

**A GLOBAL THINK TANK DEDICATED TO  
DELIVERING DATA-RICH ANALYSES AND  
EXPERT INSIGHTS FOR THE PUBLIC GOOD**

JPMORGAN CHASE & Co.

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INSTITUTE

## Who we are

- JPMCI research is **public facing** for public consumption: primary audience is decision-makers: policy makers, businesses, and non-profit leaders
  - Public impact
- **Independent research agenda** from commercial operations; leverage bank expertise and data
- Team of **social scientists and data scientists** (economics to sociology to finance to computer science)
  - Mix of PhDs, grads, undergrads
  - Current part-time PhD students through PhD fellowship
- **DC and NYC headquartered**

# Our data and insights leverage the expansive breadth of the JPMorgan Chase window on the world

A relationship with  
**50% of households**  
in the U.S. (58 million  
customers)

Presence in  
**60 countries**; economic  
forecasting for **39 countries**

Services provided to over  
**550 public entities** in over  
**100 countries**

**\$2.4 Trillion in assets**  
spanning individuals,  
businesses, governments

# JPMCI data and research approach

## Consumers

*Using anonymized Chase customer transaction data*

- US Consumer financial behavior and consumers' financial lives
- Income and consumption volatility; financial shocks and financial health
- Impact of gas prices, impact of out-of-pocket healthcare spending, impact of unemployment insurance

## Business

*Using anonymized CCB individual customer data, Chase business banking data, and eventually CB data (Middle markets)*

- Interactions between consumers and businesses and impact on local economies; how businesses (small and large) behave, grow and thrive
- Impact of everyday spending in neighborhoods, cities, and nationally
- Relationship of growth of small businesses and volatility of cash flows

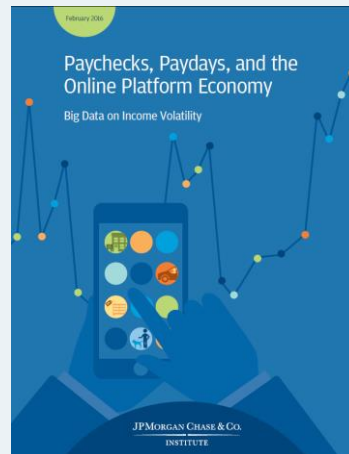
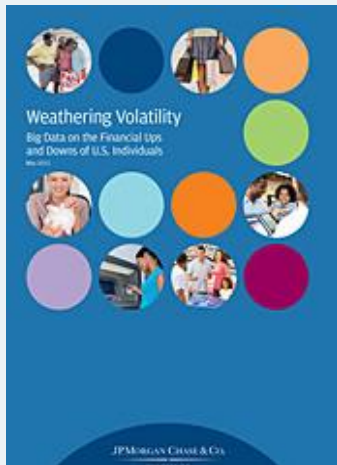
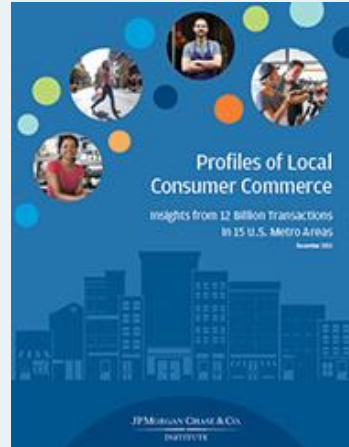
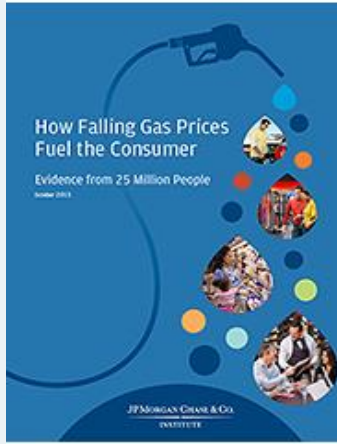
## Financial Markets

*Using anonymized CIB markets transaction data; eventually GIM transaction data*

- Interactions between financial market activities, policies and economic outcomes
- Understanding institutional investor behavior and impact on financial markets and impact of policy changes and other points in time
- Mapping of asset holdings, mapping of global capital flows

# Existing Institute Research

## Reports



## Research Briefs

**Consumption Inequality: Where does your city rank?**  
Spending by the top income quintile

Income and wealth inequality have gained prominence in the national conversation following the passing of the Affordable Care Act, but what about consumption inequality? As more and more data limitations have prevented economists from examining consumption inequality as closely, building off of 12.4 billion anonymized credit and debit card transactions in 15 metropolitan areas, the JPMorgan Chase Institute's recently released Profiles of Local Consumer Commerce sheds light on this question.<sup>1</sup> Local commerce spending by consumers in the top income quintile is one indicator of consumption inequality. By this measure, we find that there are considerable differences across cities.

**Which metro area has the largest share of spending by the top income quintile?**  
2015 Q2

Rank	Metro Area	Share of Spending
1	San Francisco-Oakland-Hayward, CA	35.0%
2	New York Newark-Jersey City, NJ-NJ-PA	33.2%
3	Houston-The Woodlands-Sugar Land, TX	30.4%
4	Seattle-Tacoma-Bellevue, WA	29.1%
5	Los Angeles-Long Beach-Anaheim, CA	28.1%
6	Chicago-Roseville-Evanston, IL-IN-WI	27.0%
7	San Diego-Carlsbad, CA	26.2%
-	Fifteen City Average	24.2%
8	Dallas-Fort Worth-Airport, TX	23.0%

**Insights**

**Boutiques or Big Box Stores: Where does your city rank?**  
Share of Spending at Small and Medium Enterprises

**Economic Contribution of Seniors: Where does your city rank?**  
Spending by Consumers 65 and Older

## Indices and Data Visualizations

**Local Consumer Commerce**  
December 2015

INDEXES ↑ 2.3%

The Local Consumer Commerce Index (LCCI) for second quarter rose 2.3% in December 2015.

