



Investigating the ~~Domestic~~ Travel Spending Trends during 2010-2019

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Why Consumer Expenditure Survey?

- CE data contains very valuable and detailed data related to the hospitality and tourism industry - travel expenditure, food and beverage, lodging, transportation, entertainment in Interview file and detailed food items and associated costs in Diary file.
- Most of hospitality and tourism researchers use the survey method to collect first-hand data which is only a snapshot for a short period of time and a limited scope. CE provides multiple years of data with participants representing the US population.
- CE is accessible online and free of charge
- Well-organized annual workshop and symposium
- Friendly and knowledgeable staffs



Purpose of Study and CE Data Used

- The purpose of this study is to investigate the trends of ~~domestic~~ travel spending during 2010-2019 by using the CE Interview survey datasets. Particularly, the study aims to profile the travel spending patterns between post-recession (2010) and prior to the pandemic (2019).
- Year: **2010-2019**
- Software: **SPSS**
- Survey: **Interview**
- File: **FMLI** and **MEMI**
- Variables:
 - **Characteristics** for reference people: Age, Gender, Race, Education, Total Family Income before Tax, Region, Family Size and Type
 - **Total Travel expenditures** on food, alcoholic beverage, lodging, entertainment, and transportation

Creating Data Sets

- One year data set = sum of 4 quarterly data sets
 - For example: 2010 data set = fmli101x + fmli102 + fmli103 + fmli104

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Data	28,429	26,990	26,993	26,108	25,908	23,574	25,441	24,479	23,159	21,701

- Within each year data set, 6 total travel expenditure related variables were computed by combining the expenditures of last quarter and this quarter.
 - total trip expenditure = last quarter (TTOTALP) + this quarter (TTOTALC)
- **Total Trip Expenditure** = Total Trip Expenditures on **Transportation** + Total Trip Expenditures on **Lodging** + Total Trip Expenditures on **Food** + Total Trip Expenditures on **Entertainment** + Total Trip Expenditures on **Alcoholic Beverage**

Preliminary Results for 2010-2019

Profiles of Reference People

- Age: around 50 years old
- Gender: Slightly more female
- Race: Caucasian (around 80%)
- Family type: married couple only + single (around 50%)
- Family size: 2.5
- Total income before tax: wide ranges
- Region: South + West (58.5% or more)
- Education: high school - college

Total Travel Expenditures

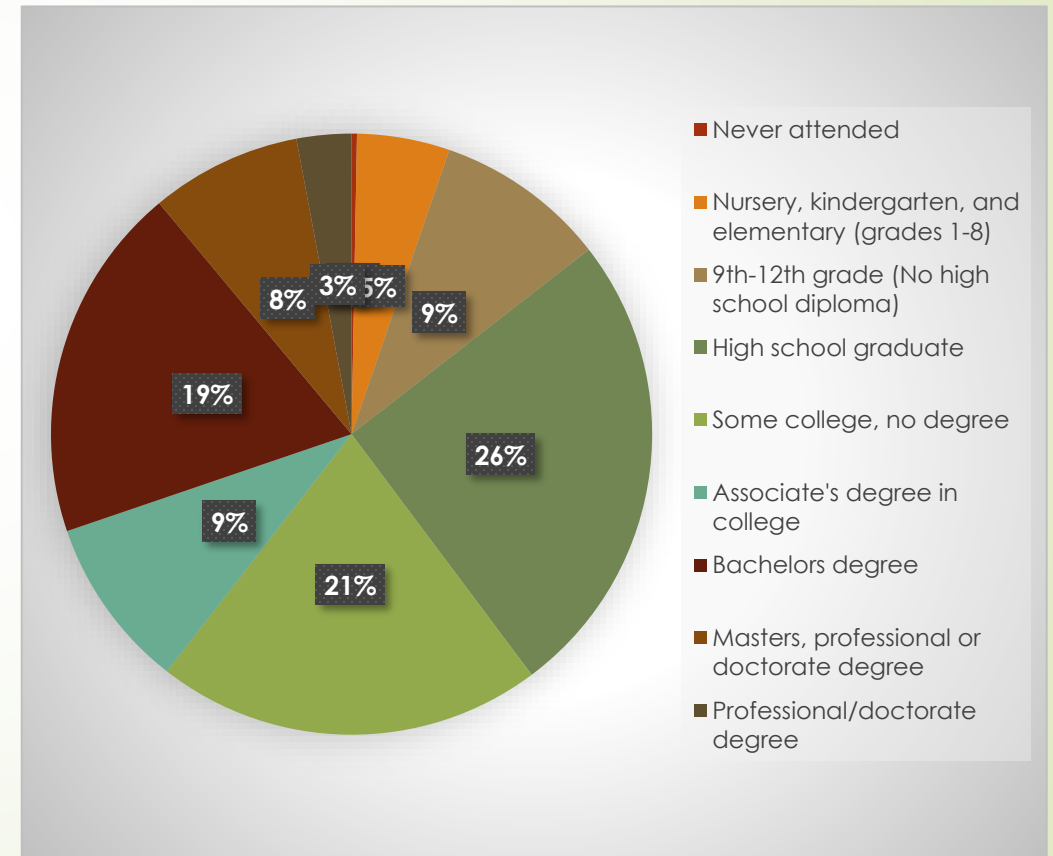
- Total Trip Expenditures (\$332-\$517)
- Transportation (\$149-\$202)
- Lodging (\$76-\$153)
- Food (\$69-\$106)
- Entertainment (\$32-\$38)
- Alcoholic Beverage (\$11-\$18)

