## Detroit Economic Activity Index (DEAI)

December 2019

THE DETROIT ECONOMIC ACTIVITY INDEX (DEAI) was +0.32 in December 2019, up from -0.03 in November. For the fourth quarter of 2019, the DEAI was +0.42, down from +1.09 in the previous quarter. Detroit real gross city product (GCP) and real per capita income are projected to have increased 2.4% and 3.3% in 2019, respectively.

The DEAI measures growth in economic activity for the city of Detroit using a mixed-frequency dynamic factor model of 24 Detroit-specific data series. An index value greater than zero points to above-trend growth, and conversely, a value less than zero points to below-trend growth. The index is then measured in standard deviation units from trend growth. The model also allows for projections of annual real gross city product and real per capita income.









## Detroit real per capita income (inflation-adjusted dollars)



Recent values (December 2019)

	Monthly		Quarterly		Annual
Dec	+0.32	Q4	+0.42	2019	+0.77
Nov	-0.03				
Oct	+0.83				
Sep	-0.11	Q3	+1.09		
Aug	+0.25				
Jul	+1.10				
Jun	+2.14	Q2	+0.01		
May	-0.71				
Apr	-0.29				
Mar	-0.16	Q1	+1.28		
Feb	+0.52				
Jan	+2.67				
Dec	-0.33	Q4	+0.39	2018	+0.68

transformations of the monthly series.

## Recent contributions

Category	Dec	Nov	Oct	Q4
Income	-0.01	+0.04	+0.01	+0.01
Labor	+0.34	-0.23	+0.89	+0.41
Real estate	-0.01	+0.16	-0.08	0.00
Trade	0.00	0.00	+0.01	-0.01

The index can be decomposed into the contributions from each component data series. We group these series into four categories: income, labor, real estate, and trade. Included in the income category is gross metropolitan product (GMP) for the Detroit–Warren– Dearborn metropolitan statistical area (MSA), which is used in the estimation of Detroit GCP. For additional details, see "Tracking Detroit's economic recovery after bankruptcy with a new index."

The shaded periods in the first figure correspond to recessions as determined by the National Bureau of Economic Research. *Actual* real per capita income data are from the U.S. Census Bureau, *American Community Survey* 1-year estimates.

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