Figure 1: Local Consumer Commerce Index (LCCI)

The JPMorgan Chase Institute's LCCI is a measure of the monthly, per-capita spending on goods and services at brick-and-mortar stores. The LCCI is calculated for 15 major U.S. metro areas: Boston, Dallas, Denver, Detroit, Houston, Los Angeles, Miami, Minneapolis, New York, Phoenix, San Diego, San Francisco, San Jose, Seattle, Tampa, and Washington. Each metro area's LCCI is calculated as the ratio of the total value of retail and food services sales to the total population of the metro area. The LCCI is calculated on a monthly basis and is seasonally adjusted. For more information on the methodology and statistical significance of the LCCI, please visit [www.jpmorganchase.com/research](http://www.jpmorganchase.com/research).

The index captures changes in the volume of retail and food services sales that are not captured by other data sources. There are a number of factors that can affect the index, such as changes in the number of stores, changes in the mix of goods and services sold, and changes in the mix of consumers. The index is not intended to be a measure of economic growth or a predictor of economic activity. For more information on the index, please visit [www.jpmorganchase.com/research](http://www.jpmorganchase.com/research).

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**San Francisco, CA**

**Metro Area Breakdowns**

Which is spending?

San Francisco, CA: 35.0%

New York Newark-Jersey City, NJ-NJ-PA: 33.2%

Houston-The Woodlands-Sugar Land, TX: 30.4%

Seattle-Tacoma-Bellevue, WA: 29.1%

Los Angeles-Long Beach-Anaheim, CA: 28.1%

Chicago-Roseville-Evanston, IL-IN-WI: 27.0%

San Diego-Carlsbad, CA: 26.2%

Fifteen City Average: 24.2%

Dallas-Fort Worth-Airport, TX: 23.0%

# Local Consumer Commerce

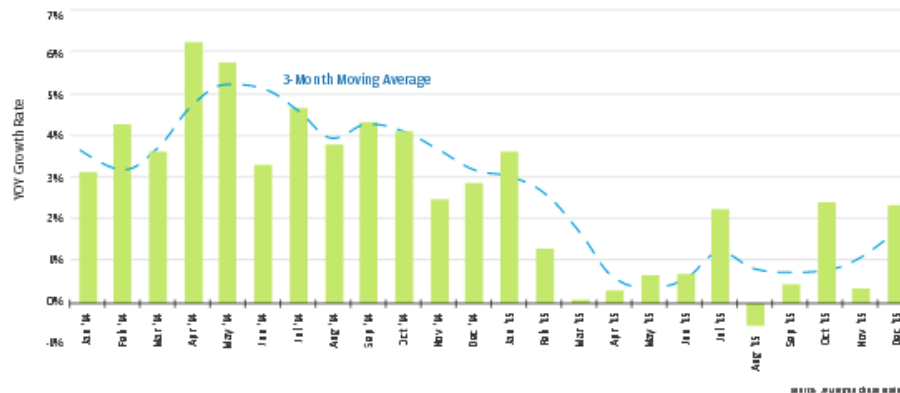
## December 2015



DEC 2015 **↑ 2.3%**

The Local Consumer Commerce Index (LCCI) increased 2.3 percent year-over-year in December 2015.

Figure 1: Local Consumer Commerce Index (LCCI)



The JPMorgan Chase Institute's LCCI is a measure of the monthly year-over-year growth rate of everyday debit and credit card spending. The LCCI is constructed from over 14 billion anonymized credit and debit card transactions from over 50 million Chase customers across 15 U.S. cities: Atlanta, Chicago, Columbus, Dallas, Denver, Detroit, Houston, Miami, Los Angeles, New York, Phoenix, Portland (OR), San Diego, San Francisco, and Seattle. Unlike many existing sources of data on consumer spending, the LCCI captures actual transactions, instead of self-reported measures of how consumers think they spend. The LCCI's geographically specific data provide a granular and timely view of how cities and their surrounding metro areas are faring on a monthly basis. Our portfolio of cities mirrors the geographic and economic diversity of larger metropolitan areas in the United States and accounts for 32 percent of retail sales nationwide. The index captures economic activity in consumer-facing retail and services sectors that previously have not been well understood by other data sources. These include activities in sectors such as food trucks, new businesses, and personal services. The LCCI is a powerful tool for city development officials, businesses and investors, and statistical agencies to better understand the everyday economic health of consumers, businesses, and the places they care about.

This report analyzes the growth of local consumer commerce across all 15 metro areas in aggregate and in each of the 15 metro areas individually. It also presents a view of local consumer commerce through five important lenses: consumer age and income, business size and product type, and consumer residence relative to the location of the business. For each lens, we show how different segments contributed to year-over-year spending growth for each month covered by the series.

15 Cities

51 Million

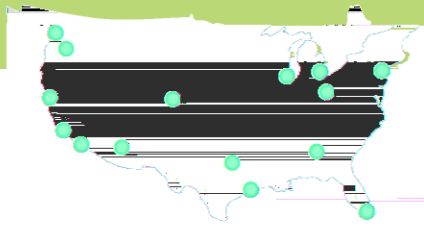
Age

How do older and

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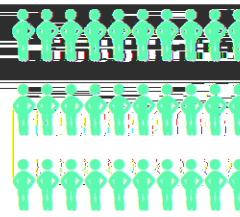
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Anonymized JPMorgan Chase

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We use 14.4 billion credit and debit card transactions of 51 million JPMorgan Chase customers conducted over 39 months to analyze the growth of local consumer commerce at business establishments in 15 metropolitan areas. We analyze how the growth of local consumer commerce is shaped by the age and income of the consumer, the products sold by the business and the distance and residence of the consumer to the business.

