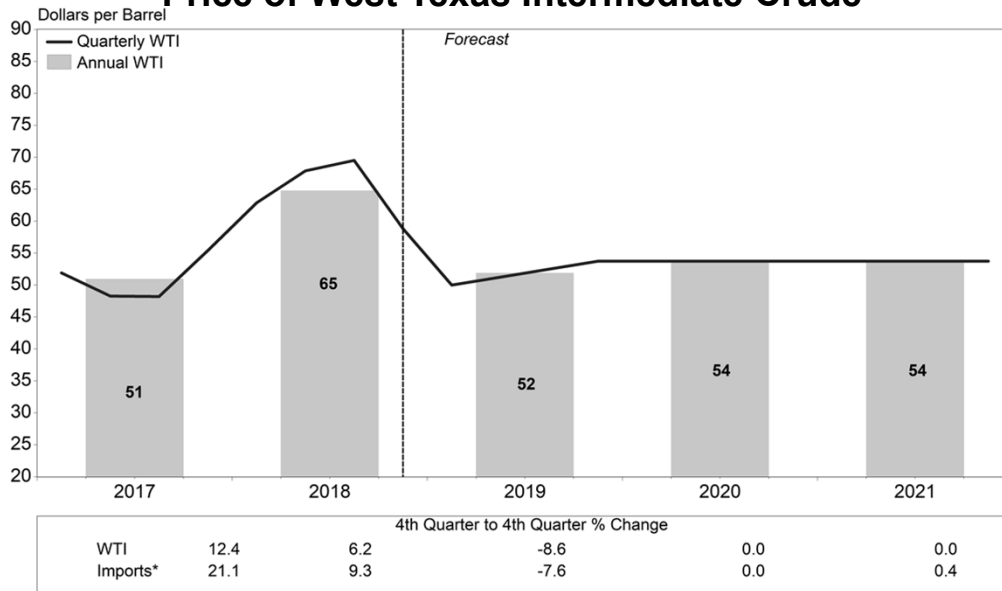


### Federal Budget, NIPA Basis (Billions of Dollars)

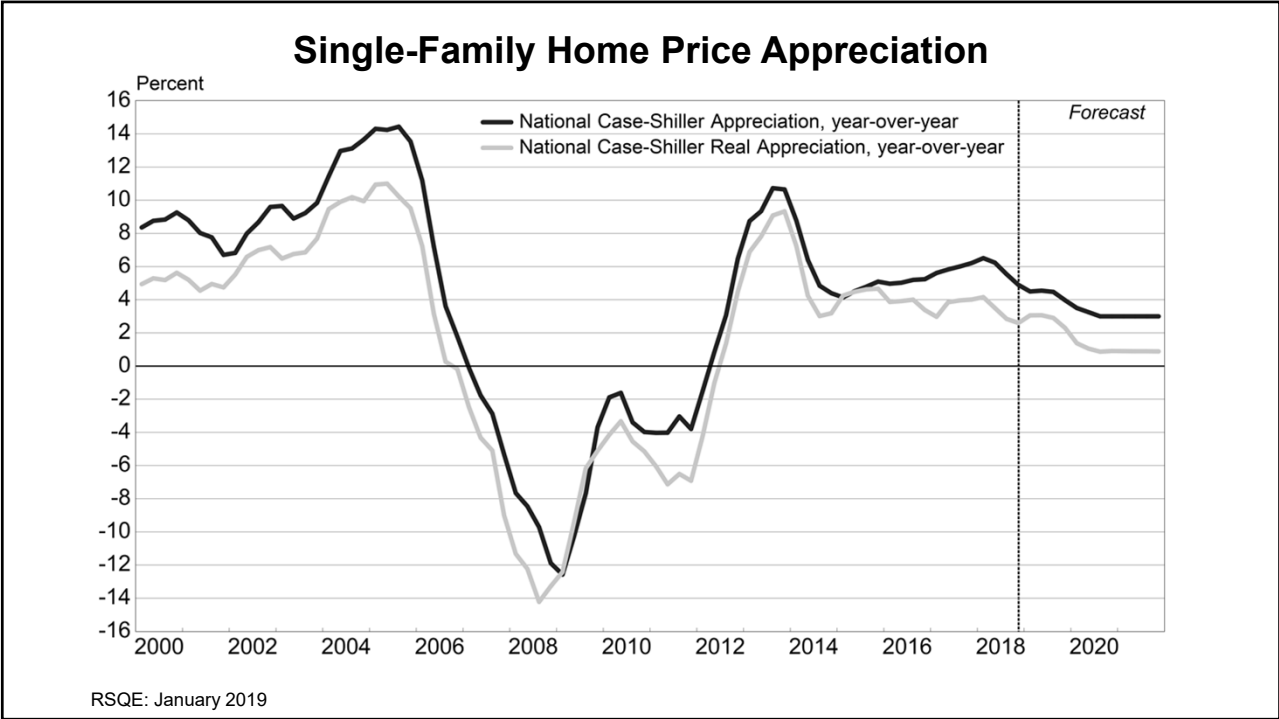
	2017	2018	FY Forecast		
			2019	2020	2021
<b>Current receipts</b>	<b>3554.0</b>	<b>3490.3</b>	<b>3590.9</b>	<b>3719.6</b>	<b>3899.3</b>
<b>% change</b>	<b>2.3</b>	<b>-1.8</b>	<b>2.9</b>	<b>3.6</b>	<b>4.8</b>
<b>Current expenditures</b>	<b>4218.1</b>	<b>4423.3</b>	<b>4721.3</b>	<b>4974.6</b>	<b>5215.6</b>
<b>% change</b>	<b>2.8</b>	<b>4.9</b>	<b>6.7</b>	<b>5.4</b>	<b>4.8</b>
<b>Consumption</b>	<b>981.7</b>	<b>1019.9</b>	<b>1095.5</b>	<b>1134.6</b>	<b>1151.9</b>
<b>% change</b>	<b>1.9</b>	<b>3.9</b>	<b>7.4</b>	<b>3.6</b>	<b>1.5</b>
<b>Transfer payments</b>	<b>2707.4</b>	<b>2809.1</b>	<b>2964.0</b>	<b>3097.1</b>	<b>3234.8</b>
<b>% change</b>	<b>2.7</b>	<b>3.8</b>	<b>5.5</b>	<b>4.5</b>	<b>4.4</b>
<b>Surplus (+) or deficit (-)</b>	<b>-664.1</b>	<b>-933.0</b>	<b>-1130.4</b>	<b>-1255.0</b>	<b>-1316.2</b>
<b>Percent of GDP</b>	<b>-3.4</b>	<b>-4.6</b>	<b>-5.3</b>	<b>-5.7</b>	<b>-5.8</b>

RSQE: January 2019

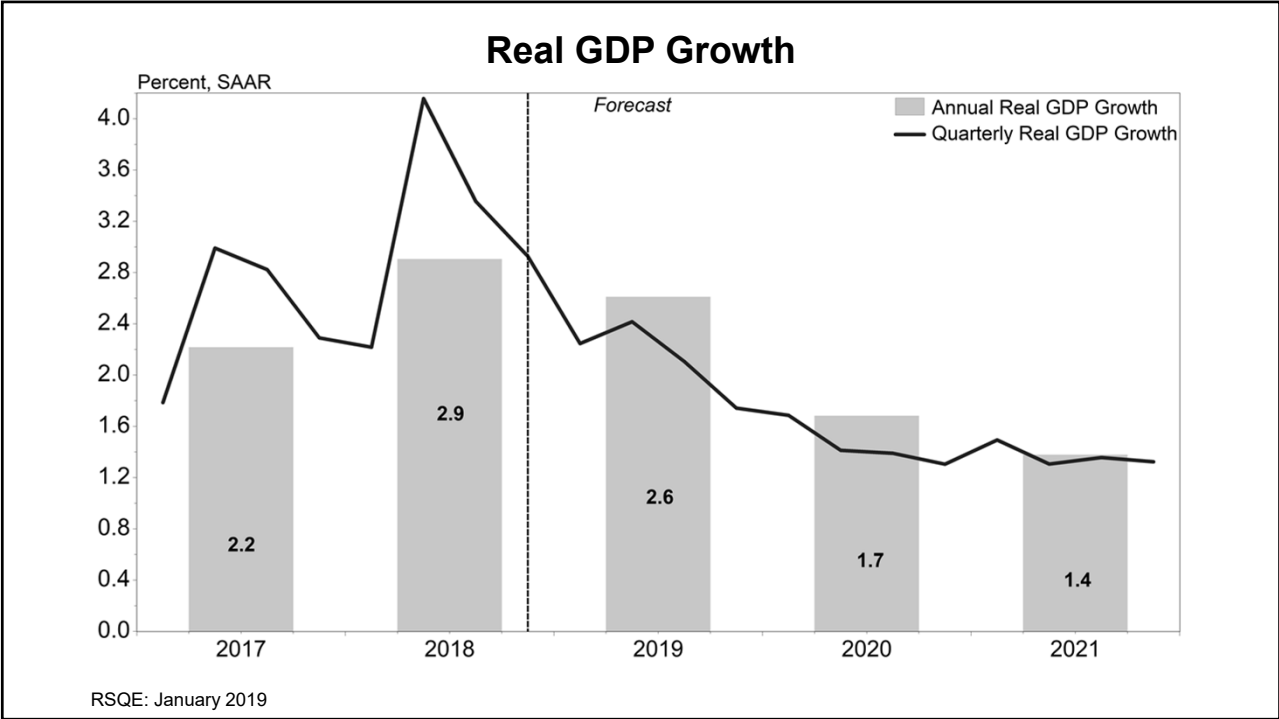
### Price of West Texas Intermediate Crude



