

Detroit Economic Activity Index (DEAI)

September 2021

THE DETROIT ECONOMIC ACTIVITY INDEX (DEAI) was -0.77 in September 2021, down from $+0.21$ in August. For the third quarter of 2021, the DEAI was $+0.08$, down from $+0.17$ in the previous quarter. Detroit real gross city product (GCP) and real per capita income are projected to have decreased 5.5% and 0.02% in 2020, 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 Economic Activity Index
(standard deviations from trend)

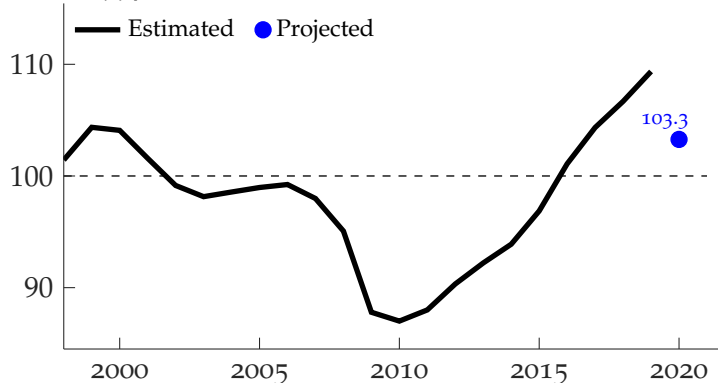


Recent values (September 2021)

	Monthly	Quarterly	Annual	
Sep	-0.77	Q3	+0.08	
Aug	+0.21			
Jul	+0.74			
Jun	+0.15	Q2	+0.17	
May	+0.19			
Apr	-0.06			
Mar	+0.10	Q1	+0.87	
Feb	+0.15			
Jan	+1.03			
Dec	-0.15	Q4	-0.29	
			2020	-2.18

Note: Quarterly and annual values are triangle averaged transformations of the monthly series.

Detroit real gross city product (GCP)
(index, 1997=100)



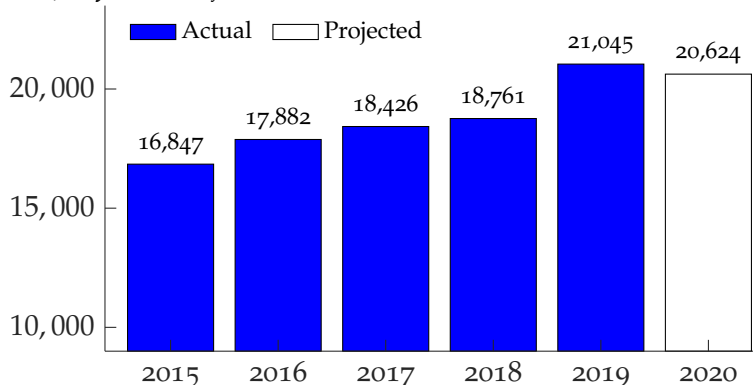
Recent contributions

Category	Sep	Aug	Jul	Q3
Income	0.00	0.00	0.00	-0.01
Labor	-0.75	+0.27	+0.72	+0.15
Real estate	+0.01	+0.01	-0.01	-0.02
Trade	-0.03	-0.07	+0.03	-0.04

Note: Quarterly values are triangle averaged transformations of the monthly contributions.

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 [“Measuring Detroit’s Economic Progress with the DEAI.”](#)

Detroit real per capita income
(2019 inflation-adjusted dollars)



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

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For additional information on the DEAI, contact Martin Lavelle at martin.lavelle@chi.frb.org or visit chicagofed.org/deai.