14.4

12.4 Bil

Debit & Credit Card Transactions



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Months

October 2012 to December 2015



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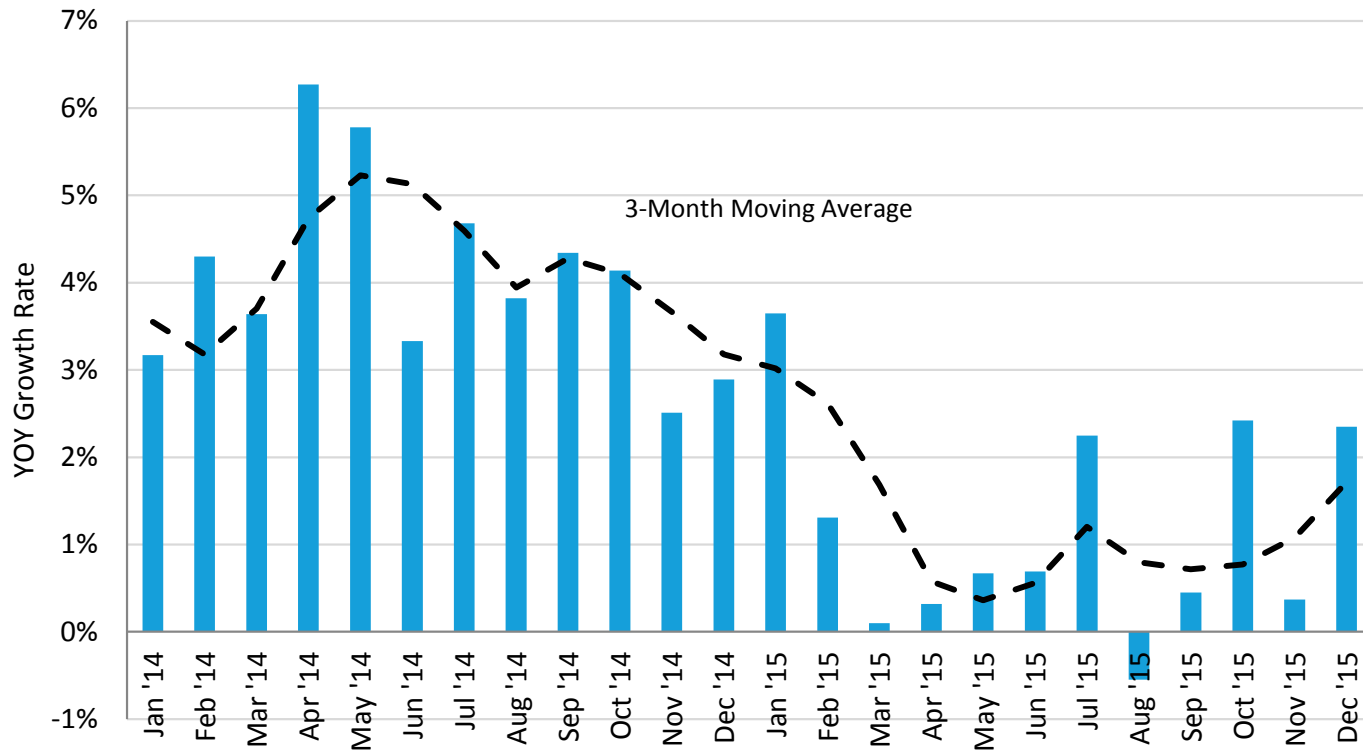


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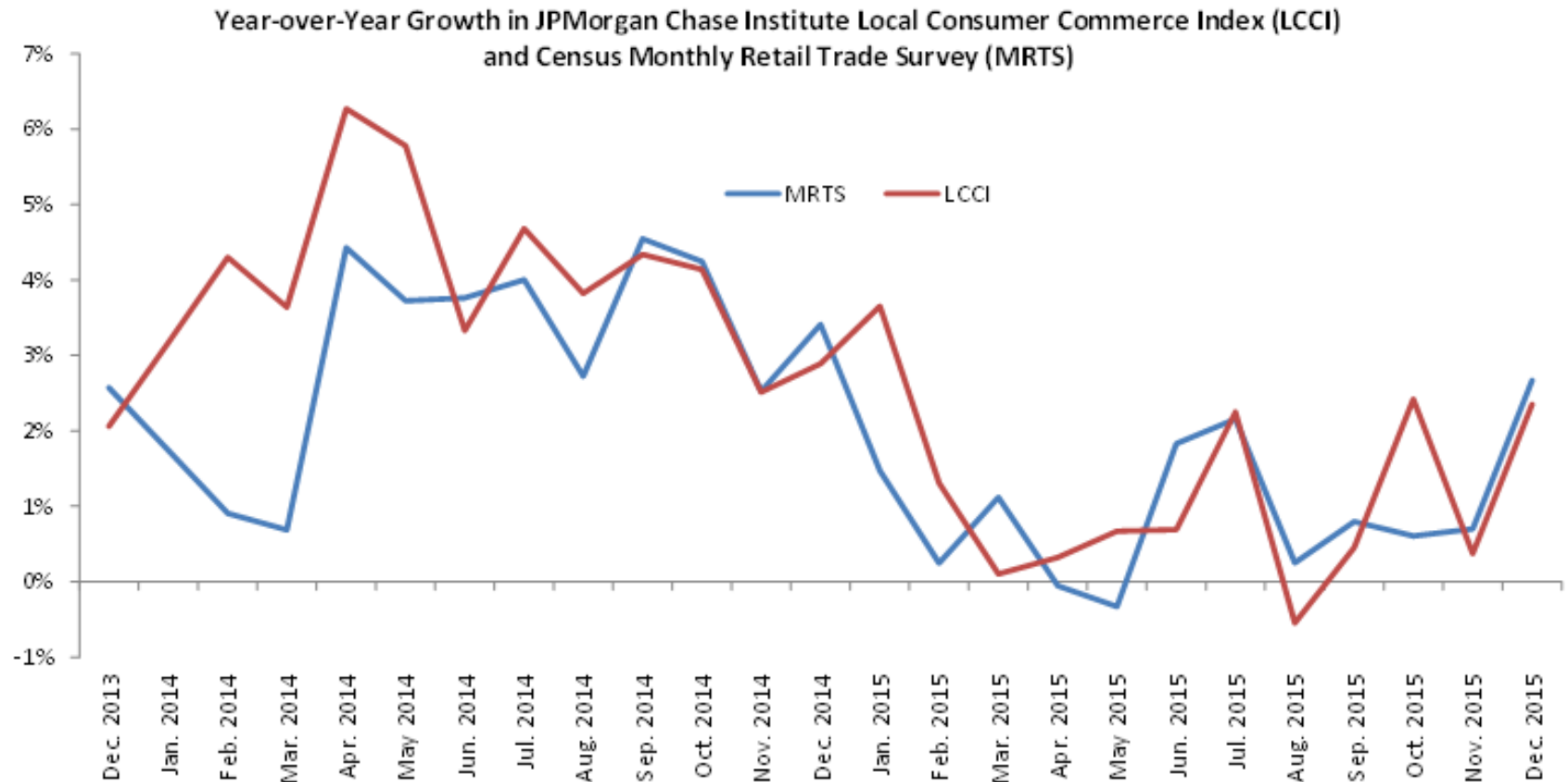
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# JPMCI LCC Data drive the Local Consumer Commerce Index – a view on local commercial activity in urban areas





The JPMCI LCC Index tracks the Census MRTS well enough to suggest that we measure something conceptually similar



Source: JPMorgan Chase Institute and U.S. Census Bureau.

