

Creating and Assessing Candidate Food Service and Retail Beef Demand Indices

Glynn T. Tonsor & Ted C. Schroeder

FY17 Checkoff Update Session

February 2, 2017

Presentation at 2017 National Cattlemen's Beef Association Annual Meeting Nashville, TN



Demand is **NOT** Per Capita Consumption

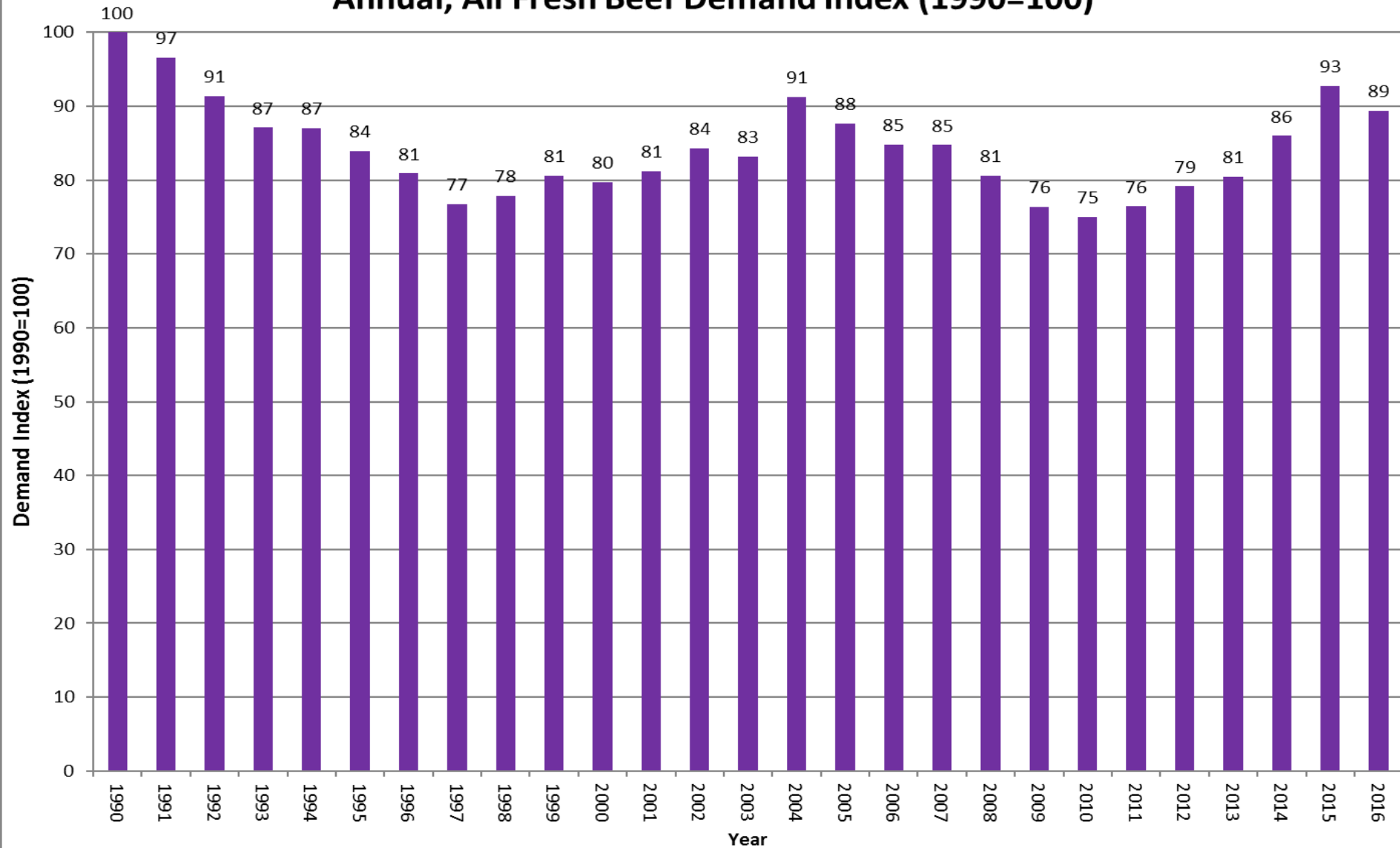
2013 Beef Demand Determinants Study



[http://www.beefboard.org/evaluation/
130612demanddeterminantstudy.asp](http://www.beefboard.org/evaluation/130612demanddeterminantstudy.asp)