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## U.S. Forecast for 2019–2021



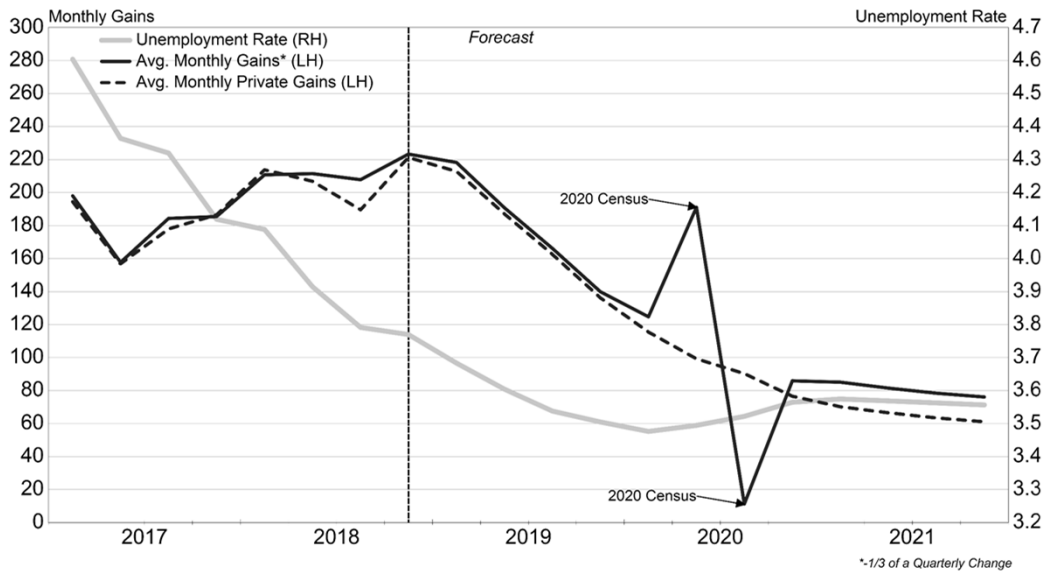
### Contributions to the Growth of Real GDP

(Average quarterly contributions, percentage points at annual rate)

	'18Q4	'19H1	'19H2	'20	'21
<b>Real GDP (% change, AR)</b>	<b>2.9</b>	<b>2.3</b>	<b>1.9</b>	<b>1.4</b>	<b>1.4</b>
<b>Contributions to real GDP growth</b>					
<b>Final sales to domestic purchasers</b>	<b>3.4</b>	<b>2.1</b>	<b>1.9</b>	<b>1.9</b>	<b>1.7</b>
<b>Consumption</b>	<b>2.2</b>	<b>1.5</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>
<b>Nonresidential fixed investment</b>	<b>0.5</b>	<b>0.1</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>
<b>Residential investment</b>	<b>-0.0</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>Government purchases</b>	<b>0.7</b>	<b>0.6</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>
<b>Net exports</b>	<b>-0.5</b>	<b>0.1</b>	<b>0.2</b>	<b>-0.3</b>	<b>-0.3</b>
<b>Inventory investment</b>	<b>0.1</b>	<b>0.1</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.1</b>

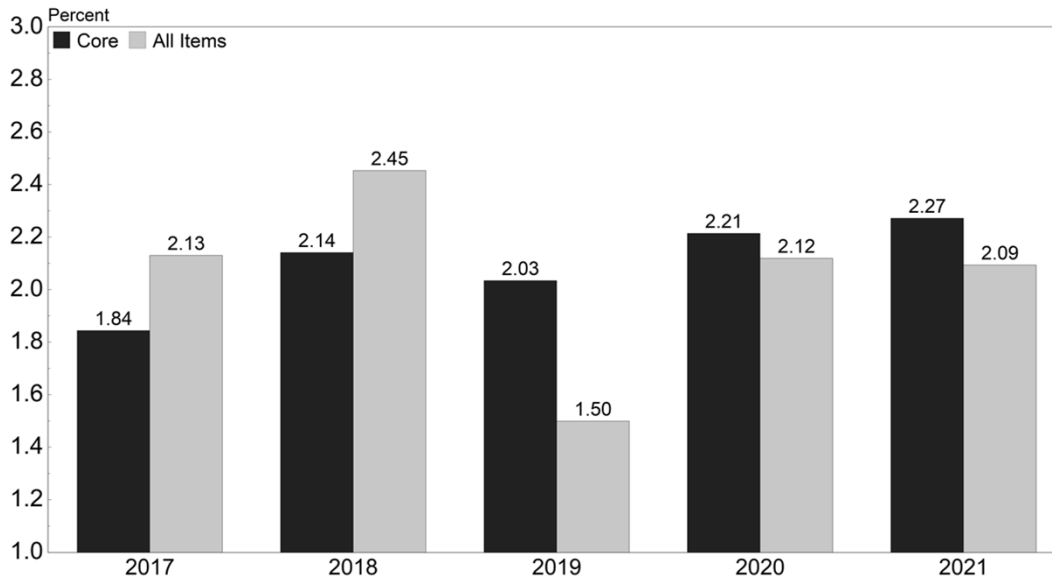
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## Nonfarm Payroll Employment Gains and Unemployment Rate



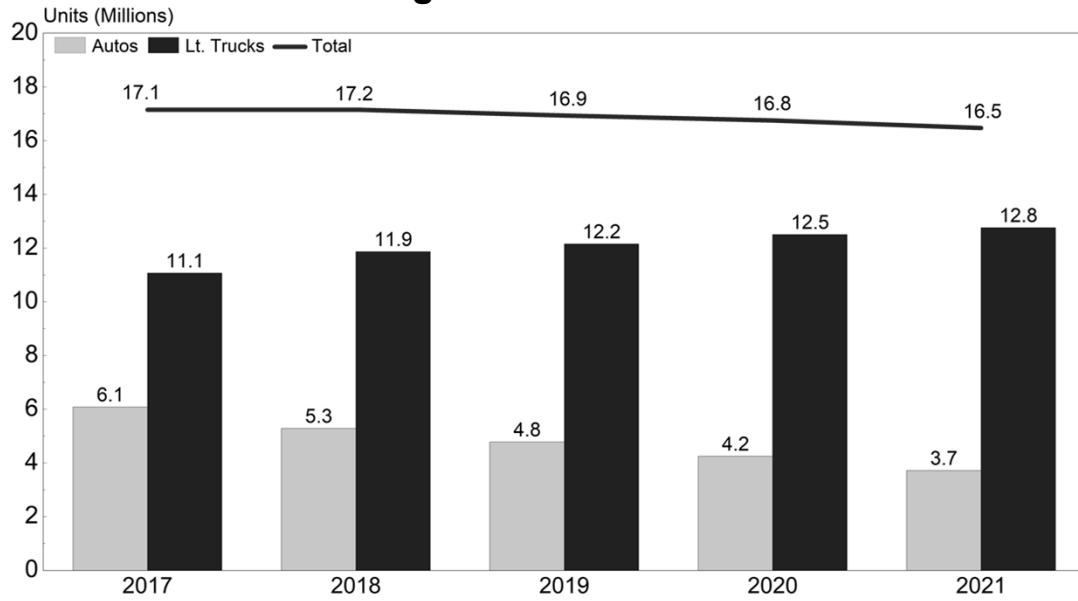
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## Consumer Price Inflation (CPI-U)