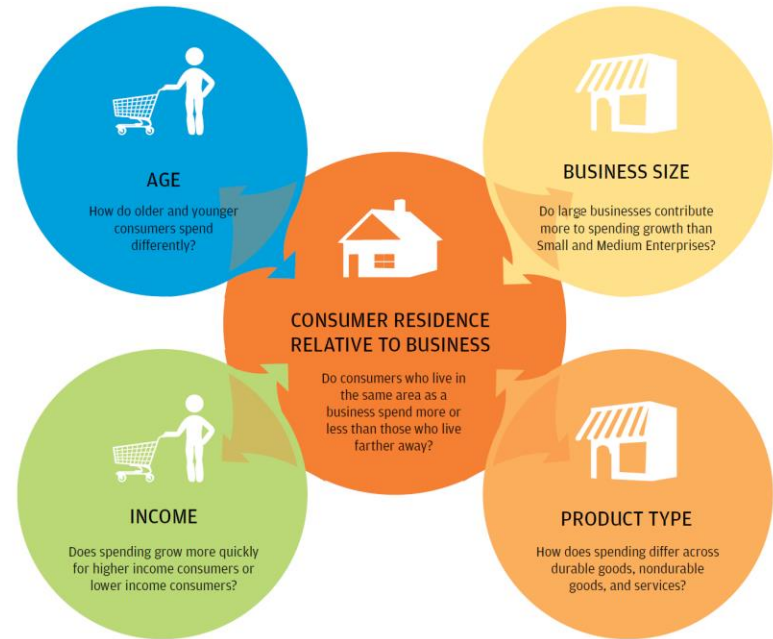
Note: We use the Census series for retail sales and food services excluding motor vehicles and parts.

# The Local Consumer Commerce Index can help build a picture of commercial activity in the US through its unique lens on consumer attributes

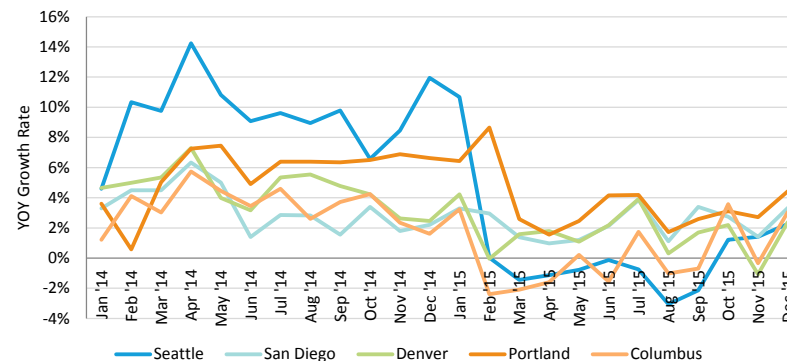
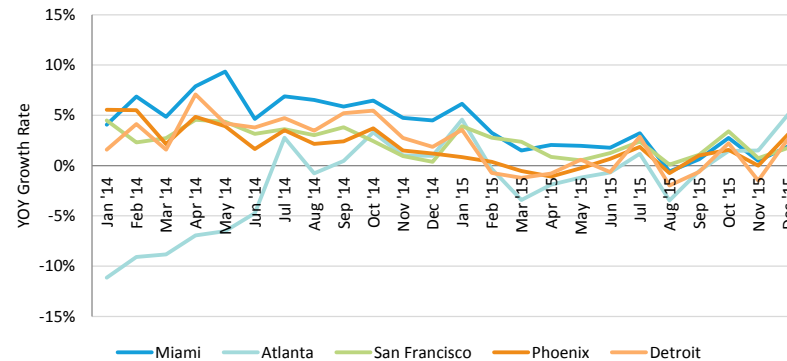
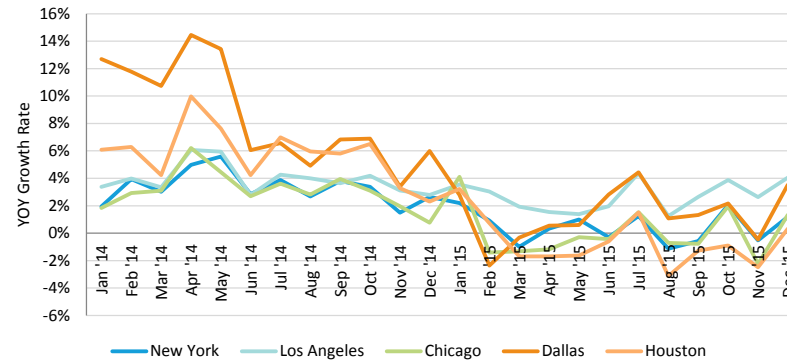
## What do we see from 14.4 billion transactions?