Current Situation

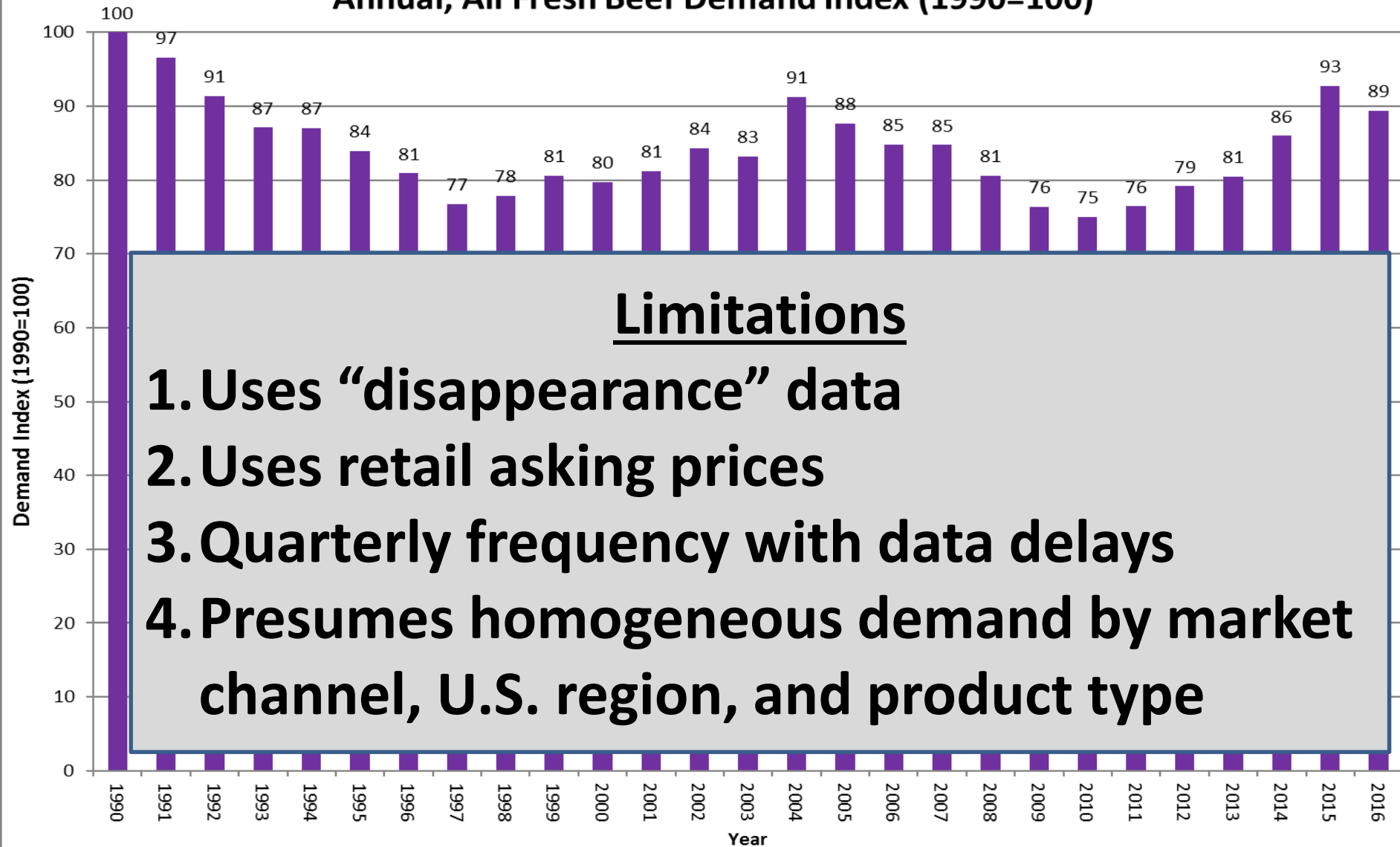
Annual, All Fresh Beef Demand Index (1990=100)



