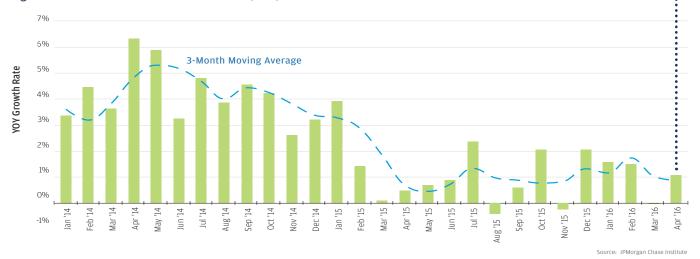
# Local Consumer Commerce April 2016



The Local Consumer Commerce Index (LCCI) increased 1.1 percent year-over-year in April 2016.

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 by more than 54 million anonymized Chase customers across 15 cities in the U.S. Unlike many sources of data on consumer spending, the LCCI captures actual transactions, instead of self-reported measures of how consumers think they spend, with a unique dataset constructed from over 16 billion anonymized debit and credit card transactions. 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 LCCI 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 merchants, 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: two consumer, two business, and the residence of consumers 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.



Overall growth in local consumer spending in April 2016 rebounded from flat growth in March. At 1.1 percent, however, growth in April remains below comparable figures in December (2.1 percent), January (1.6 percent), and February (1.5 percent). The three-month rolling average in April (0.9 percent) fell relative to March, hitting the lowest level since November 2015 (0.8 percent). Growth in 2015 also experienced a rebound from virtually flat growth in March (0.1 percent) to stronger growth in April (0.5 percent), but the pickup was notably larger in 2016.

More cities in April experienced growth in local consumer commerce relative to March. Only two cities, Houston (-2.9 percent) and San Francisco (-0.8 percent), experienced negative growth in April. This compares to seven cities with negative growth in March. Among cities experiencing positive growth, rates ranged from 0.1 percent

(San Diego) to 5.8 percent (Atlanta). 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.

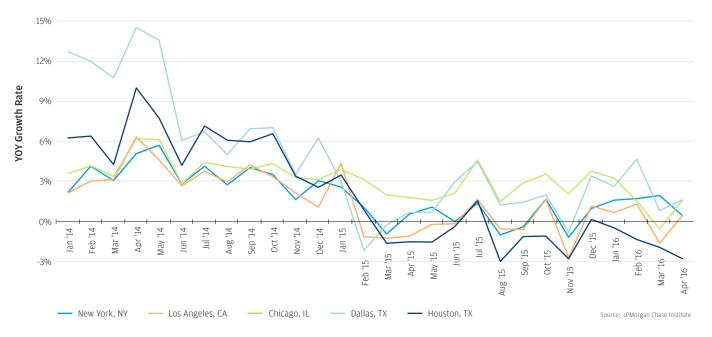


Figure 2: LCC Growth in Largest Metro Areas

Figure 2 above shows the performance of the five largest metro areas in our 15 metro area aggregate. In April 2016, spending in the Dallas metro area grew the fastest amongst these five largest metro areas (1.6 percent). By contrast, the growth rate in Houston was the lowest in the group, and the city has experienced the largest slowdown in growth since the start of 2016—from -0.5 percent in January to -2.9 percent in April. Despite positive growth in four of the five large cities in our sample, average growth across the group in April was just 0.2 percent.