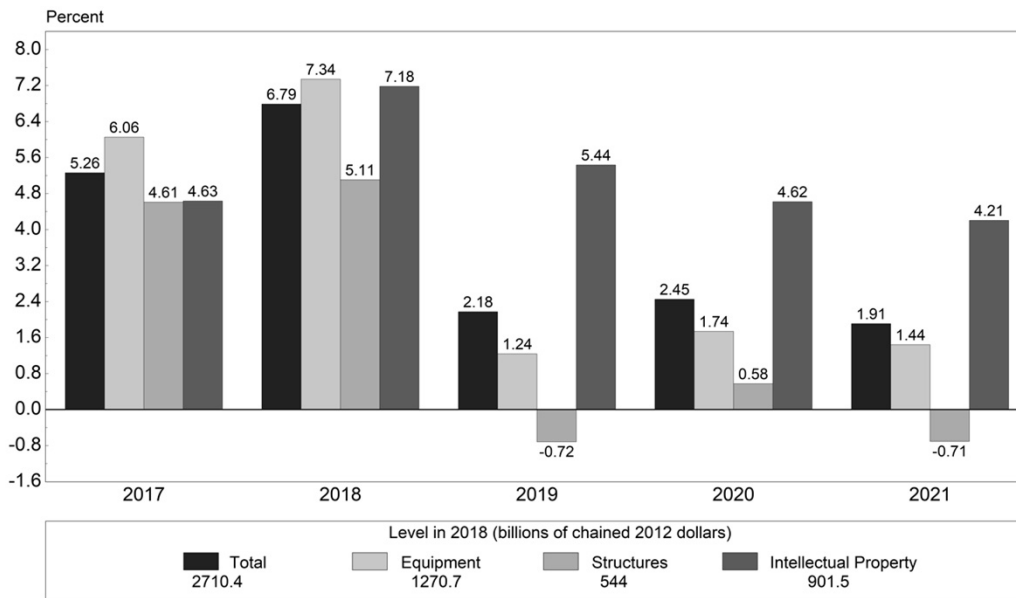
RSQE: January 2019

## Light Vehicle Sales



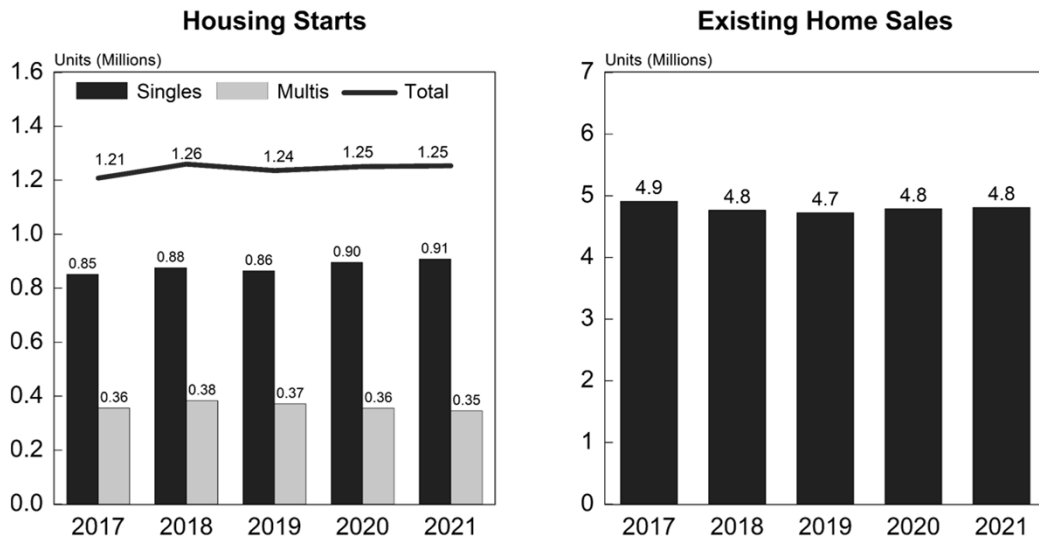
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## Growth of Nonresidential Fixed Investment



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## Housing Market



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## Risks to Our Outlook

- Balance of risks tilted toward downside
- Oil prices and geopolitical risks
- Fiscal policy
- Monetary policy
- Trade policy and foreign growth
- Abnormal weather

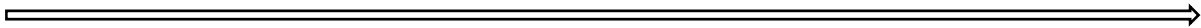
RSQE: January 2019

# The Michigan Economic Outlook For 2019–2021



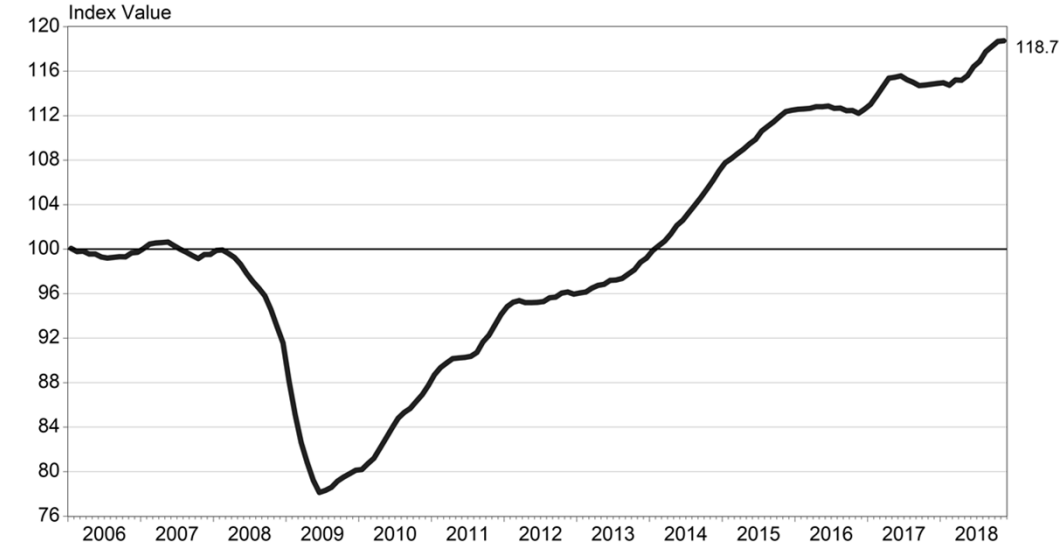
Consensus Revenue Estimating Conference  
January 11, 2019

**Research Seminar in Quantitative Economics**



# Current State of Michigan's Economy

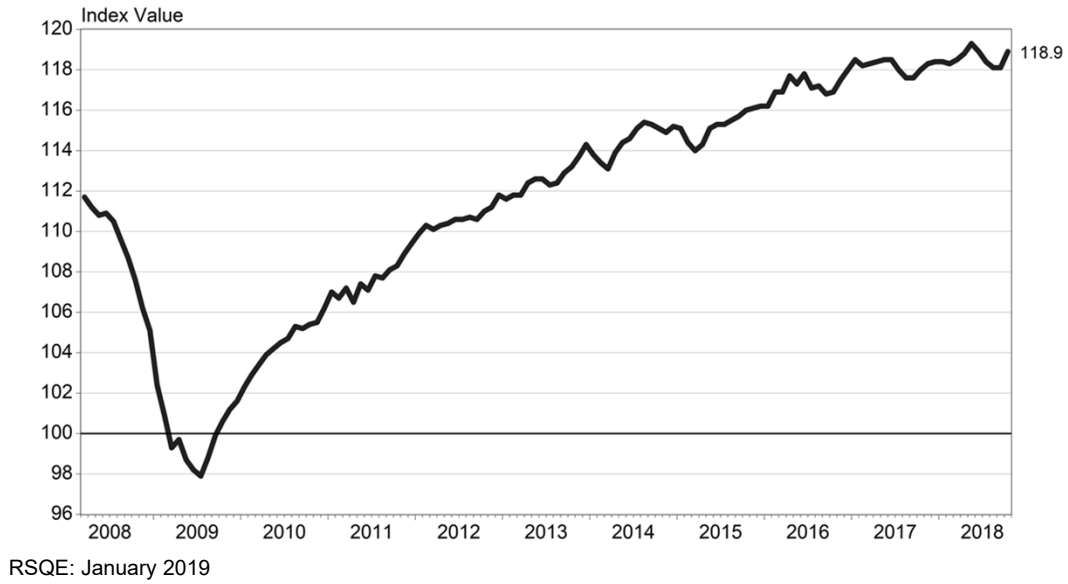
## Federal Reserve Bank of Philadelphia State Coincident Index