The travel expenditure patterns from 2010 to 2019 were upward in all aspects, while the lodging expenditure had the highest percentage increase (101%)

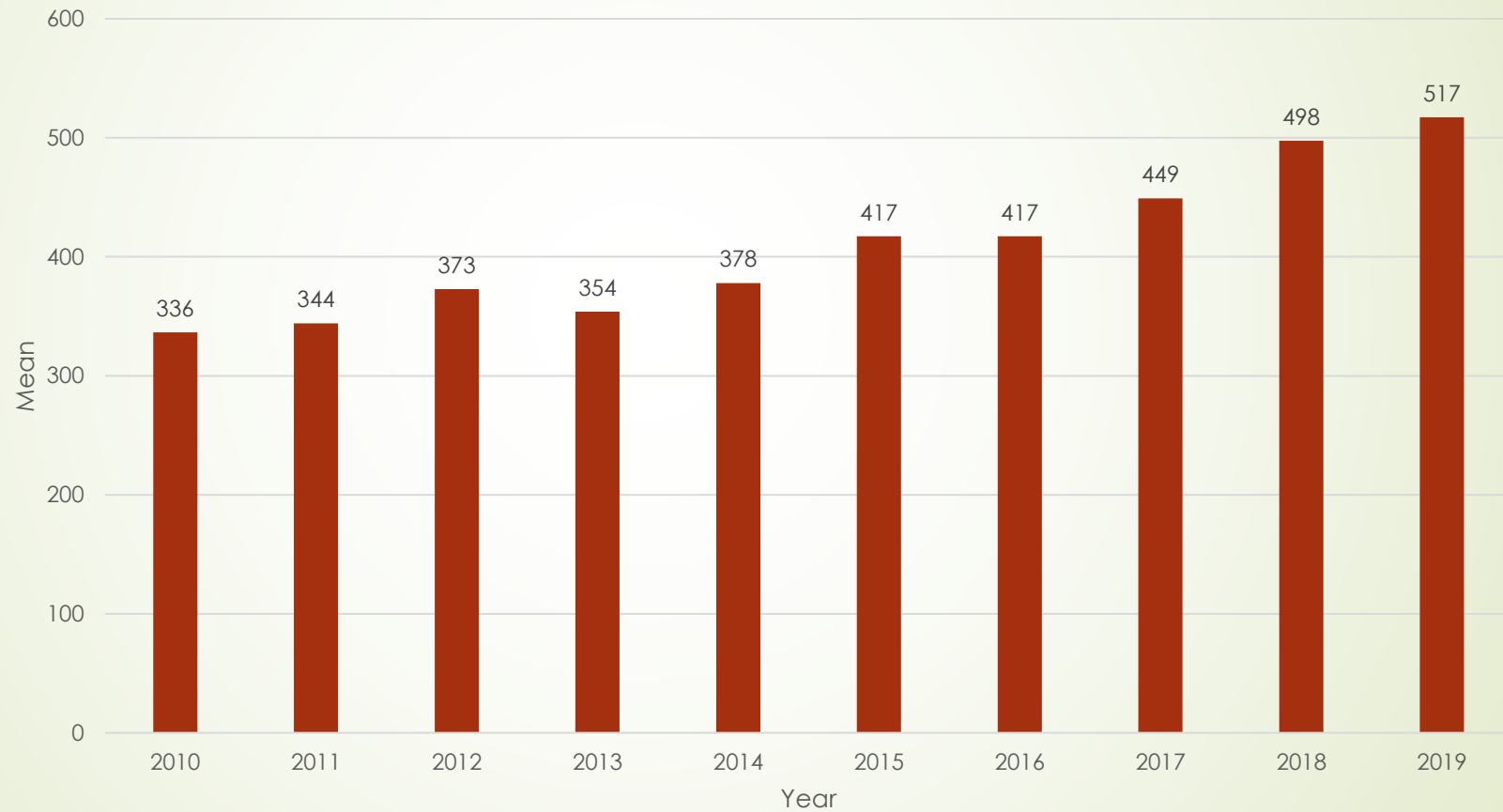
2010 Profile of Reference Person

- **Age:** 49.7 (Range: 16-87)
- **Gender:** 53% Female
- **Race:** 80.4% Caucasian
- **Family Type:**
 - Married Couple Only: 20.7%
 - Single: 30.1%
- **Family size:** 2.5 (Range: 1-14)
- **Total Income Before Tax:** \$63,234.7 (Range: -\$52,928 - \$700,350)
- **Region:**
 - 35% South
 - 23.1% West