Figure 3: LCC Growth in Mid-Sized Metro Areas

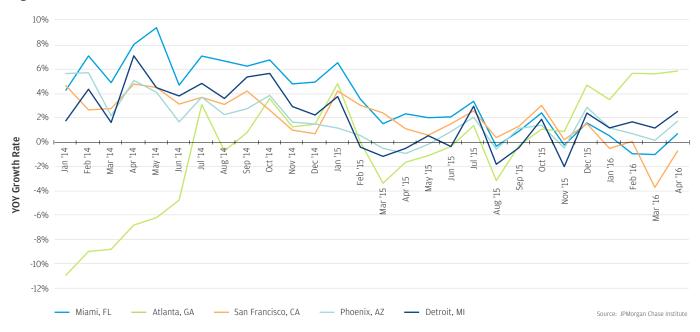
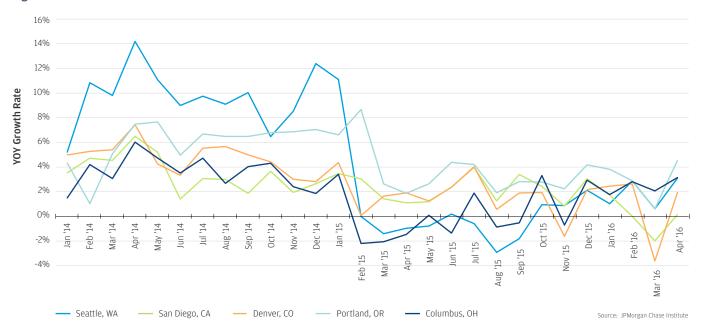


Figure 3 above depicts growth rates from the 5 mid-sized cities in our 15 metro area aggregate. Among these, local spending in April 2016 grew notably in Atlanta at 5.8 percent - faster than local consumer commerce grew in any of the other 14 cities in our sample. San Francisco experienced another contraction in spending with a growth rate of -0.8 percent, though this contraction is considerably smaller than the -3.8 percent experienced in March. It was the only city in the group to experience a contraction in April. The average growth rate across the mid-sized cities in our sample was 2 percent.

Figure 4: LCC Growth in Smallest Metro Areas



The five smallest metro areas in our sample are shown in Figure 4 above. In April, local consumer commerce in the Portland metro area grew at a significant rate of 4.5 percent, faster than all others in the smallest metro area group. Though San Diego also experienced positive growth, at 0.1 percent, it experienced the smallest growth rate in the group. Fueled by positive growth across the board, the small cities in our sample grew on average by 2.5 percent.



#### Spending by Age

Figure 5: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Age 7 pp 6 рр 5 рр **YOY Growth Contribution** 4 pp 3 рр 2 pp 1 pp Jul '14 Jun '14 Sep '14 Jan '14 17 Oct '14 Dec '14 Jan '15 Nov '14 Feb '16 Dec '15 Feb '15 Jul '15 -1 pp Jun '15 Sep '15 Nov '15 Mar '15 May '15 Apr '15 -2 pp Under 25 35-44 45-54 65 and over 55-64 Total Source: JPMorgan Chase Institute

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. Since the start of 2016, consumers under 25 contributed slightly less than 0.9 percentage points to overall spending growth on average, a strong contribution given their relatively low share of spending. Consumers between the ages of 25 and 34 contributed a comparable amount to overall growth in 2016, at slightly more than 0.9 percentage points. These groups contributed 1 and 1.1 percentage points to growth in April, respectively. By contrast, consumers over 65 years of age subtracted 0.7 percentage points on average in 2016, and subtracted 0.9 in April, specifically. This represents persistent reductions in growth contributions by this group, which began in the fourth quarter of 2014. Indeed, the 12 months preceding April 2016 may be generally characterized as exhibiting a negative correlation between age and spending growth contribution.





## Spending by Income

Figure 6: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Income 7 рр 6 рр 5 рр **YOY Growth Contribution** 4 pp 3 рр 2 pp 1 pp gg 0 Sep '14 Oct '14 Dec '14 Jan '15 Feb '15 Jun '15 Apr '15 May '15 -1 pp Sep '15 Nov '15 Aug '15 Feb '16 -2 pp 19 Bottom Quintile Second Quintile Middle Quintile Fourth Quintile Top Quintile Source: JPMorgan Chase Institute

Figure 6 shows how consumers in different income quintiles<sup>1</sup> contributed to monthly local consumer commerce growth across all 15 metro areas. Consumers in the lowest 20 percent by income continued the stable contributions they made in 2015. These consumers contributed 1.3 percentage points to growth during the relatively strong month of April 2016, the largest overall contribution in that month. In contrast, consumers in the top 20 percent by income subtracted 1.6 percentage points from growth in April 2016, the lowest across all income groups. The first three months in 2016 saw progressively larger contractions from the top income quintile, but that trend has started to abate in April. Contributions from the top quintile group have been a drag on growth since February 2015.