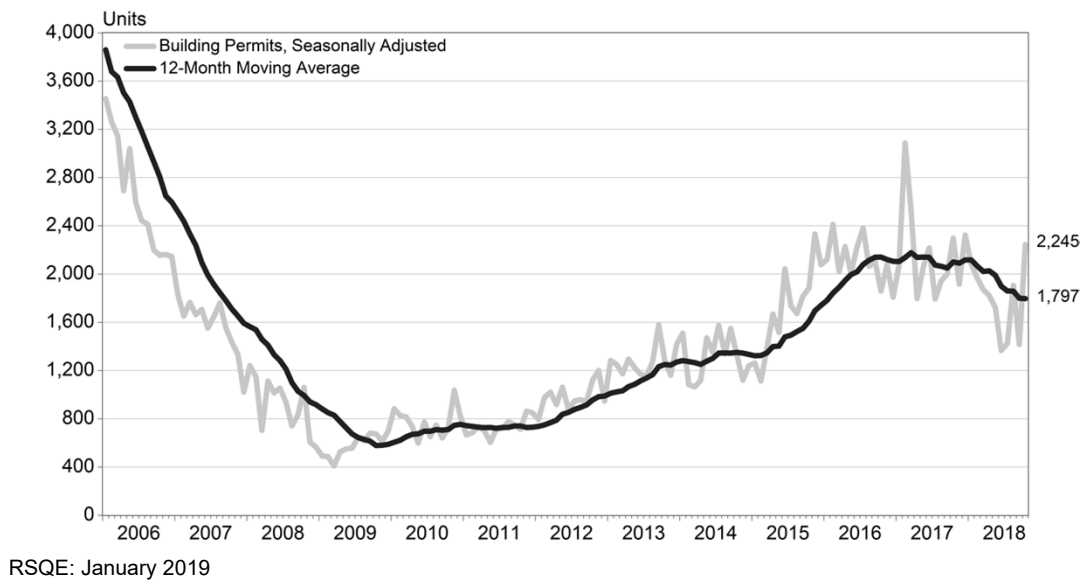
RSQE: January 2019



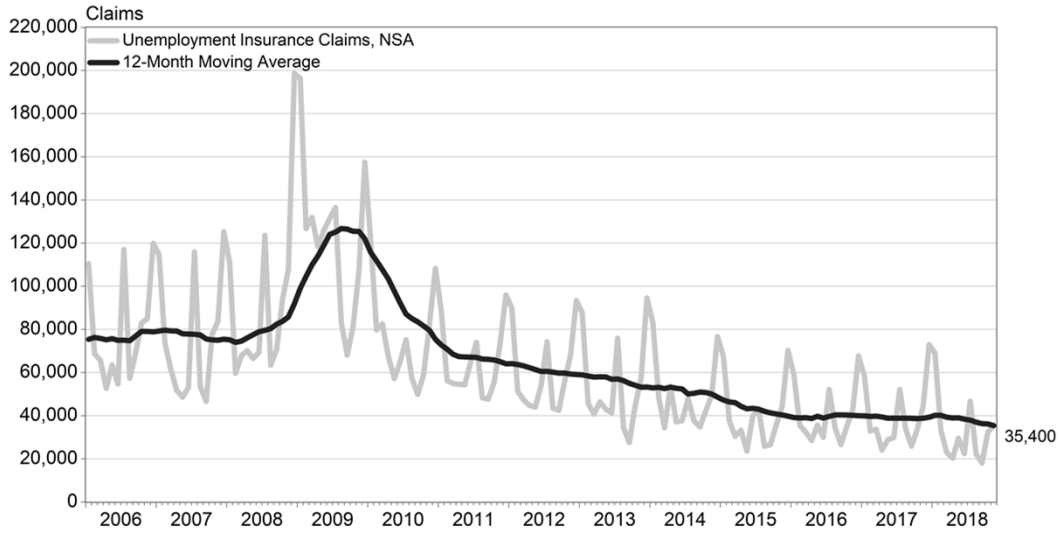
## Comerica Bank Michigan Economic Activity Index