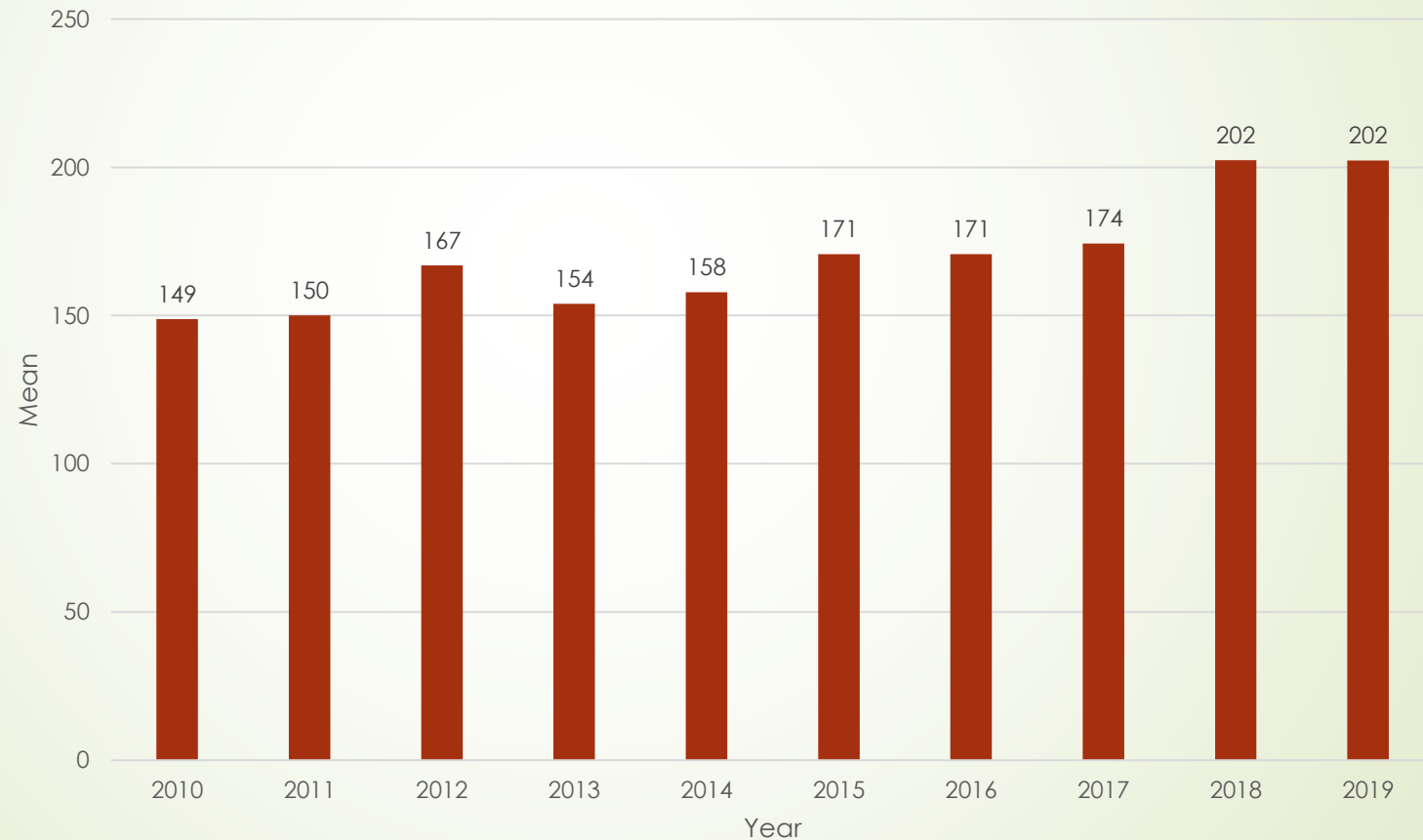
➤ Education:



