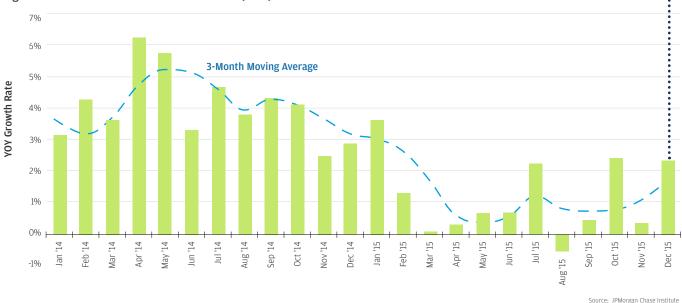
# Local Consumer Commerce December 2015



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



#### Figure 1: Local Consumer Commerce Index (LCCI)

March 2016

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.

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Figure 2: LCC Growth in Largest Metro Areas

The economy is still jittery after anemic growth during most of 2015 according to the LCCI. However, there are glimmers of hope in the December data, which show year-over-year growth of 2.3 percent. Year-over-year growth in local consumer commerce exceeded two percent in three of the most recent six months observed by the series, marking the highest rates since January 2015. However, year-overyear growth was only 0.4 percent in November, consistent with the tepid growth rates observed during much of 2015. The three-month moving average of the index in December 2015 was 1.7 percent.

Local consumer commerce growth varied considerably across metropolitan areas. All 15 cities that comprise the LCCI experienced positive growth in December, the first month since January 2015 where we observed across-theboard growth. We present analyses of three groups of five metropolitan areas each, ordered by the relative amount of estimated spending in each of the metropolitan areas.

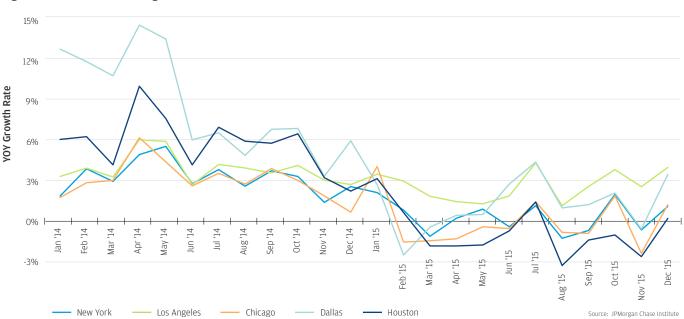
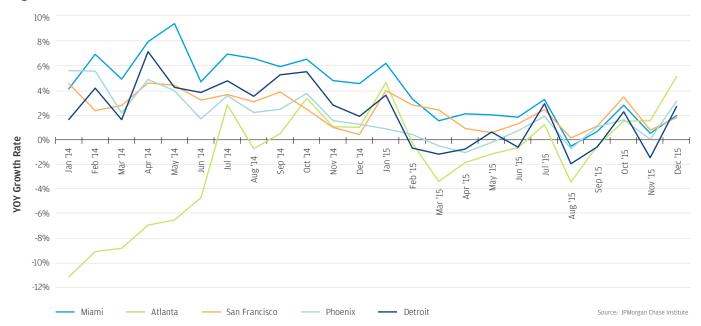


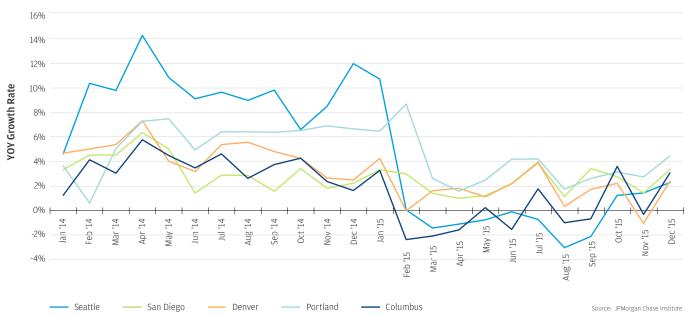
Figure 2 above shows the performance of the five largest metro areas in our 15 metro area aggregate. In December 2015, spending in the Los Angeles metro area grew the fastest amongst these five largest metro areas. Since the beginning of our data series in January 2014, Los Angeles has shown relatively stable local consumer commerce growth, and spending in the area grew 4 percent in December. In contrast, the Houston metro area had one of the highest growth rates among large metro areas in early 2014, but had the slowest growth in December 2015 at 0.3 percent—the slowest growth observed among our 15 metro areas.