## Building Permits

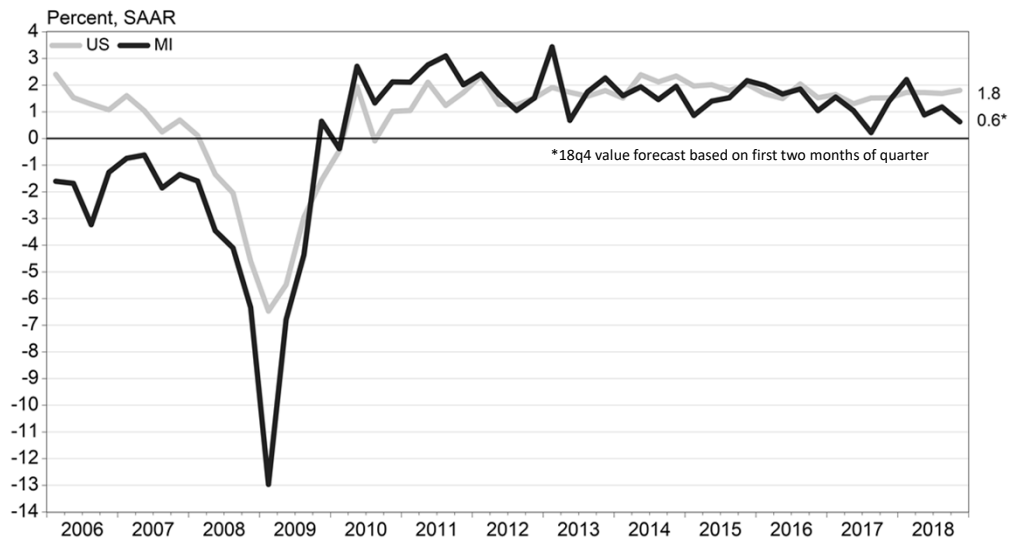


## Initial Unemployment Claims



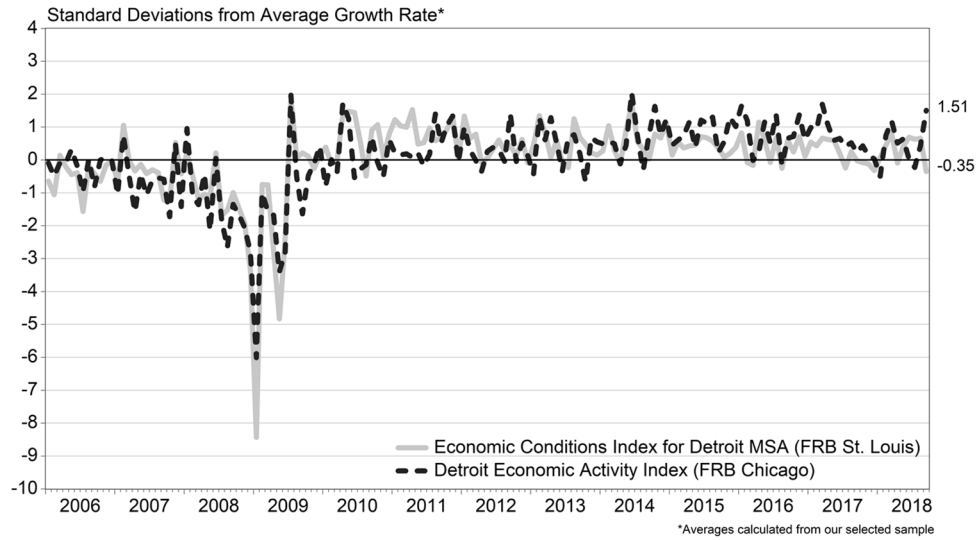
RSQE: January 2019

## Michigan and U.S. Quarterly Payroll Employment Growth



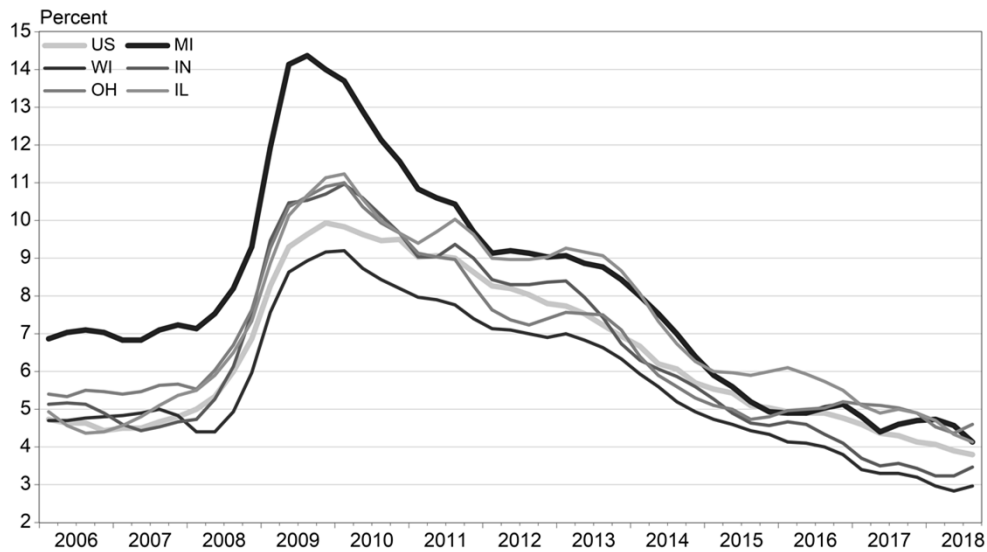
RSQE: January 2019

## Detroit Economic Activity Indices



RSQE: January 2019

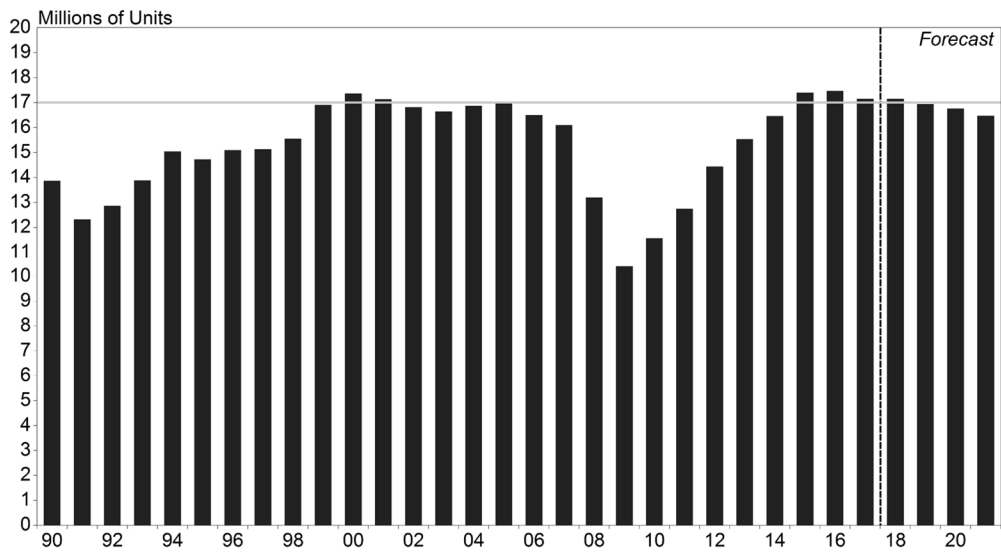
## Quarterly Average Unemployment Rates United States and East North Central Census Division



RSQE: January 2019

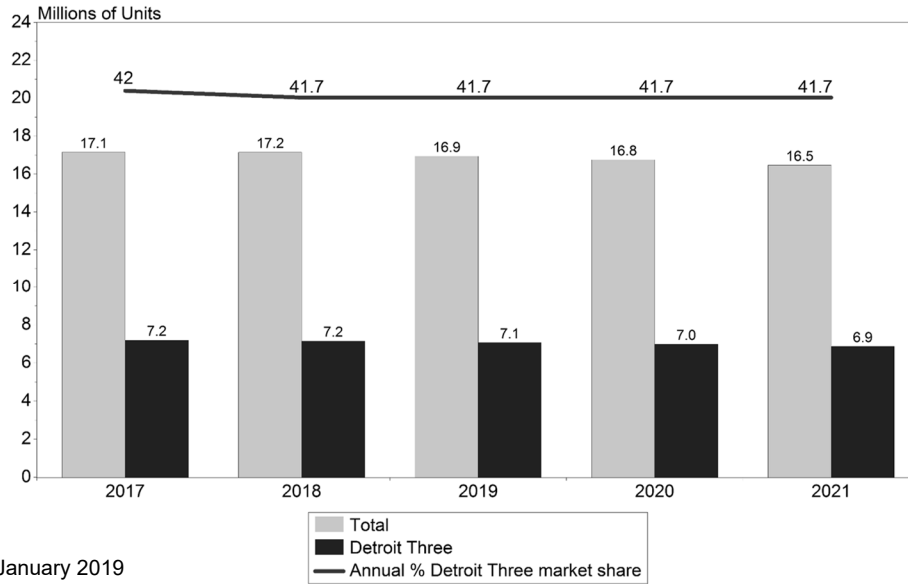
# Michigan Economic Outlook

## U.S. Light Vehicle Sales, 1990–2021

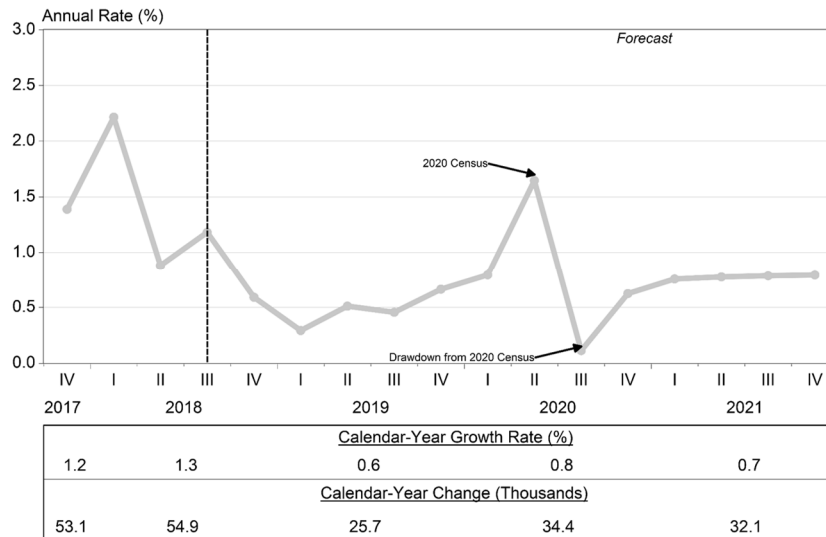


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## U.S. Light Vehicle Sales Total vs. Detroit Three, 2017–2021



## Michigan Wage and Salary Employment Growth



## Annual Job Growth in Michigan, 1991–2021



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## Forecast of Payroll Jobs in Michigan by Major Industry Division, 2017–2021 (Thousands of Jobs)