Source: Glynn T. Tonsor, Kansas State University, Jan. 2017

Current Situation

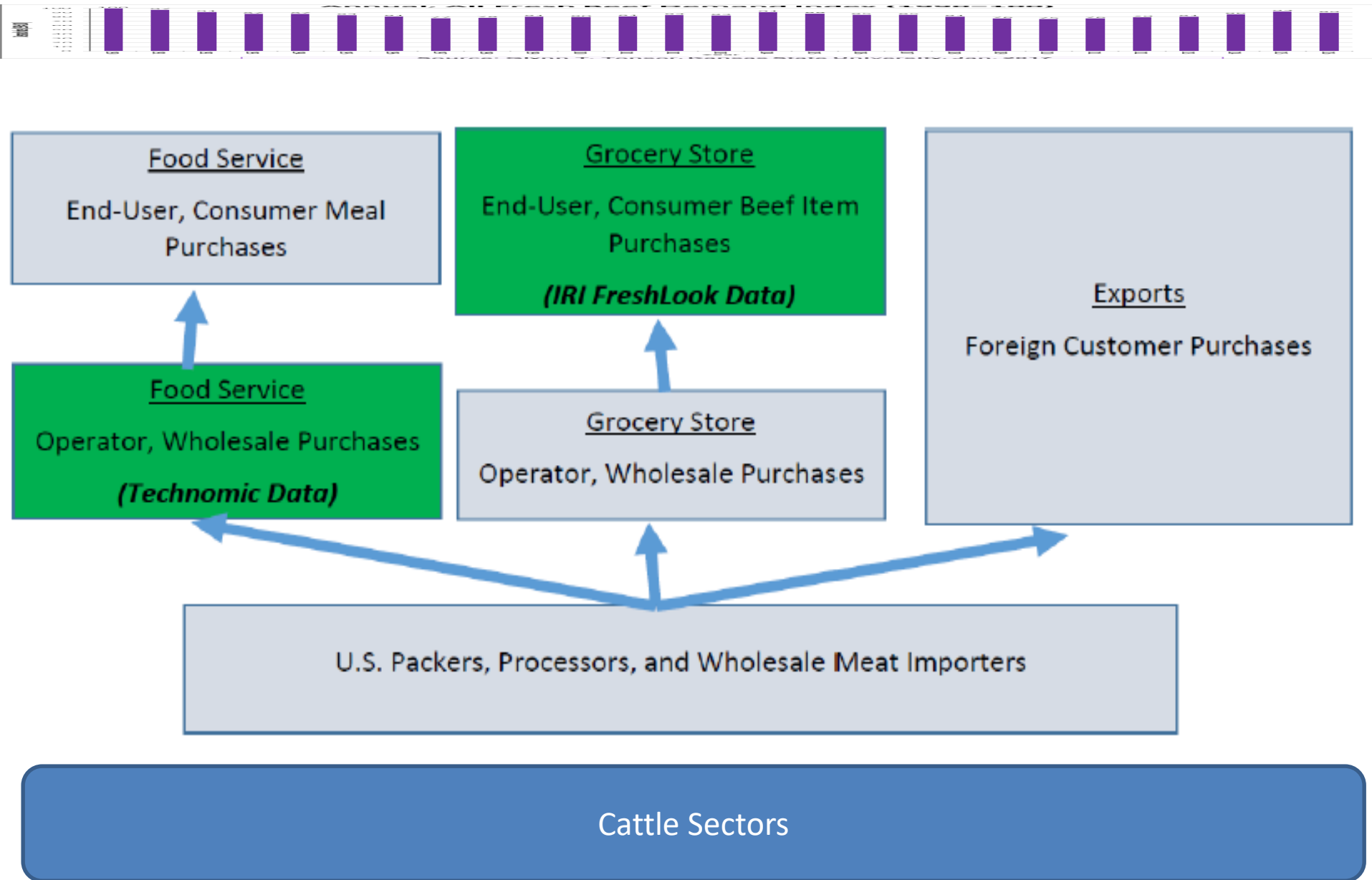
Annual, All Fresh Beef Demand Index (1990=100)



Limitations

1. Uses “disappearance” data
2. Uses retail asking prices
3. Quarterly frequency with data delays
4. Presumes homogeneous demand by market channel, U.S. region, and product type

Position of Potential New Indices



Project Purpose

Main Goal

Assess feasibility of new beef demand indices to provide industry guidance on viability for ongoing use to expand understanding of beef demand.