### Spending by Size of Business

Figure 7: 15 Metro LCC Year-over-Year Growth Contribution by Business Size 7 рр 6 рр 5 рр **YOY Growth Contribution** 4 pp 3 рр 2 pp 1 pp 0 pp Jul '14 Jul '15 Sep '14 Nov '14 Jan '15 Oct '15 Jan '16 Aug '14 Jun '15 Dec '14 Apr '15 -1 pp Aug '15 15 16 -2 pp Mar Medium Businesses Small Businesses Large Businesses Total

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 outsized impact on local consumer commerce. They account for less than 1 percent of establishments but generate 33 percent of observed local consumer commercial spending. Nonetheless, in the first four months of 2016, the large business contribution to the growth of local consumer commerce was only 0.4 percentage points on average. Small businesses, by contrast, contributed 1.1 percentage points on average over the time period. In April of 2016, large businesses contributed 0.8 percentage points, while small businesses contributed 1.1 points. Midsized businesses, by contrast, reduced their contribution by 0.8 percentage points.





### Spending by Product Type

Figure 8: 15 Metro LCC Year-over-Year Growth Contribution by Product Type 8 рр 7 pp 6 рр YOY Growth Contribution 5 рр 4 pp 3 рр 2 pp 1 pp Sep '14 Oct '14 May '14 Jul '14 Aug '14 -1 pp un '14 Nov '14 14 Jun '15 -2 pp Aug '15 Jan '15 -3 pp Durables Other Services Other Non-Durables Restaurants

Source: JPMorgan Chase Institute

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 in April, subtracting 0.8 percentage points from overall spending growth. However, durable spending subtracted 1.2 percentage points from growth in April, and has consistently subtracted more from growth than fuel in every month in 2016. Nondurables (1.4 percentage points) and restaurants (1.2 percentage points) made the strongest contributions to growth in April 2016. Restaurants, in fact, experienced the strongest growth in the first four months of 2016 at an average of 1.2 percentage points. Durables saw the largest contraction, reducing contributions to growth by 1.1 percentage points on average over the same period.





### Spending by Consumer Residence

7 рр 6 рр 5 рр **YOY Growth Contribution** 4 pp 3 рр 2 pp 1 pp 0 nn Jan '15 Feb '16 Feb '15 Oct '15 Dec '15 Jan '16 Jun '14 Jul '14 Sep '14 Oct '14 Nov '14 Sep '15 Jun '15 May '15 Mar '15 Apr '15 -1 pp Nov '15 Mar -2 pp Same Neighborhood Same Metro Area Outside Metro Area Source: JPMorgan Chase Institute

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

Not surprisingly, most local consumer commercial spending is local. Eighty-four percent of local consumer commercial spending at a business comes from consumers who live in the same metropolitan area, and nearly 30 percent comes from consumers who live in the same neighborhood.

Figure 9 depicts the monthly contribution to local spending by consumers' place of residence across all 15 metro areas. In the first four months of 2016, the year-over-year growth contributions of consumers from the same metro area as a business grew by 0.1 percentage points on average. Despite a slight rebound in April (0.2 percentage points), this obscures a general decline in this activity over time. By April 2016, same metro spend was down 0.6 percentage points from the same month in the previous year. Contributions from customers outside of the metro area remained positive over the first four months of 2016, though the growth contribution dipped to 0.4 percentage points by April. Customers from the same neighborhood experienced more volatile growth, experiencing a slight rebound from contributing slightly more than -0.1 percentage points in March to contributing 0.5 percentage points in April.



## **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 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 another important sector of commerce: spending at non-employer businesses, new businesses, and other small businesses that are often difficult to reach through establishment surveys. 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, 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 firms as small, medium, or large based on market share calculated from transaction data and external Census and Small Business Administration (SBA) data. Firms with more than 8 percent market share are classified as large, and firms that qualify for SBA loans are classified as small. All other firms are considered medium.

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**

- 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.