	2017	Forecast Employment Change				
		'17-'18	'18-'19	'19-'20	'20-'21	'17-'21
<b>TOTAL JOBS (Number of persons)</b>	<b>4372.5</b>	<b>54.9</b>	<b>25.7</b>	<b>34.4</b>	<b>32.1</b>	<b>147.1</b>
TOTAL GOVERNMENT	604.2	4.1	5.3	5.7	1.6	16.6
TOTAL PRIVATE	3768.3	50.8	20.4	28.7	30.5	130.5
Natural resources and mining	7.2	0.1	-0.2	-0.1	-0.1	-0.3
Construction	162.8	11.5	3.7	2.9	3.4	21.6
Manufacturing	614.7	6.3	0.3	-1.1	-0.1	5.4
Trade, transportation and utilities	788.8	3.1	1.7	5.6	5.2	15.5
Information	56.4	-1.2	-0.1	-0.3	-0.2	-1.8
Financial activities	218.0	2.4	2.2	0.4	0.5	5.5
Professional and business services	648.0	10.0	0.7	5.9	6.2	22.9
Private education and health services	671.1	5.5	5.6	7.5	8.1	26.7
Leisure and hospitality	433.3	8.6	6.2	7.0	6.8	28.5
Other services	168.0	4.5	0.4	0.8	0.7	6.5
<b>Addendum: Percent Change in Total Jobs</b>	<b>1.2</b>	<b>1.3</b>	<b>0.6</b>	<b>0.8</b>	<b>0.7</b>	<b>3.4</b>

RSQE: January 2019

## Assessing the Layoffs at General Motors

- Nearly 1,900 production jobs cut in Michigan
  - Split between Detroit-Hamtramck Assembly and Warren Transmission Operations
- Approximately 8,000 white collar job cuts
  - We expect the substantial majority to be in southeast Michigan
- Current strength of labor market should help laid-off workers become re-employed
- Total effect of 16,000 fewer jobs over the next two years
  - Includes spillover job losses

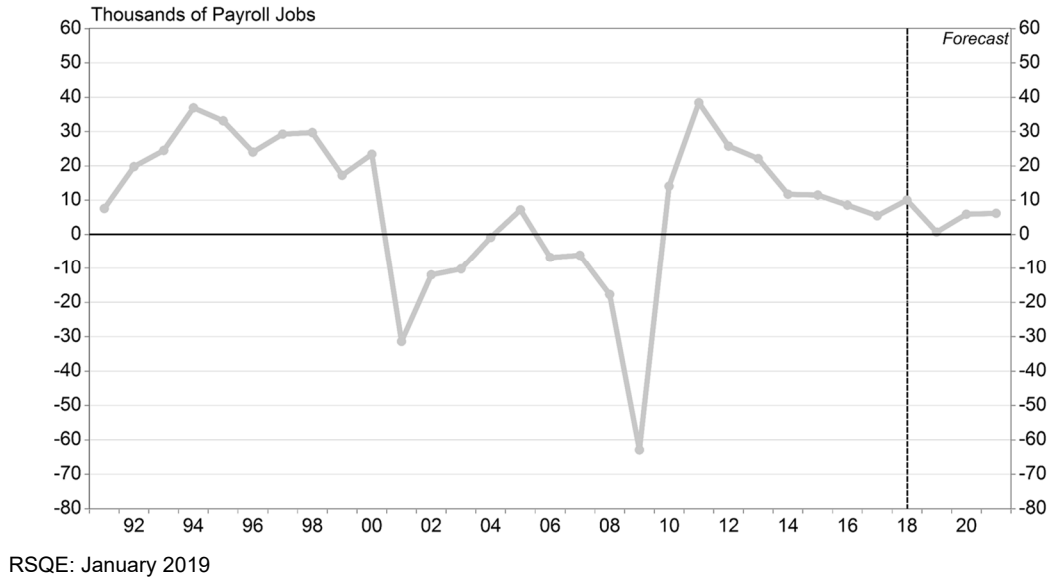
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## Annual Job Growth in Michigan, 1991–2021 Manufacturing Sector