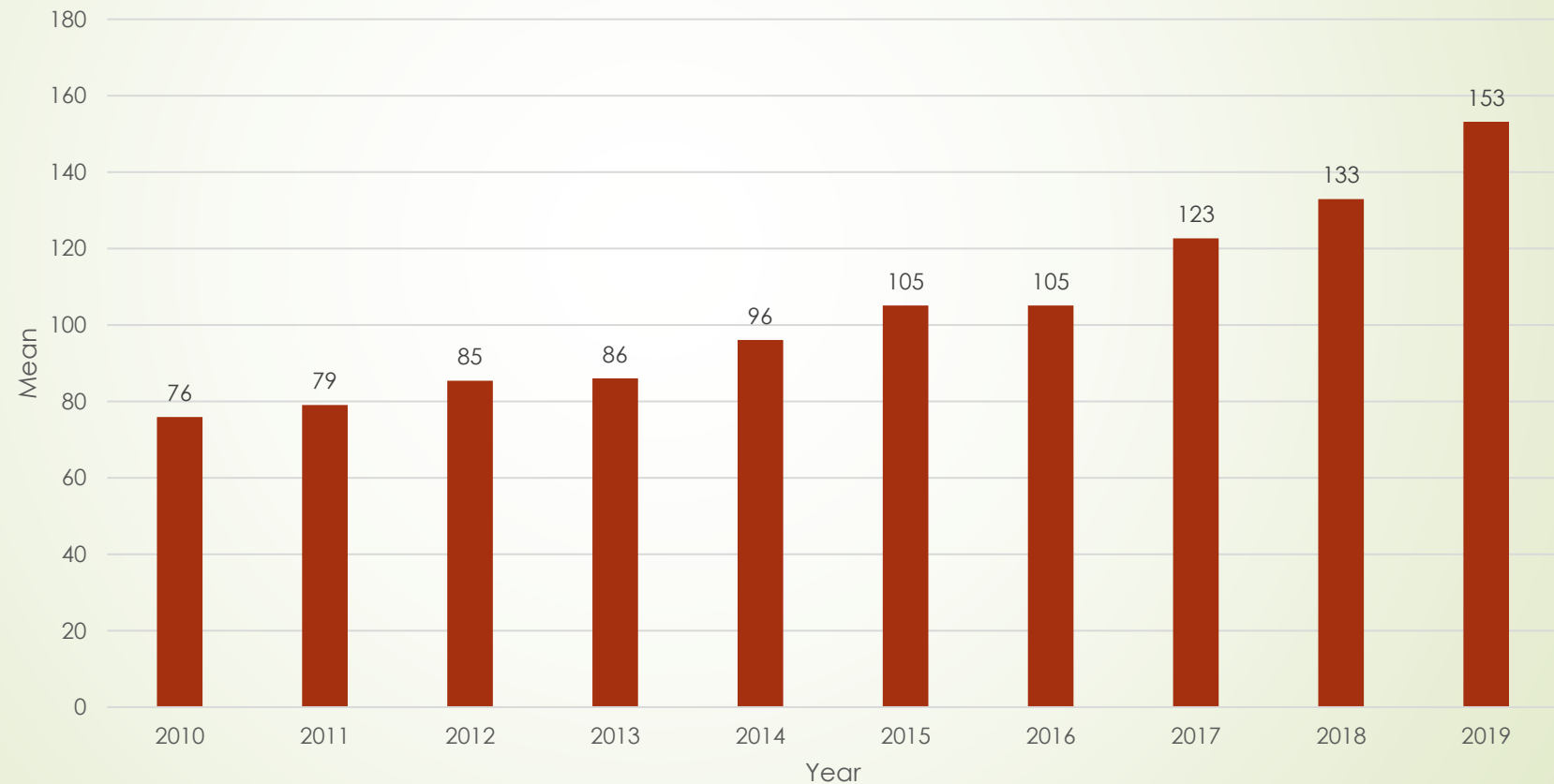
Total Trip Expenditures in 2010-2019