#### 2



#### Figure 3: LCCI Growth in Mid-Sized Metro Areas

Figure 3 above depicts growth rates from the next 5 largest cities in our 15 metro area aggregate. Among these, December 2015 local consumer commerce grew the fastest in Atlanta at 5.1 percent–faster than the growth of local consumer commerce in any of the other metro areas in our sample of any size. This was a marked reversal from declining growth and low growth rates in Atlanta throughout 2014. Local consumer commerce in December 2015 grew the least in San Francisco, at 1.8 percent, with spending only increasing by 1.9 percent in Miami.



#### Figure 4: LCC Growth in Smallest Metro Areas

The five smallest metro areas in our sample are shown in Figure 4 above. In December, local consumer commerce in the Portland metro area grew 4.4 percent, faster than all other smaller metro areas. In contrast, Seattle had the slowest local consumer commerce growth among smaller cities in December 2015 at 2.3 percent, markedly down from the robust growth rates observed in the Seattle area during most of 2014. The Denver metro area saw the next lowest growth at 2.4 percent.



### Spending by Age

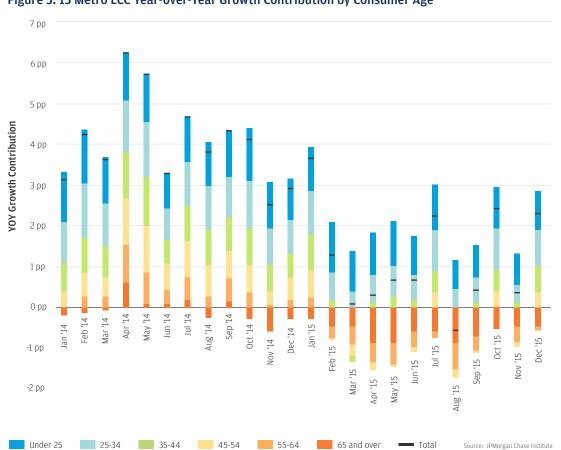


Figure 5: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Age

Figure 5 shows how consumers of different ages contributed to monthly local consumer commerce growth across all 15 metro areas. Consumers under 35 continued to make stable contributions to spending growth. From December 2014 to December 2015, consumers under 25 contributed 1 percentage point to growth, a strong contribution given their relatively low share of spending and the overall slowdown in spending growth during 2015. In contrast, consumers 65 and over subtracted 0.5 percentage points from growth from December 2014 to December 2015 – continuing the substantial subtractions by this group from the second quarter of 2015. Consumers aged 35 to 54 made somewhat larger contributions in December 2015 than they did during the Q2 2015 slowdown. Specifically, consumers aged 35 to 44 contributed 0.6 percentage points to growth in December 2015, the largest contribution by this group since January 2015.





