# CFNAI Technical Report November 20, 2003

This Technical Report describes recent changes to the CFNAI. First, it describes changes to the indicators used to construct the CFNAI. Second, it presents the index weights for the individual indicators as of November 18, 2003. Third, it describes the new broad categories of indicators referred to in the monthly CFNAI release.

## **Changes to the Indicators**

The following is a list of recent changes to the series used to construct the CFNAI. Old series codes referred to below are taken from Appendix A of the original CFNAI Background Release.

- 1. Old series CONDO9 (construction contracts, millions of square feet) and MPCONQ (contracts and order for plant and equipment, 1996 dollars) have been discontinued. These series are no longer used to compute the CFNAI.
- 2. Two new construction series have been added to the indicators used to construct the CFNAI. The first is a measure of real private nonresidential construction put in place and the second is a measure of real public construction put in place. These series are based on calculations by the Federal Reserve Bank of Chicago: monthly nominal series from the Census Bureau are deflated by monthly price deflators. The deflators are interpolated from quarterly nonresidential and federal, state and local government construction deflators in the National Income and Product Accounts.
- 3. Old series CDMNHM (PCE, new autos, chained 1996 dollars) has been replaced by CDVHM (PCE, motor vehicles and parts, chained 1996 dollars.)
- 4. Old series LASRVSA (Payroll employment, services) has been replaced with the sum of the Bureau of Labor Statistics payroll employment series LAINFOA (information), LAPBSVA (professional and business services), LAEDUHA (Education and health), LALEIHA (leisure and hospitality), and LASRVOA (other services). The new series code is the same as the old series code, LASRVSA.
- 5. Old series LATPUTA (transportation and utilities) has been replaced with the sum of payroll employment series LATRANA (transportation) and LAUTILA (utilities). The new series code is the same as the old series code, LATPUTA.
- 6. Old series RSDH (Retail sales, Durable goods, chained 1996 dollars) and RSNH (Retail sales, Nondurable goods, chained 1996 dollars) have been replaced by series constructed by the Federal Reserve Bank of Chicago using detailed retail sales data published by the Bureau of Economic Analysis. The new series codes are the same as the old series codes, RSDN and RSNH.