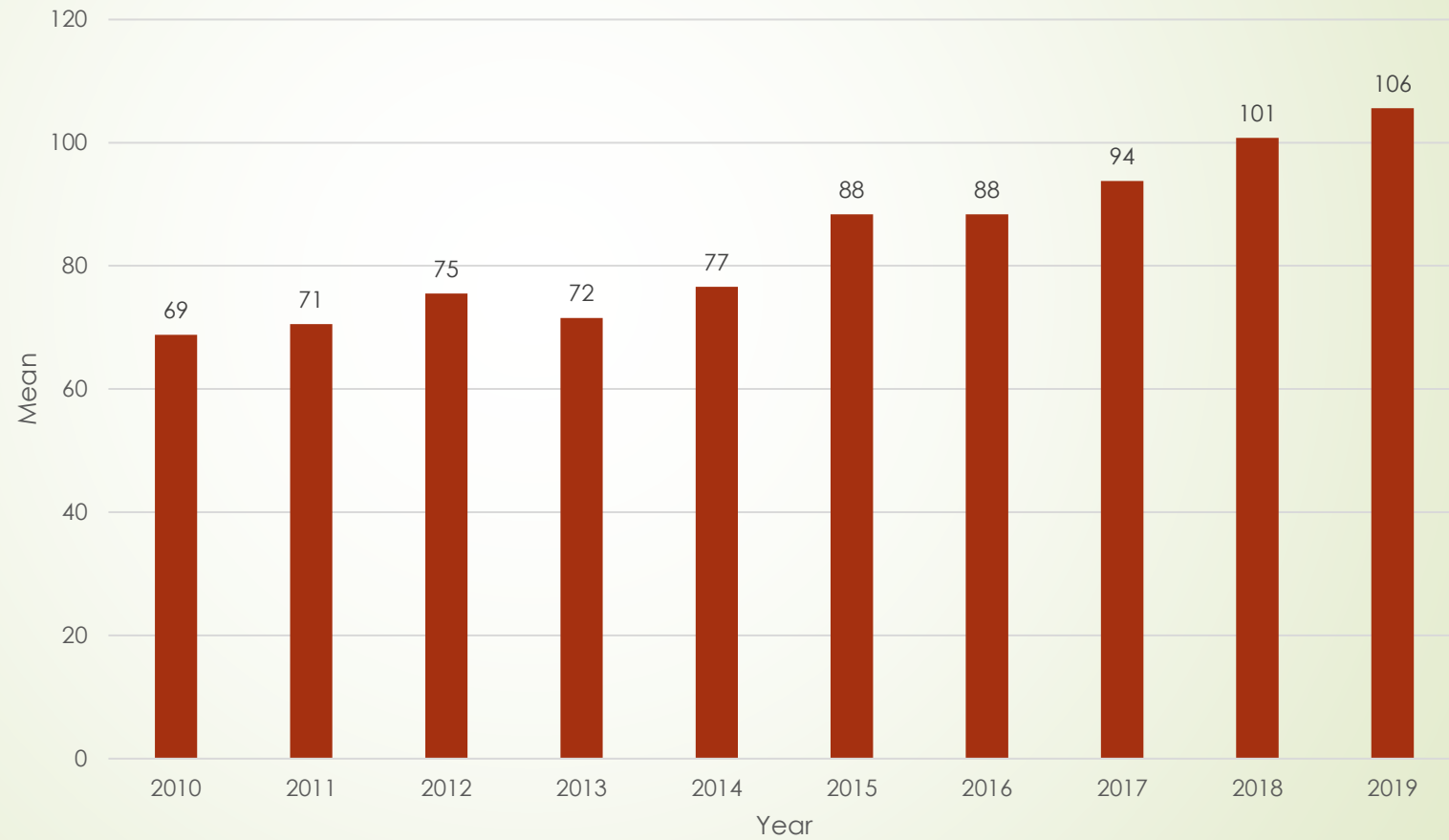
Total Trip Expenditures on Transportation in 2010-2019