### Spending by Income

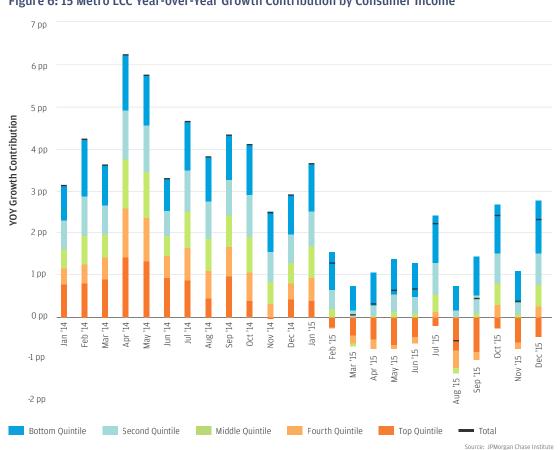


Figure 6: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Income

Figure 6 shows how consumers in different income quintiles<sup>1</sup> contributed to monthly local consumer commerce growth across all 15 metro areas. Again, the pattern maps closely to that which we observed for consumers of different ages. Consumers in the lowest 20 percent by income continued the stable contributions they made in the first and second quarters of 2015. These consumers contributed 1.3 percentage points to growth during the relatively strong growth month of December 2015, and 0.7 percentage points to growth during the weaker growth month of November 2015. In contrast, consumers in the top 20 percent by income subtracted 0.4 percentage points from growth in December 2015 and subtracted 0.6 percentage points from growth in November 2015. The top income quintile has been a drag on growth since February 2015.





### Spending by Size of Business

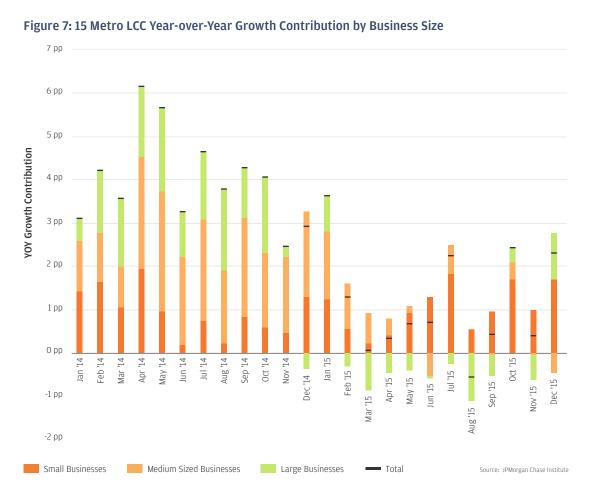


Figure 7 presents a monthly view of the contribution to local consumer commerce growth by large, medium, and small businesses across all 15 metro areas. Large businesses have an outsize impact on local consumer commerce. They accounted for less than 1 percent of establishments but generated 33 percent of observed local consumer commercial spending. Nonetheless, from December 2014 to December 2015, large businesses contributed 1.1 percentage points to the growth of local consumer commerce. Small businesses performed particularly well in recent months, contributing 1.7 percentage points to growth in October, 1 percentage point in November, and 1.7 percentage points in December. Medium sized businesses had a rockier quarter, growing slightly in October, flat lining in November, and subtracting 0.5 percentage points from growth in December.





### Spending by Product Type

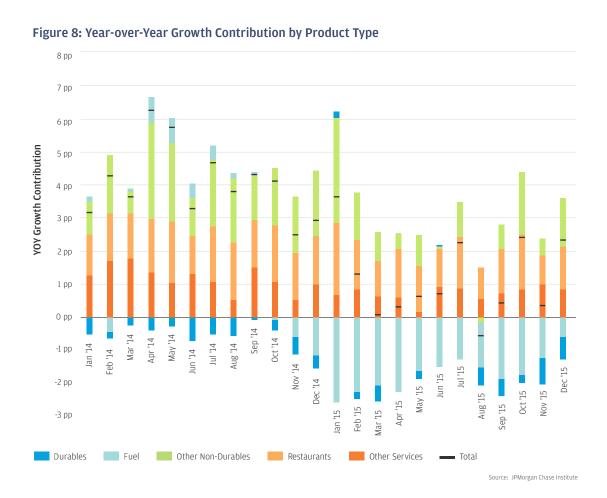
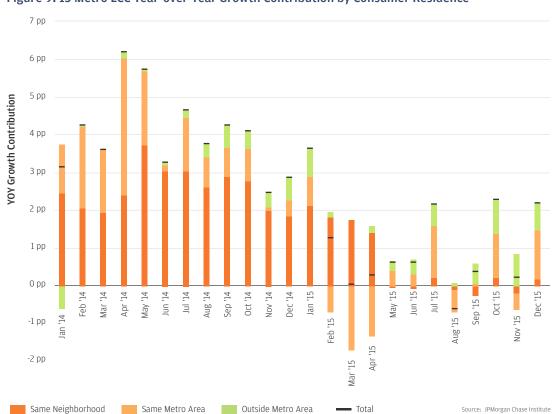