# **CFNAI Component Data Series**

Series	Weights	Transformation	Description	Source	Category
IPMFG	0.021	DLN	Industrial Production: Manufacturing SA, 1997=100	FRB	1
IP	0.021	DLN	Industrial Production Index SA, 1997=100	FRB	1
CUMFG	0.021	DLV	Capacity Utilization: Manufacturing SA, Percent of Capacity	FRB	1
LAGOODA	0.021	DLN	All Employees: Goods-Producing Industries SA, Thousands	BLS	2
LAPRIVA	0.021	DLN	All Employees: Private Nonfarm Payrolls SA, Thousands	BLS	2
IPMDG	0.020	DLN	Industrial Production: Durable Goods Manufacturing SA, 1997=100	FRB	1
LANAGRA	0.020	DLN	Employees on Nonfarm Payrolls SA, Thousands	BLS	2
LAMANUA	0.020	DLN	All Employees: Manufacturing SA, Thousands	BLS	2
IPTP	0.020	DLN	Industrial Production: Final Products and Nonindustrial Supplies SA, 1997=100	FRB	1
LADURGA	0.019	DLN	All Employees: Durable Goods Manufacturing SA, Thousands	BLS	2
IP53	0.019	DLN	Industrial Production: Materials SA, 1997=100	FRB	1
IP531	0.019	DLN	Industrial Production: Materials: Durable SA, 1997=100	FRB	1
IP54	0.018	DLN	Industrial Production: Nonindustrial Supplies SA, 1997=100	FRB	1
NAPMNI	0.018	LV	National Association of Purchasing Managers: Manufacturing: Diffusion Index, New Orders SA, Percent	ISM	4
NAPMOI	0.018	LV	National Association of Purchasing Managers: Manufacturing: Diffusion Index, Production SA, Percent	ISM	1
IPFP	0.018	DLN	Industrial Production: Final Products SA, 1997=100	FRB	1
IP521	0.018	DLN	Industrial Production: Business Equipment SA, 1997=100	FRB	1
NAPMC	0.018	LV	National Association of Purchasing Managers: Manufacturing: Composite Index SA, Percent	ISM	1
NAPMEI	0.016	LV	National Association of Purchasing Managers: Manufacturing: Diffusion Index, Employment SA, Percent	ISM	2
LANDURA	0.016	DLN	All Employees: Nondurable Goods Manufacturing SA, Thousands	BLS	2
TSTH	0.016	DLN	Real Manufacturing and Trade: Sales SA, Millions/Chained/1996\$	BEA	4
IPMND	0.016	DLN	Industrial Production: Nondurable Manufacturing SA, 1997=100	FRB	1
LATRDA	0.016	DLN	All Employees: Retail and Wholesale Trade SA, Thousands	BLS	2
LHELPR	0.015	DLN	Ratio: Help-Wanted Advertising in Newspapers/Number Unemployed SA	Haver1	2
LASERPA	0.015	DLN	All Employees: Service-Producing Industries SA, Thousands	BLS	2
HST	0.015	LN	Housing Starts SAAR, Thousands of Units	Census	3
IP51	0.014	DLN	Industrial Production: Consumer Goods SA, 1997=100	FRB	1
LASRVSA	0.014	DLN	All Employees: Services SA, Thousands (constructed)	BLS	2
TSMH	0.014	DLN	Sales: Manufacturing SA, Millions/Chained/1996\$	BEA	4
IP532	0.014	DLN	Industrial Production: Materials: Nondurable SA, 1997=100	FRB	1
IP511	0.014	DLN	Industrial Production: Durable Consumer Goods SA, 1997=100	FRB	1
LR	0.014	DLV	Civilian Unemployment Rate SA, Percent	BLS	2
TSMDH	0.014	DLN	Sales: Manufacturing: Durable Goods SA, Millions/Chained/1996\$	BEA	4
HPT	0.014	LN	Housing Units Authorized by Building Permit SAAR, Thousands of Units	Census	3
LACONSA	0.014	DLN	All Employees: Construction SA, Thousands	BLS	2
MOCGMC	0.013	DLN	Real Manufacturers' New Orders: Consumer Goods & Materials SA, Millions/1996\$	TCB	4
TRMH	0.013	DLV	Inventory/Sales Ratio: Manufacturing SA, Chained/1996\$	BEA	4
TSWDH	0.013	DLN	Sales: Wholesale: Durable Goods SA, Millions/Chained/1996\$	BEA	4
HSTS	0.013	LN	Housing Starts: South SAAR, Thousands of Units	Census	3
LRM25	0.013	DLV	Civilian Unemployment Rate: Men, 25-54 Years SA, Percent	BLS	2
HSTW	0.013	LN	Housing Starts: West SAAR, Thousands of Units	Census	3
LE	0.012	DLN	Civilian Employment: Sixteen Years & Over SA, Thousands	BLS	2
TRTH	0.012	DLV	Real Manufacturing and Trade: Inventory/Sales Ratio SA, Chained/1996\$	BEA	4
LENA	0.012	DLN	Civilian Employment: Nonagricultural Industries SA, Thousands	BLS	2
LHELP	0.012	DLN	Index of Help-Wanted Advertising in Newspapers SA, 1987=100	TCB	2
YPLTPMH	0.012	DLN	Real Personal Income Less Transfer Payments SAAR, Billions/Chained/1996\$	Haver2	1
HSTMW	0.011	LN	Housing Starts: Midwest SAAR, Thousands of Units	Census	3
NAPMVDI	0.011	LV	National Association of Purchasing Managers: Manufacturing: Diffusion Index, Vendor Deliveries SA, Percent	ISM	4