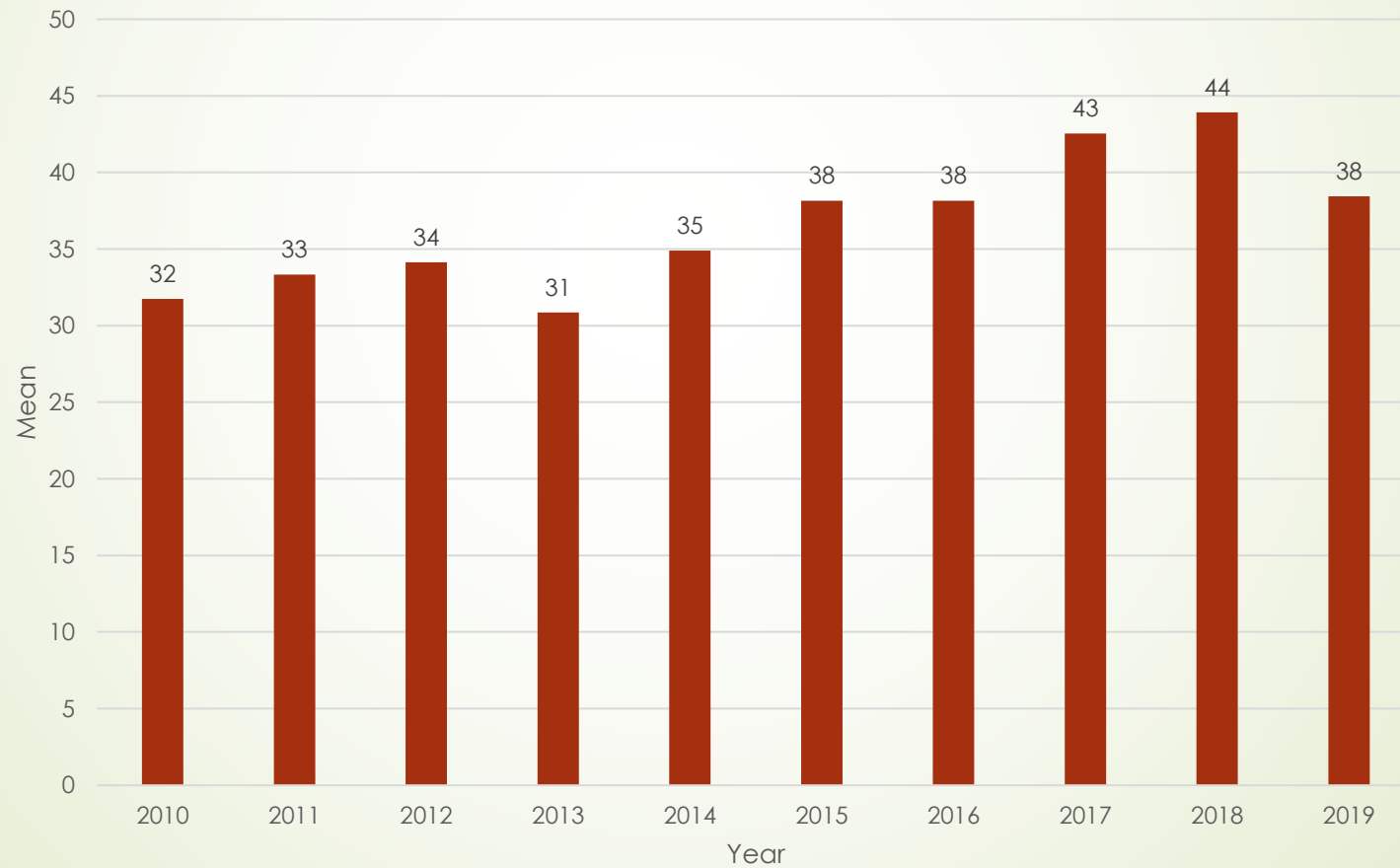
Total Trip Expenditures on Lodging in 2010-2019



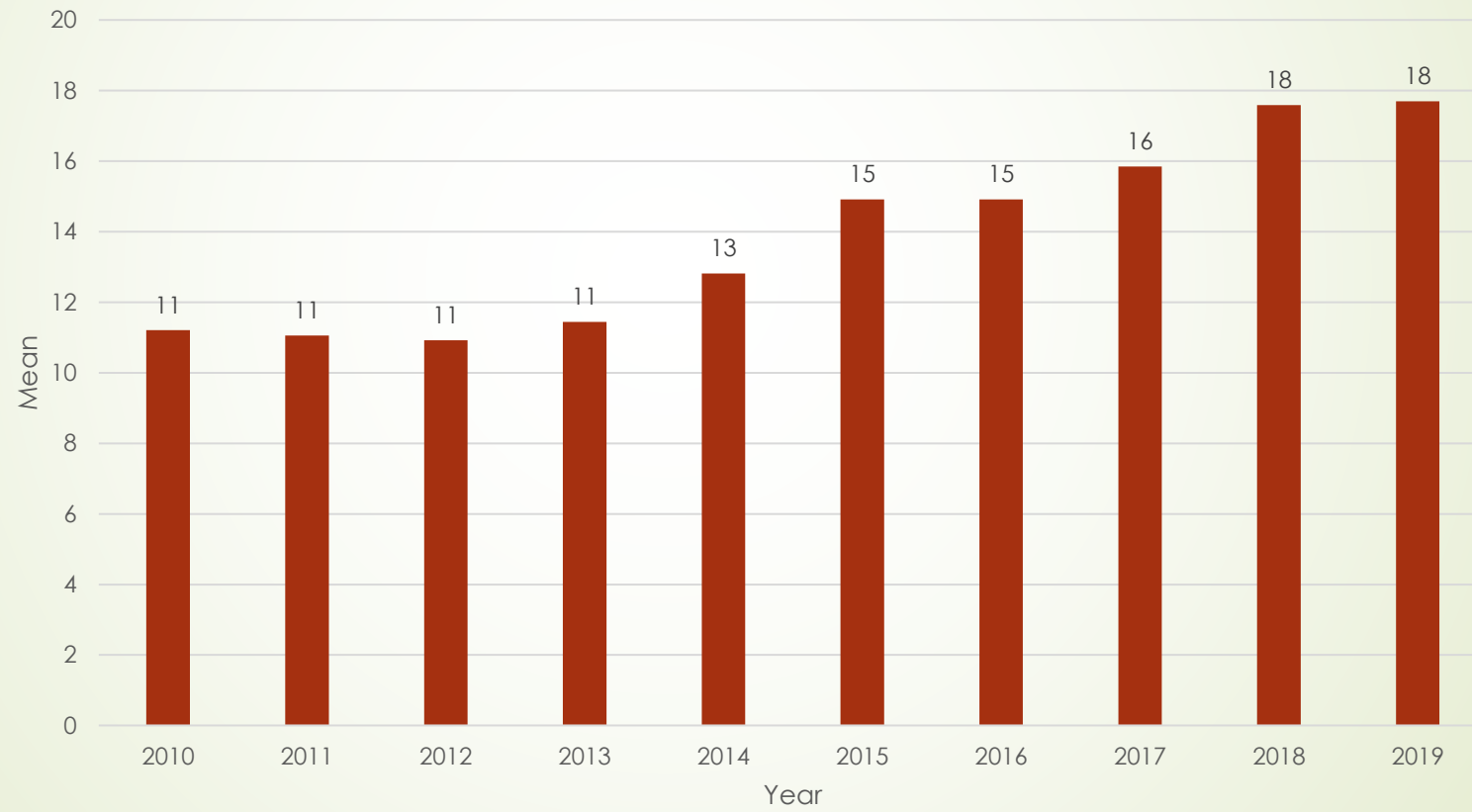
Total Trip Expenditures on Food in 2010-2019



