NARRATING FOOD PRICE INFLATION THROUGH DATA VISUALIZATION
2018 APDU CONFERENCE

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**Using Tableau to Visualize Data**

- Determine the need and audience for your data visualization
- Preparing your data
- Telling a story
- Making the visualization interactive
KEY DESIGN CHOICES

• Color
• Filters
• Size
# Food Price Outlook Data Viz Demo

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>How does the average American household spend their money?</td>
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<td>Are food prices more or less volatile than other spending categories?</td>
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<td>Over time, food price inflation has outpaced many other major categories.</td>
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<td>Does restaurant inflation differ from grocery store inflation?</td>
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<td>In recent years, food-at-home prices have been declining.</td>
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<td>Price changes vary by food category as well as year to year.</td>
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<tr>
<td>Food price inflation also varies by city.</td>
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</tbody>
</table>

LESSONS LEARNED

• Keep it simple
• There is such a thing as ‘too customizable’
• Check for consistencies throughout your storyboard or dashboard
• Get feedback from different users
THANK YOU!

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How does the average American household spend their money?

- Housing: 33.0%
- Transportation: 15.8%
- Food: 12.6%
- Housing: 33.0%
- Transportation: 15.8%
- Food: 12.6%

Note: "Other" includes personal care products, tobacco, and miscellaneous expenditures. The Consumer Expenditure Survey refers to medical care costs as 'healthcare'.

Regardless of category, prices can be volatile year to year. However, for some categories, prices have become less volatile post-1970s price spike.

Over the last 10 years, food prices have grown more than most major CPI categories, with the exception of medical care costs. However, this is not true over all 10-year periods.

Growth rates begin to diverge in 2009, when food away from home (restaurant) prices started growing at a faster rate.
In recent years, food-at-home prices have been declining.
Price changes vary by food category as well as year to year.
Food price inflation also varies by city.

Kansas City and Pittsburgh experienced the highest rate of food price inflation in the contiguous U.S. at 2.4 percent.

Detroit saw the lowest rate of inflation at 1.2 percent.

Note: the 10-year average was calculated by averaging the last 10 years of annual data (2008-2017) for each Metropolitan Statistical Area (city). This approach smooths out year-to-year noise.