Series	Weights	Transformation	Description	Source	Category
TSWH	0.011	DLN	Sales: Merchant Wholesalers SA, Millions/Chained/1996\$	BEA	4
LCUN	0.011	DLV	Weekly Initial Claims For Unemployment Insurance SA, Thousands	TCB	2
TSMNH	0.010	DLN	Sales: Manufacturing: Nondurable Goods SA, Millions/Chained/1996\$	BEA	4
MDOQ	0.010	DLN	Real Manufacturers' New Orders: Durable Goods Industries, Billions/Chained/1996\$	TCB	4
NAPMII	0.010	LV	National Association of Purchasing Managers: Manufacturing: Diffusion Index, Inventory SA, Percent	ISM	4
HSM	0.010	LN	Manufacturers' Shipment of Mobile Homes SAAR, Thousands of Units	Census	3
HSTNE	0.010	LN	Housing Starts: Northeast SAAR, Thousands of Units	Census	3
LATPUTA	0.009	DLN	All Employees: Transportation and Public Utilities SA, Thousands (constructed)	BLS	2
LAFIREA	0.009	DLN	All Employees: Finance, Insurance and Real Estate SA, Thousands	BLS	2
LRMANUA	0.009	DLV	Average Weekly Hours: Manufacturing SA, Hours	BLS	2
TIRH	0.009	DLN	Inventories: Retail Trade EOP, SA, Millions/Chained/1996\$	BEA	4
TRWH	0.008	DLV	Inventory/Sales Ratio: Merchant Wholesalers SA, Chained/1996\$	BEA	4
IP512	0.008	DLN	Industrial Production: Nondurable Consumer Goods SA, 1997=100	FRB	1
СВНМ	0.008	DLN	Personal Consumption Expenditures SAAR, Billions/Chained/1996\$	BEA	3
RSH	0.008	DLN	Real Retail Sales SA, Millions/Chained/1996\$	BEA	3
RSDH	0.007	DLN	Real Retail Sales: Durable Goods SA, Millions/Chained/1996\$ (constructed)	CHI1	3
LOMANUA	0.007	DLV	Average Weekly Overtime Hours: Manufacturing SA, Hours	BLS	2
TITH	0.007	DLN	Real Manufacturing & Trade Inventories EOP, SA, Millions/Chained/1996\$	BEA	4
CONSTPV	0.007	DLN	Private nonresidential construction, SAAR Mil\$, Chained/1996\$ (constructed)	CHI2	1
YPDHM	0.006	DLN	Disposable Personal Income SAAR, Billions/Chained/1996\$	BEA	1
CDBHM	0.006	DLN	Personal Consumption Expenditures: Durable Goods SAAR, Billions/Chained/1996\$	BEA	3
CNBHM	0.005	DLN	Personal Consumption Expenditures: Nondurable Goods SAAR, Billions/Chained/1996\$	BEA	3
CDVHM	0.005	DLN	Personal Consumption Expenditures:Motor vehicles and parts SAAR, Millions/Chained/1996\$	BEA	3
TSWNH	0.005	DLN	Sales: Wholesale: Nondurable Goods SA, Millions/Chained/1996\$	BEA	4
RSNH	0.005	DLN	Real Retail Sales: Nondurable Goods SA, Millions/Chained/1996\$ (constructed)	CHI1	3
CSBHM	0.005	DLN	Personal Consumption Expenditures: Services SAAR, Billions/Chained/1996\$	BEA	3
IPB0	0.004	DLN	Industrial Production: Mining SA, 1992=100	FRB	1
MOCNC	0.004	DLN	Real Manufacturers' New Orders: Nondefense Capital Goods Industries SA, Millions/1996\$	TCB	4
TIWH	0.003	DLN	Inventories: Merchant Wholesalers EOP, SA, Millions/Chained/1996\$	BEA	4
TIMDH	0.003	DLN	Inventories: Manufacturing: Durable Goods EOP, SA, Millions/Chained/1996\$	BEA	4
TIMH	0.003	DLN	Inventories: Manufacturing EOP, SA, Millions/Chained/1996\$	BEA	4
CONSTPU	0.003	DLN	Total Public construction, SAAR Mil\$, Chained/1996\$ (constructed)	CHI2	1
LAMINGA	0.003	DLN	All Employees: Mining SA, Thousands	BLS	2
IPUTL	0.002	DLN	Industrial Production: Electric and Gas Utilities SA, 1997=100	FRB	1
TRRH	0.002	DLV	Inventory/Sales Ratio: Retail Trade SA, Chained/1996\$	BEA	4
TIMNH	0.001	DLN	Inventories: Manufacturing: Nondurable Goods EOP, SA, Millions/Chained/1996\$	BEA	4
LAGOVTA	0.001	DLN	All Employees: Government SA, Thousands	BLS	2

## For a series $y_t$ , the transformations $x_t = f(y_t)$ are:

1. LV:  $x_t = y_t$ 2. DLV:  $x_t = Dy_t$ 3. LN:  $x_t = ln(y_t)$ 4. DLN:  $x_t = D[ln(y_t)]$ 

### Source codes:

BEA = Bureau of Economic Analysis BLS = Bureau of Labor Statistics Census = Census Bureau CHI1 = Constructed by Chicago Fed with data from BEA CHI2 = Constructed by Chicago Fed with data from BEA and Census FRB = Federal Reserve Board Haver1 = Constructed by Haver Analytics with data from Conference Board and BLS

### Categories:

- 1. Production and Income
- 2. Employment, Unemployment, and Hours
- 3. Personal Consumption and Housing
- 4. Sales, Orders, and Inventories

Haver2 = Constructed by Haver Analytics with data from BEA ISM = Institute for Supply Management

TCB = The Conference Board