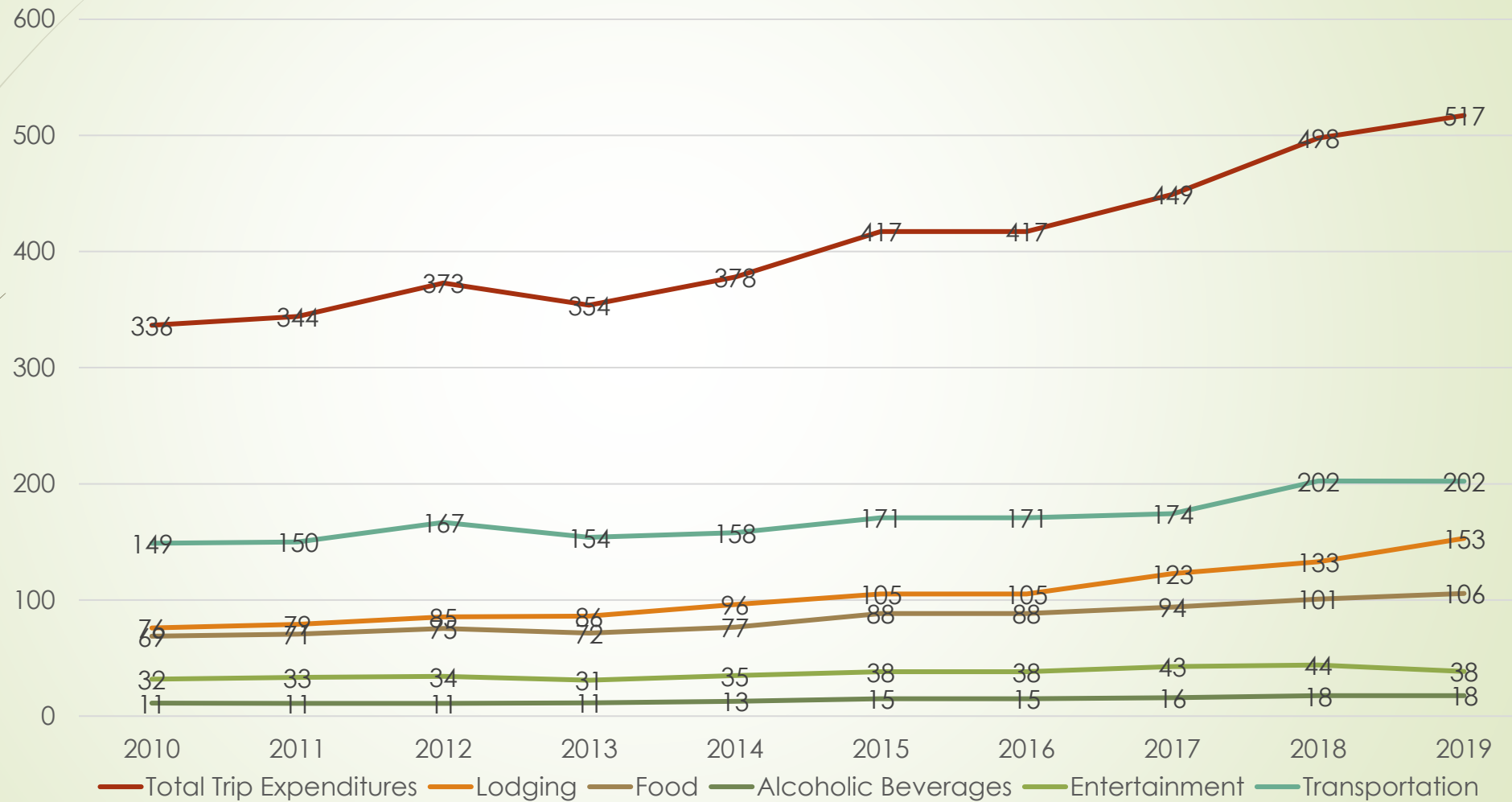
Total Trip Expenditures on Entertainment in 2010-2019