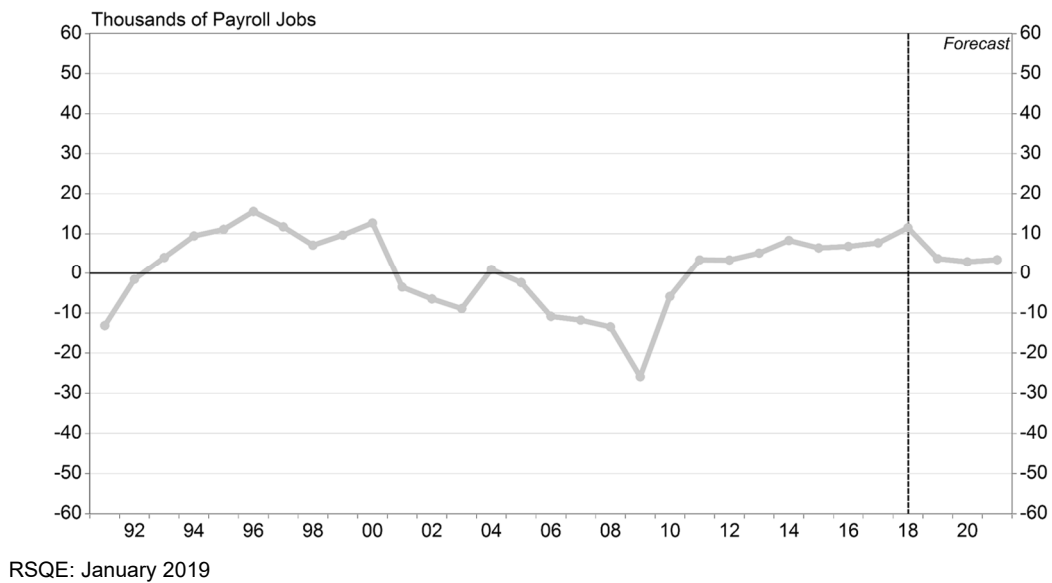


RSQE: January 2019

### Annual Job Growth in Michigan, 1991–2021 Professional and Business Services Sector

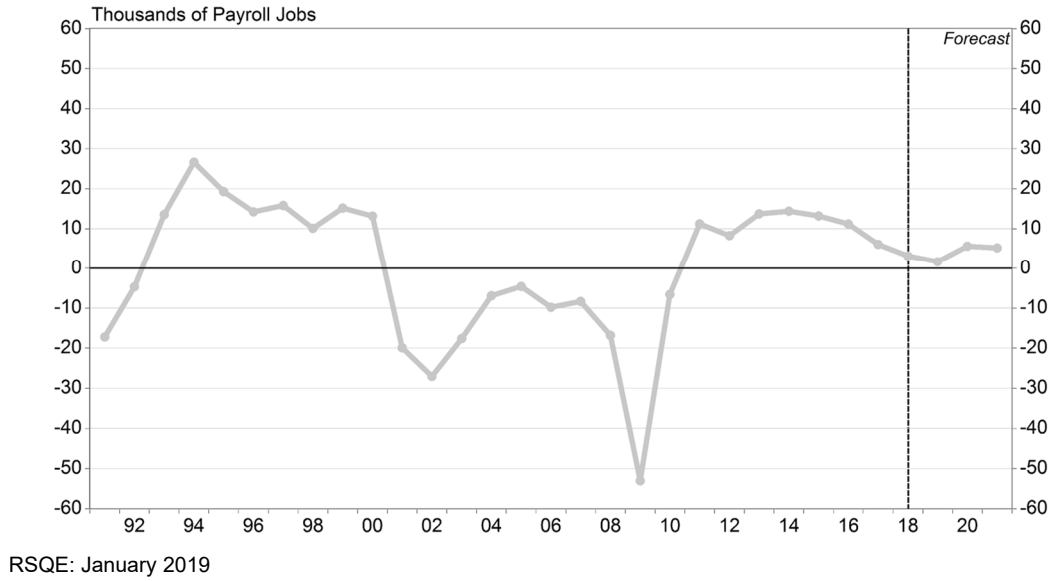


### Annual Job Growth in Michigan, 1991–2021 Construction Sector

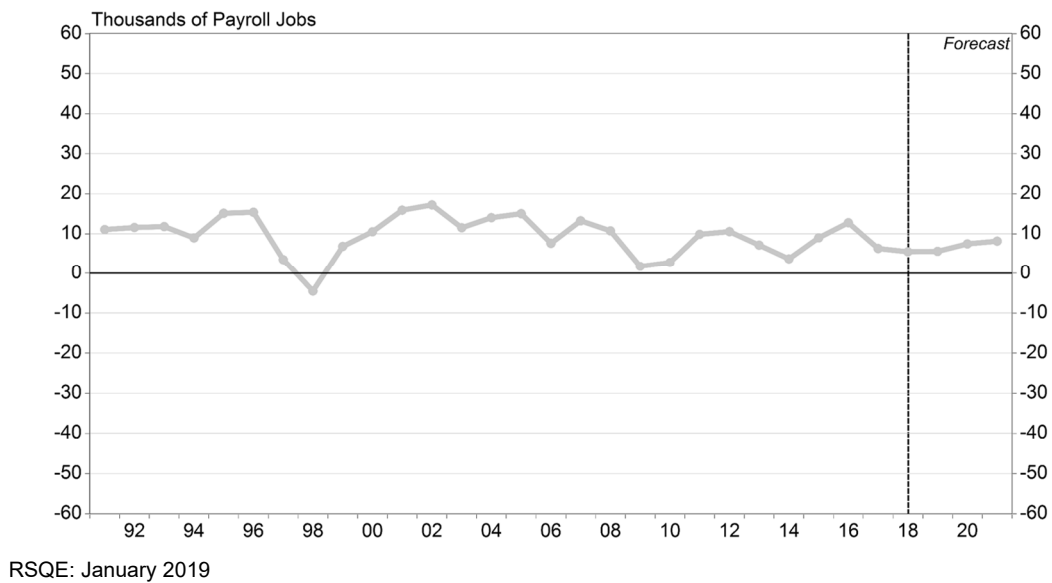




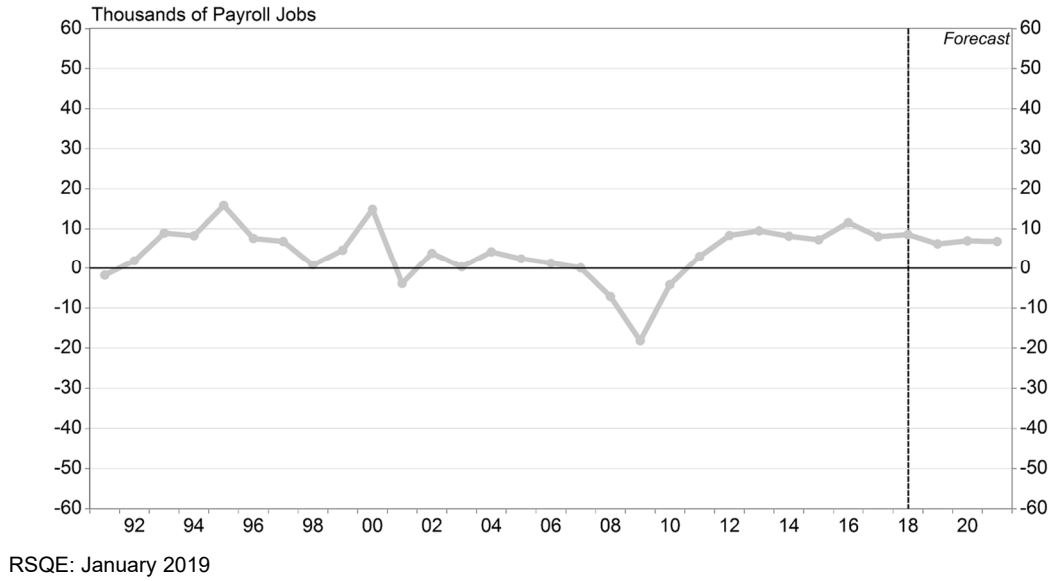
### Annual Job Growth in Michigan, 1991–2021 Trade, Transportation, and Utilities Sector



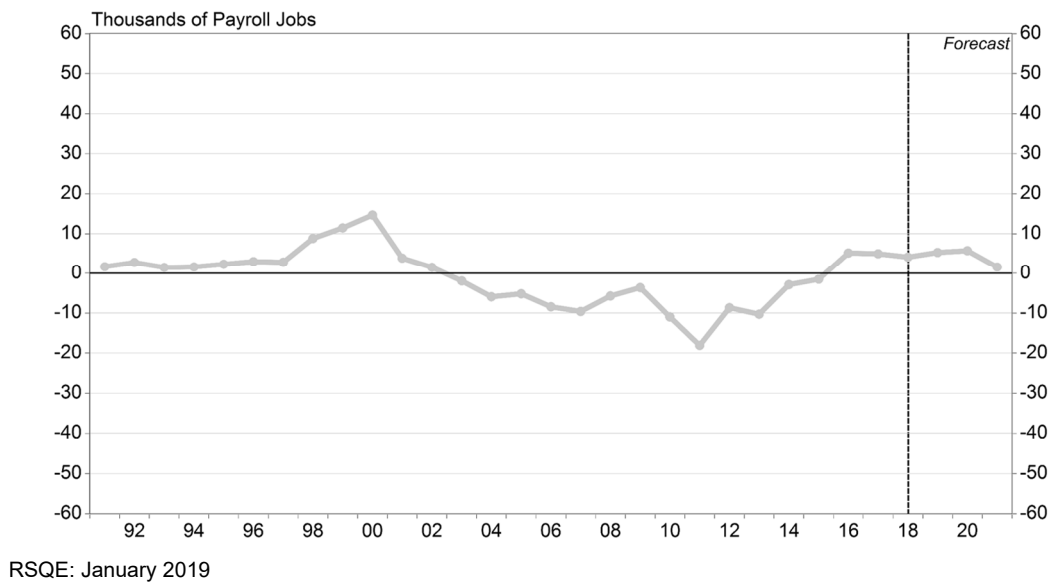
### Annual Job Growth in Michigan, 1991–2021 Private Education and Health Services Sector



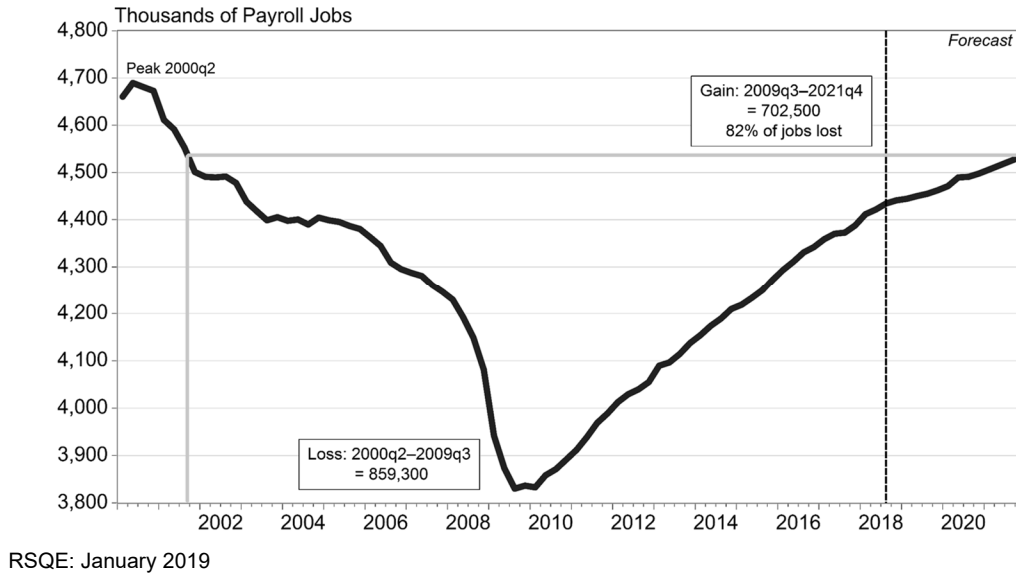
### Annual Job Growth in Michigan, 1991–2021 Leisure and Hospitality Sector