Project Process

Process

- 1. Establish feasibility of new beef demand indices**
 - **Food service & Retail (grocery-store scanner)**
 - **Total Beef & Product Category**
- 2. Assess strengths and weaknesses of indices**
- 3. Recommend indices to maintain**
- 4. Widely disseminate findings and implications**

New BEEF Retail Index

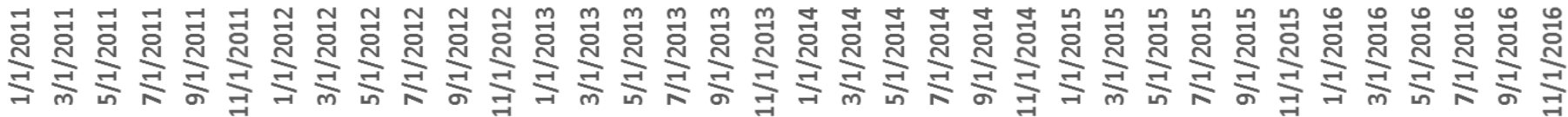
Grocery-Store, US Class Level, Non Seasonally-Adjusted Beef Index

MAX:
116.80
July-2015

$$y = 0.0036x - 45.862$$
$$R^2 = 0.2056$$

MIN:
91.30
Nov-2011

Nov-2016 Situation
Last Month: -6.02%
Last Year: -4.94%



Note: All estimates and analyses based upon Information Resources, Inc. data are by the authors and not by Information Resources, Inc.

New BEEF CATEGORY-LEVEL Retail Indices

Variable	Min	Max	Min Date	Max Date	Current Month	Last Month	Last Year	Last Month	Last Year
					Nov-2016	Oct-16	Nov-15	Percent Change	
Chuck	70.30	108.28	Jul-11	Oct-16	97.46	108.28	101.32	-10.00	-3.81
Ground	99.05	141.81	Nov-11	Jul-15	112.77	117.38	131.31	-3.93	-14.12
Loin	87.75	132.10	Nov-12	Jun-11	92.20	101.54	91.97	-9.20	0.25
Rib	-14,427.13	4,352.21	Dec-11	Dec-12	118.97	116.86	105.83	1.80	12.42
Round	74.94	100.00	Jun-13	Jan-11	77.93	81.44	84.01	-4.31	-7.23

Note: All estimates and analyses based upon Information Resources, Inc. data are by the authors and not by Information Resources, Inc.

Inconsistency Points:

- Rib index is nonsense

New BEEF REGIONAL Retail Indices

Variable	N	Mean	StdDev	Min	Max	Min Date	Max Date	Current Month	Last Month	Last Year	Last Month	Last Year
								Nov-2016	Oct-16	Nov-15	Percent Change	
Northeast	71	102.85	7.88	84.07	123.07	Nov-11	Jun-16	98.39	107.94	102.23	-9.56	-3.85
South	71	102.04	6.09	92.31	119.82	Feb-13	Nov-14	111.02	106.76	117.60	4.26	-6.58
Midwest	71	111.93	6.92	96.77	127.36	Nov-11	Oct-15	108.69	115.59	119.56	-6.90	-10.86
West	71	108.61	5.67	97.18	122.08	Nov-12	Jul-15	103.55	107.22	112.24	-3.67	-8.69

Heterogeneity Observations:

- Demand peaked first in *South* and last in *Northeast*
- Demand up in Nov-2016 in *South* and down in *Northeast*
- Pork price only impacts *South & Midwest* demand

Recommendations

- ❑ **Prioritize support for maintaining some Retail indices:**
 - **Class-level, U.S. & Regional Beef Indices**
 - **Category-level, U.S. Indices**
 - ***Ground, Loin, Chuck, and Round***

- ❑ **Do not maintain:**
 - **Category-level, *Rib* Index**
 - **Ground Beef SubCategory indices**

 - **Food Service indices**

Recommendations

- **recognize and support ongoing education on the economic value of understanding beef demand concepts**

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