Total Trip Expenditures on **Alcoholic Beverages** in 2010-2019



The Overall Trend in 2010-2019





My Experience of Using CE Data

Like

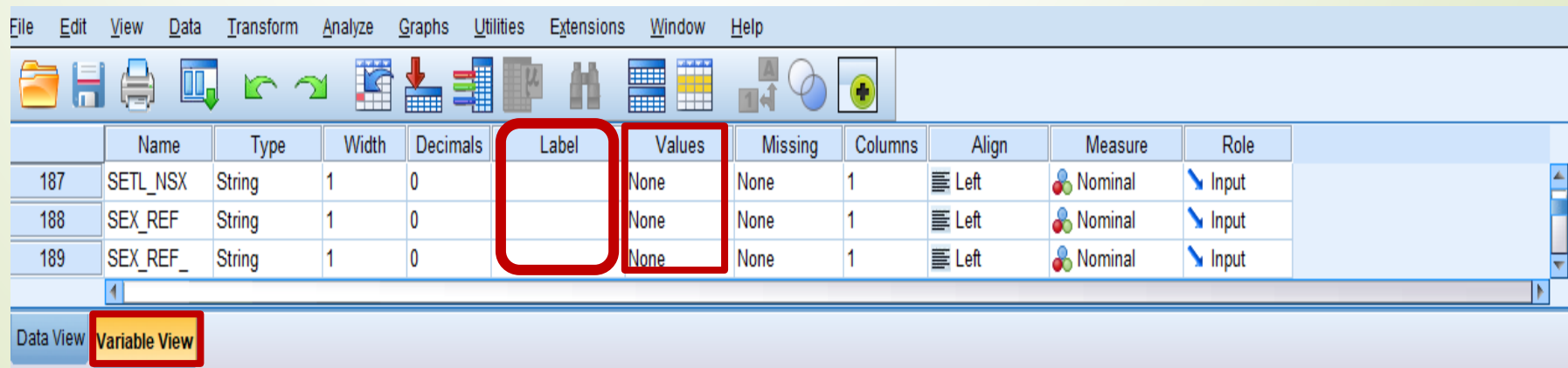
- ▶ Microdata available in different formats – SAS, SPSS, STATA, CVS
- ▶ Well-documented handbook, manual, getting started guide, dictionary, etc.
- ▶ The sorting function in the dictionary excel file
- ▶ Total travel expenditure variables computed
- ▶ One-on-one support and consultation

Dislike

- ▶ Very confused about which variable to use, e.g. total income before tax
- ▶ Some variables and their associated codes don't match in data set/dictionary, e.g. OCCUPRE1, ORIGINR, etc.
- ▶ Could not find or don't know how to find some variables, such as length of stay, destination, ethnic variables, etc.
- ▶ Variables changing over the years

Suggestions

- Make the “domestic vs international trip” variable available to the public to better evaluate the impact of travel expenditures on the domestic economy
- Explore further the ethnic variable to truly reflect the diverse population in the U.S.
- Improve the accuracy of [Dictionary for Interview and Diary Surveys \(XLSX\)](#)
- Create Customized Chart / Table / Index for Travel and Tourism Sector
- Include Code Information within data set, for example SPSS “Label” and “Value” under Variable View tab



The screenshot shows the SPSS Variable View dialog box. The 'Label' and 'Values' columns for the first three variables are highlighted with red boxes. The 'Variable View' tab is also highlighted with a red box at the bottom left.

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
187	SETL_NSX	String	1	0		None	None	1	Left	Nominal	Input
188	SEX_REF	String	1	0		None	None	1	Left	Nominal	Input
189	SEX_REF_	String	1	0		None	None	1	Left	Nominal	Input

Special Thanks to
Dr. Geoffrey Paulin



*Thank
you!*



Any Questions or
Comments?