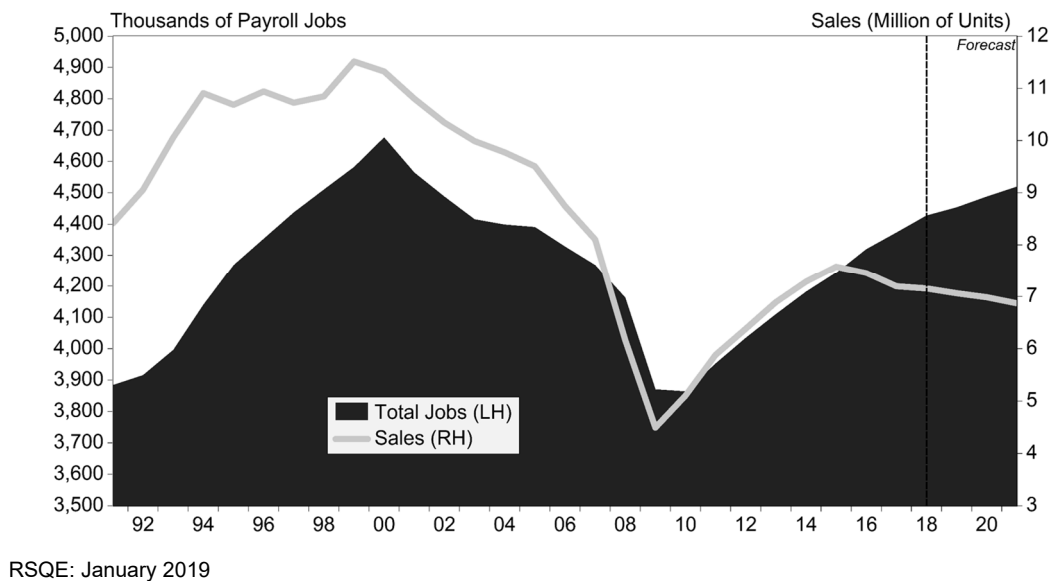
### Annual Job Growth in Michigan, 1991–2021 Government Sector



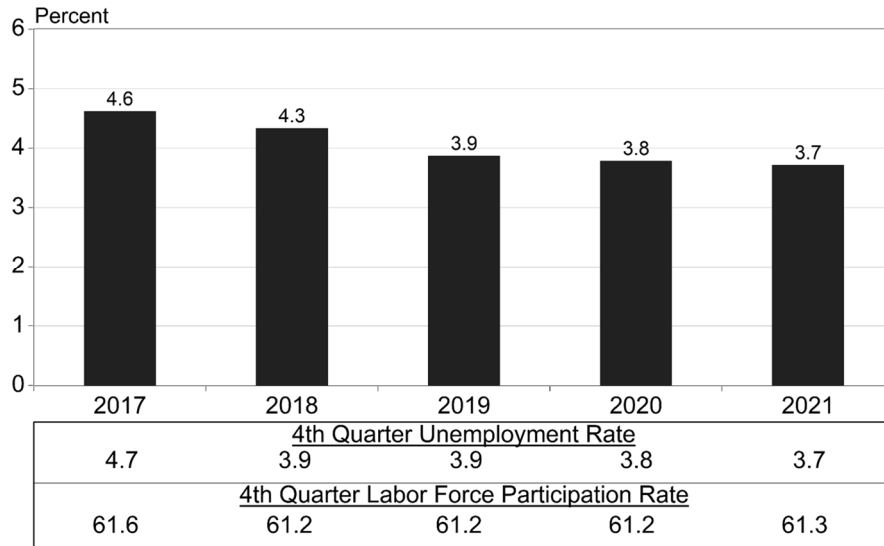
## Michigan Wage and Salary Employment First Quarter of 2000 to Fourth Quarter of 2021



## Michigan Total Jobs and Detroit Three Sales of Light Vehicles, 1991–2021

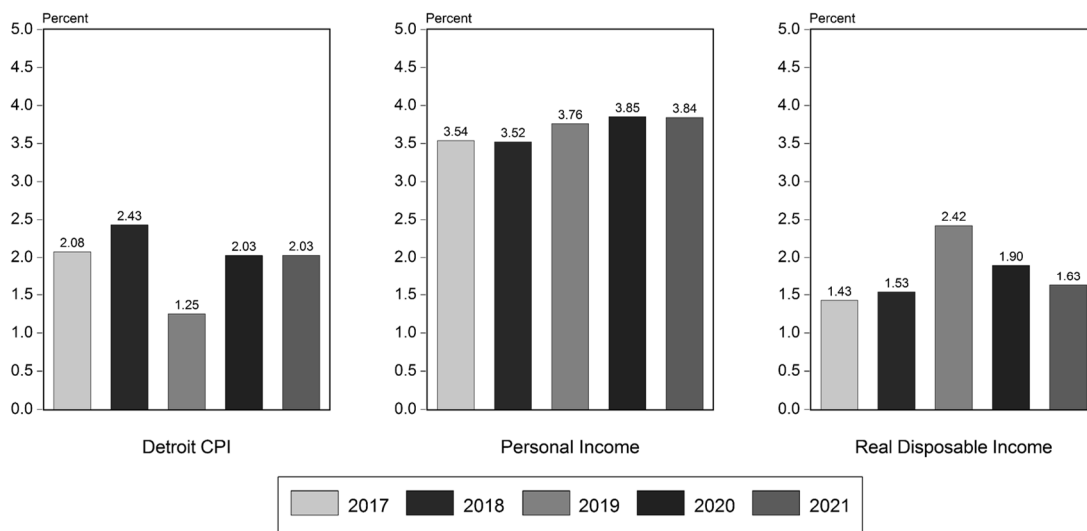


## Michigan Unemployment Rate, 2017–2021



RSQE: January 2019

## Michigan Inflation and Income Growth, 2017–2021



RSQE: January 2019

## State Revenue Outlook

### RSQE Forecast – State Revenues by Fiscal Year (Millions of Dollars)

	<u>Actual</u> 2018 <sup>P</sup>	<u>Forecast</u>		
		2019	2020	2021
GFGP revenue	11,019	10,745	10,757	11,045
(% change)	(8.0)	(-2.5)	(0.1)	(2.7)
Earmarked state SAF revenue	13,200	13,315	13,713	14,133
(% change)	(4.1)	(0.9)	(3.0)	(3.1)

<sup>P</sup>Preliminary

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RSQE: January 2019

**State Revenues by Fiscal Year**  
**(Millions of dollars, except as noted)**

	Actual	RSQE Forecast		
	2018 <sup>P</sup>	2019	2020	2021
<u>General Fund General Purpose</u>				
Personal income tax	7264	7091	7090	7312
(% change)	(7.9)	(-2.4)	(0.0)	(3.1)
Consumption taxes	2404	2297	2353	2407
(% change)	(13.7)	(-4.4)	(2.4)	(2.3)
Sales	1308	1316	1378	1425
Use	820	690	687	696
Other consumption	276	291	288	287
Business taxes	819	926	869	875
(% change)	(0.6)	(13.1)	(-6.2)	(0.7)
MBT/SBT/Corporate income	398	505	444	441
Other business	421	421	425	434
Other GFGP taxes	159	117	124	126
GFGP tax revenue	10647	10431	10436	10720
(% change)	(9.2)	(-2.0)	(0.1)	(2.7)
Nontax revenue	373	314	320	324
GFGP revenue	11019	10745	10757	11045
(% change)	(8.0)	(-2.5)	(0.1)	(2.7)
<u>School Aid Fund</u>				
SAF taxes	12220	12373	12766	13178
(% change)	(3.9)	(1.3)	(3.2)	(3.2)
Lottery transfer	980	942	947	955
(% change)	(6.0)	(-3.9)	(0.5)	(0.8)
Earmarked state SAF revenue	13200	13315	13713	14133
(% change)	(4.1)	(0.9)	(3.0)	(3.1)
<u>Addendum</u>				
Gross sales and use taxes	9885	10019	10368	10700
(% change)	(6.7)	(1.4)	(3.5)	(3.2)

<sup>P</sup> Preliminary

RSQE: January 2019

## Risks to Our Forecast

### ➤ International trade situation

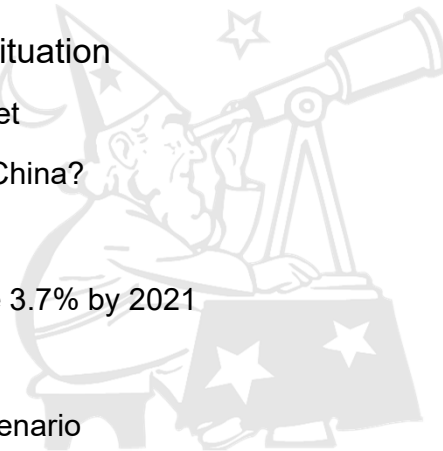
- USMCA not done yet
- Possible deal with China?

### ➤ Labor shortages

- Unemployment rate 3.7% by 2021

### ➤ National recession

- Not our baseline scenario



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RSQE: January 2019

**M** | **LSA** RESEARCH SEMINAR IN  
QUANTITATIVE ECONOMICS  
UNIVERSITY OF MICHIGAN

[lsa.umich.edu/econ/rsqe](http://lsa.umich.edu/econ/rsqe)