**UNIQUE LCC VIEW**

■ <b>Date</b>	October 2013
■ <b>Customer Age</b>	35-44 years old
■ <b>Customer Income</b>	\$75,000
■ <b>Customer Zip Code</b>	75201
■ <b>Business Zip Code</b>	75043
■ <b>Amount</b>	\$160.00
■ <b>Business Merchant Code</b>	7225 (Restaurant)

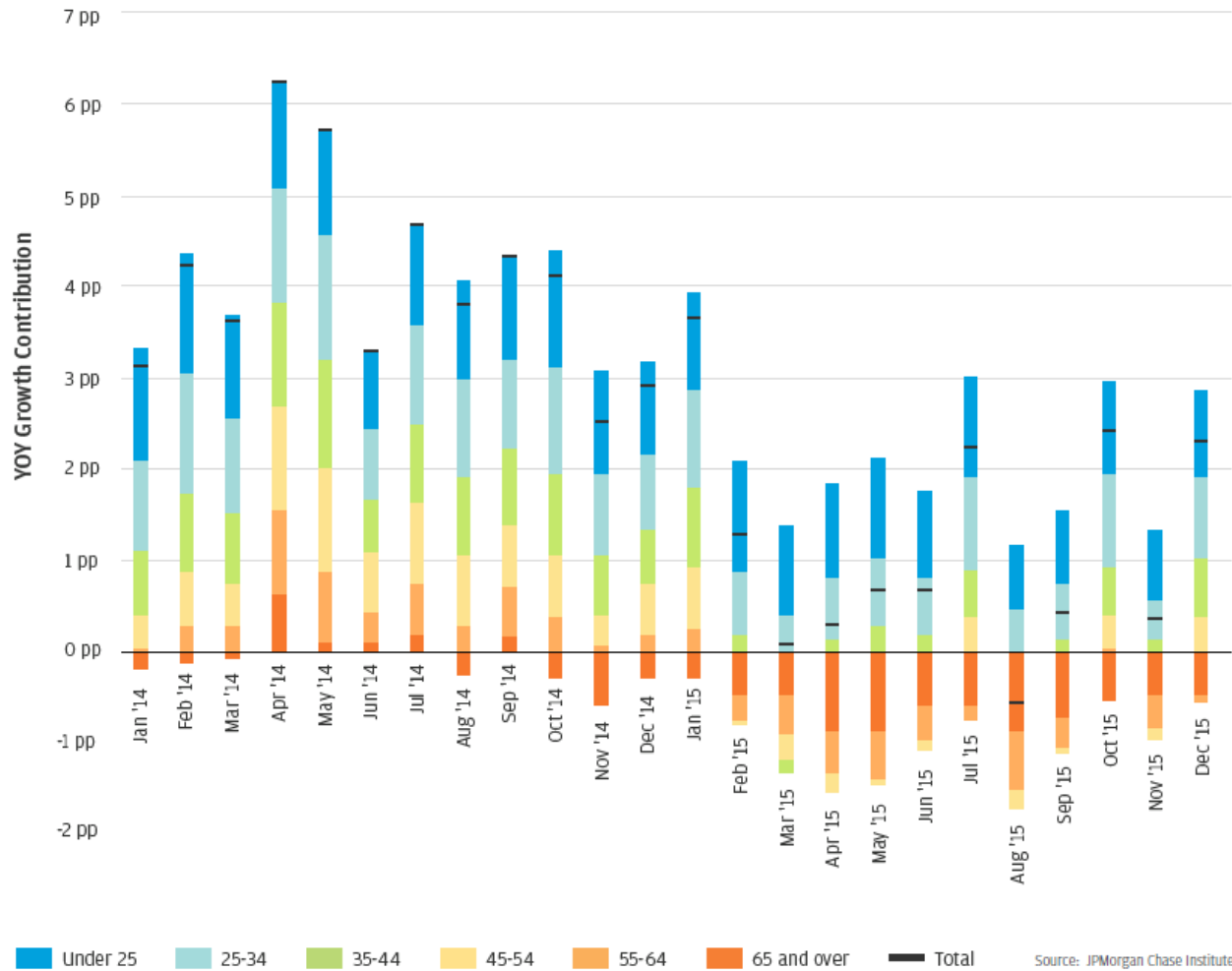


# Our detailed geographic identifiers allow the Local Consumer Commerce Index to provide a very local view of spending growth



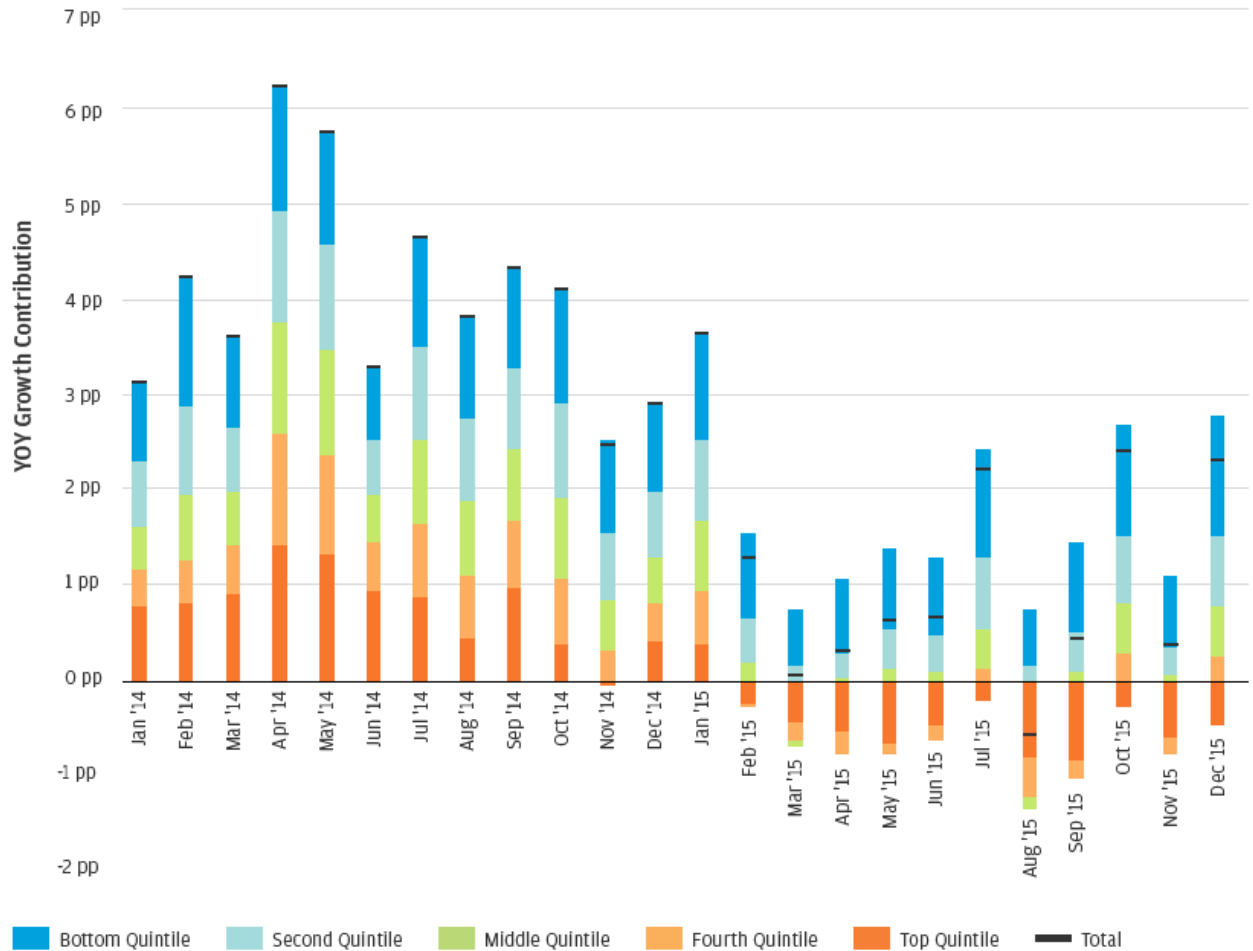
# Younger consumers have made consistent contributions to overall LCC growth