Figure 8 presents a monthly view of the contribution to local consumer commerce growth by product type across all 15 metro areas. Fuel retailers continued to drag down growth, though fuel subtracted less from growth in December 2015 at only negative 0.6 percentage points whereas fuel sales were down by over 1.2 percentage points in the rest of 2015. Retailers selling other nondurables made the strongest contributions to growth in the fourth quarter, with particularly strong months in October and December when they contributed 1.9 and 1.4 percentage points to growth. Contributions to growth from other services were slightly lower in Q4 2015 than they were in Q3 2015, but they were still a net positive. Restaurants continued to show steady gains, contributing 0.9 percentage points to growth in November 2015 and 0.8 percentage points in December 2015.





### Spending by Consumer Residence



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

Not surprisingly, most local consumer commercial spending is local. In December 2015, 84 percent of local consumer commerce at a business came from consumers who lived in the same metropolitan area, and 23 percent came from consumers who lived in the same neighborhood.

Figure 9 depicts the monthly contribution to local spending by consumers who reside in different locations across all 15 metro areas. From October to December 2015, the year-over-year growth contributions of consumers from the same metro area as a business were mixed. During the strong growth months of October and December, consumers from the same metropolitan area contributed 1.2 and 1.3 percentage points to growth, respectively. But during 2015, these consumers subtracted 0.4 percentage points. Contributions from consumers outside of the metro area were consistently positive over the last three months of 2015. Consumers from the same neighborhood made small contributions to the overall growth rate, largely remaining flat over the period.



# Measuring Local Consumer Commerce

Local consumer commerce is the everyday spending of individuals on goods and services that impacts a local community. We observe local consumer commerce through the anonymized credit-and debit-card transactions of JPMorgan Chase customers for which we can establish a geographic location. This approach shares some conceptual similarities with other established measures (for example, the U.S. Census Bureau Monthly Retail Trade Survey and the U.S. Census Bureau Quarterly Services Survey), but differs in several significant ways.

In particular, our card-based perspective captures an important sector of commerce not easily captured through establishment surveys: spending at non-employer businesses, new businesses, and other small businesses. Moreover, in addition to restaurant spending observed by other data sources, our approach captures spending on a wide range of individual consumption-oriented services, including the barber and beauty shops, doctors and dentists,<sup>2</sup> hotels, gyms, and local transportation providers that play a significant role in local economies.

Our card-based approach offers a detailed view of the types of products consumers purchase. However, this view does not capture spending by consumers through cash, checks, electronic transfers, or purchase orders. Importantly, the extent to which consumers use credit and debit cards to purchase services and goods varies significantly across product categories. In particular, differences in payment methods by product type lead us to a different perspective on the consumption of durable goods.

We classify businesses as small, medium sized, or large based on market share calculated from transaction data. Any business exceeding 8 percent market share in its CBSA and product category is classified as large. Next, we match calculated market share to Census Statistics of U.S. Businesses data on total market size to estimate revenues for each business. We then compare estimated revenues to the Small Business Administration (SBA) size standards to determine whether a business is likely to be eligible for assistance from the SBA, and businesses under the threshold are classified as small. The remaining businesses are classified as medium sized.

For additional details on the construction of the data asset, see the online methodological appendix. The website also contains all of the data presented in this update, including the growth rate, share of spend, and growth contribution for each metro area by consumer age, income quintile, consumer residence relative to the business, product type, and business size.

## Endnotes

- 1 The ratio of spending between primary account holders in the highest income quintile and the lowest income quintile is about 2 in our data. Comparable estimates from Aguiar and Bils (2015) using survey data suggest a ratio of at least 2.6 for households. We believe this gap is explained by measurement error in our income estimates.
- 2 We observe the out of pocket card based spending of consumers at healthcare providers.

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