Figure 5: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Age



# Lower income consumers have made consistent contributions to overall LCC growth

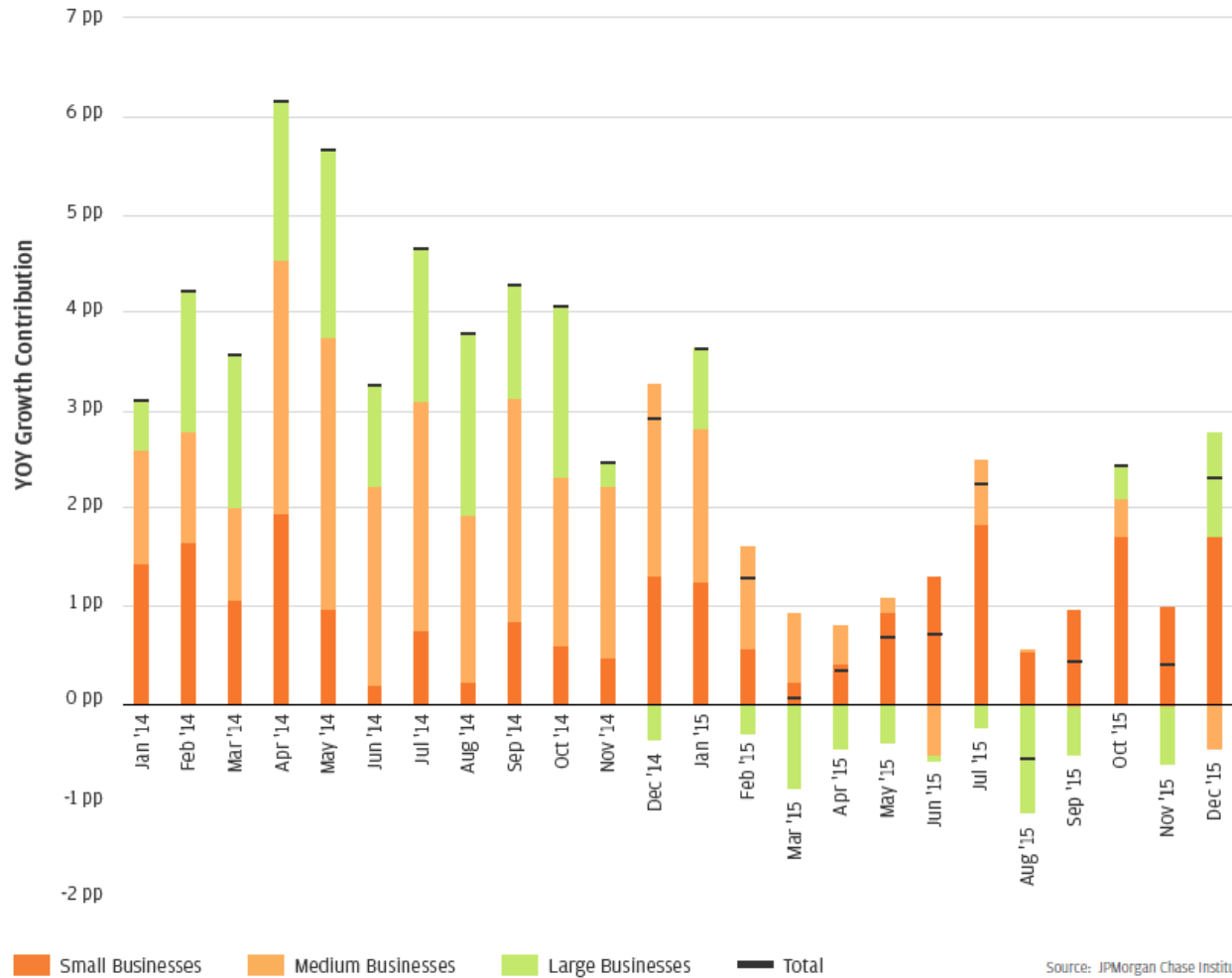
Figure 6: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Income



Source: JPMorgan Chase Institute

# Much of the variation in LCC growth is driven by spending at larger businesses

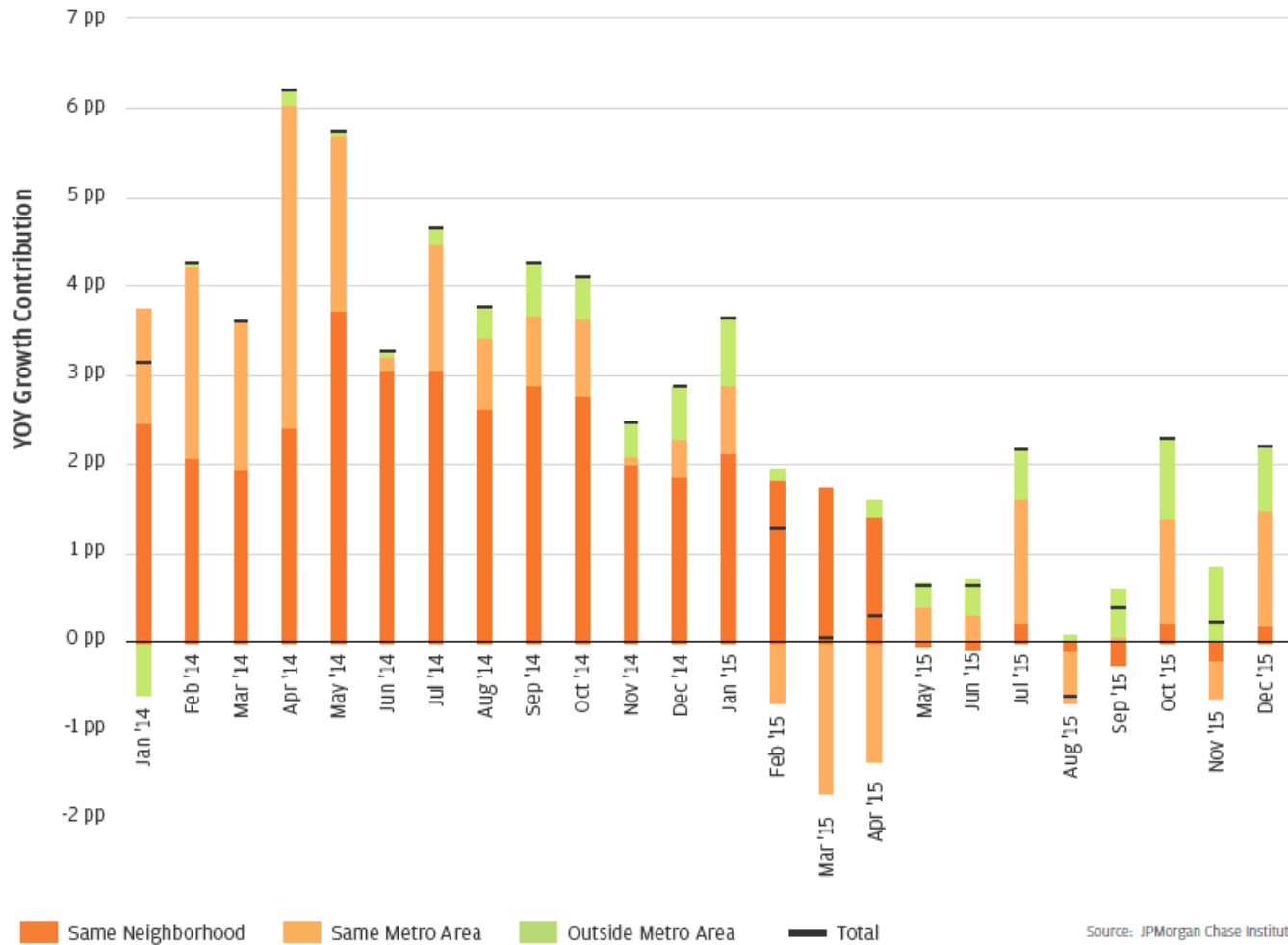
Figure 7: 15 Metro LCC Year-over-Year Growth Contribution by Business Size



Source: JPMorgan Chase Institute

# Out-of-metro spending sustained LCC growth in the second half of 2015

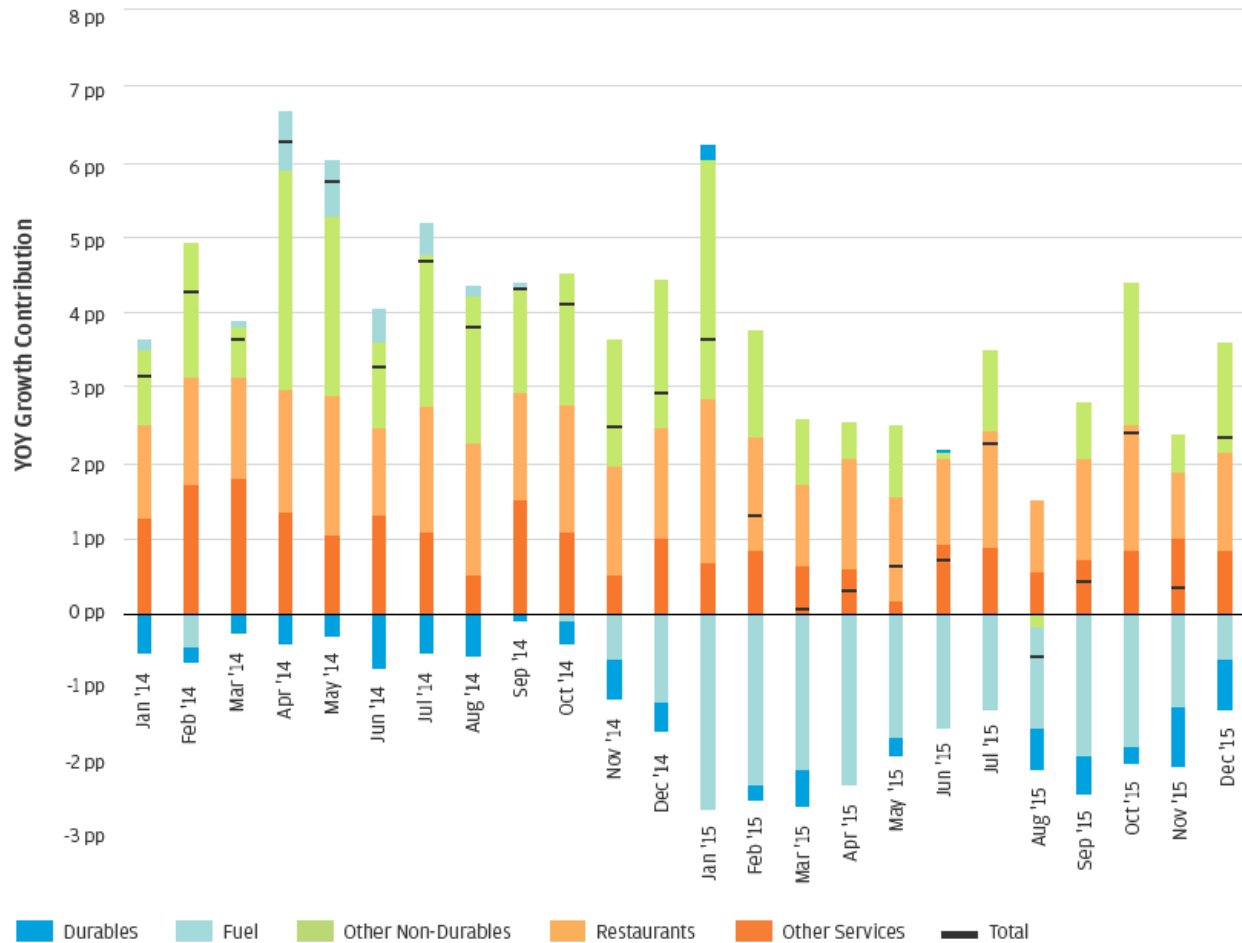
Figure 9: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Residence



Source: JPMorgan Chase Institute

# Restaurants and other services continue to contribute more strongly to growth than durable and nondurable goods

Figure 8: Year-over-Year Growth Contribution by Product Type



Source: JPMorgan Chase Institute



Geographic detail plus a multi-lens view on commercial activity allows LCC to produce otherwise hard-to-see insights (1)

## December 2015 Spending

Consumers under 35			Consumers aged 35-44			Consumers aged 45-54		
Rank	City	Growth Rate	Rank	City	Growth Rate	Rank	City	Growth Rate
1	San Francisco, CA	21.5%	1	San Francisco, CA	5.2%	1	Seattle, WA	5.4%
<b>2</b>	<b>Detroit, MI</b>	<b>13.7%</b>	2	San Diego, CA	4.8%	2	San Francisco, CA	5.2%
3	Portland, OR	13.5%	3	Seattle, WA	4.5%	3	San Diego, CA	3.8%
4	Seattle, WA	10.1%	4	Portland, OR	3.6%	4	Dallas, TX	2.7%
5	Los Angeles, CA	10.0%	<b>5</b>	<b>Detroit, MI</b>	<b>3.5%</b>	5	Los Angeles, CA	2.7%
	<i>Fifteen City Average</i>	9.6%	6	Dallas, TX	2.5%	6	Portland, OR	2.4%
6	Atlanta, GA	9.3%	7	Columbus, OH	2.5%	7	Chicago, IL	2.2%
7	Phoenix, AZ	9.1%		<i>Fifteen City Average</i>	2.3%	8	Columbus, OH	1.8%
8	San Diego, CA	8.9%	8	Los Angeles, CA	2.1%	9	New York, NY	1.6%
9	Denver, CO	8.5%	9	Phoenix, AZ	1.9%		<i>Fifteen City Average</i>	1.6%
10	New York, NY	8.3%	10	Denver, CO	1.5%	10	Phoenix, AZ	0.9%
11	Chicago, IL	7.3%	11	Miami, FL	1.4%	11	Miami, FL	0.1%
12	Dallas, TX	7.0%	12	Atlanta, GA	1.3%	12	Atlanta, GA	-0.1%
13	Columbus, OH	6.7%	13	New York, NY	0.9%	13	Denver, CO	-0.8%
14	Miami, FL	6.5%	14	Chicago, IL	0.4%	14	Houston, TX	-1.6%
15	Houston, TX	4.2%	15	Houston, TX	-2.0%	<b>15</b>	<b>Detroit, MI</b>	<b>-1.8%</b>

Source: JPMorgan Chase Institute

Geographic detail plus a multi-lens view on commercial activity allows LCC to produce otherwise hard-to-see insights (2)c

### December 2015 Spending at Small Businesses

Rank	City	Growth Rate	Rank	City	Share of Spending
<b>1</b>	<b>Detroit, MI</b>	<b>8.3%</b>	<b>1</b>	<b>Detroit, MI</b>	<b>58.4%</b>
2	Columbus, OH	6.8%	2	Los Angeles, CA	44.3%
3	Chicago, IL	6.7%	3	Atlanta, GA	41.0%
4	Denver, CO	6.4%	4	New York, NY	40.1%
5	Atlanta, GA	6.4%	5	Portland, OR	39.9%
6	Miami, FL	6.4%	6	San Francisco, CA	36.4%
7	Dallas, TX	6.3%		<i>Fifteen City Average</i>	<i>36.3%</i>
8	Portland, OR	6.2%	7	Miami, FL	35.2%
9	San Diego, CA	6.1%	8	San Diego, CA	35.1%
10	Houston, TX	5.8%	9	Denver, CO	34.6%
11	New York, NY	5.8%	10	Chicago, IL	33.7%
	<i>Fifteen City Average</i>	<i>5.7%</i>	11	Seattle, WA	33.4%
12	Los Angeles, CA	5.1%	12	Houston, TX	29.5%
13	Phoenix, AZ	4.5%	13	Phoenix, AZ	29.3%
14	San Francisco, CA	4.3%	14	Columbus, OH	27.5%
15	Seattle, WA	1.0%	15	Dallas, TX	25.4%

Source: JPMorgan Chase Institute

# Questions / Recommendations for FESAC

1. Leveraging private and / or sensitive data for public purposes
  - a. What architecture(s) support data sharing in support of public objectives when data owners have competitive interests?
  - b. Is it appropriate for public sector entities to incentivize private data owners to share data? If so, what incentives might be most effective?
2. Measurement, economic constructs, and new data sources
  - a. To what extent have we chosen to focus on the measurement of economic constructs that lend themselves to survey methods?
  - b. What other constructs might we focus on if data were produced through administrative processes (e.g. economic production through massively distributed supply chains)?
3. JPMCI Local Consumer Commerce Index
  - a. In what ways are these data most helpful to providers of public data?
  - b. Are there ways in which these data are not helpful?

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