



**2017 Summer Meeting  
Grand Geneva Resort & Spa, Lake Geneva, WI  
July 11, 2017**

**Regulation, Innovation and the Supply Chain**

**Speaker: Sharon Clark  
Perdue AgriBusiness LLC  
SVP Transportation and Regulatory Affairs**





*A Family  
Commitment  
to Quality  
Since 1920™*

## Our History



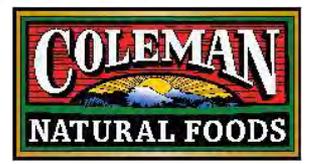
**Jim Perdue, Frank Perdue and Arthur Perdue  
circa 1960**



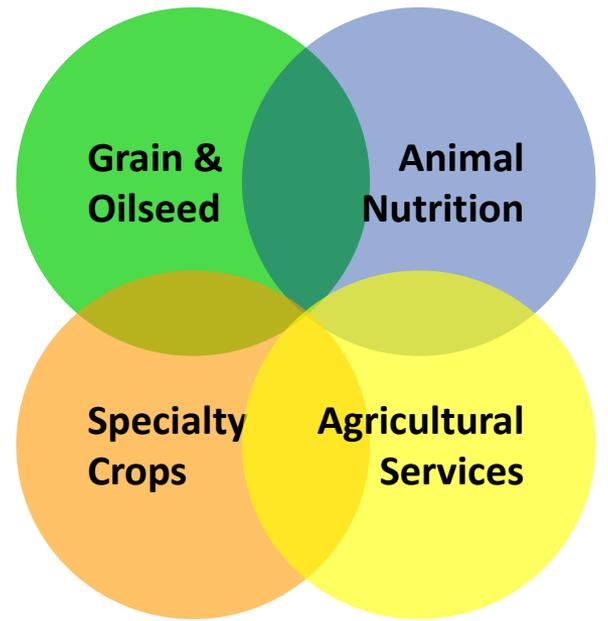
# About Perdue Farms, Incorporated



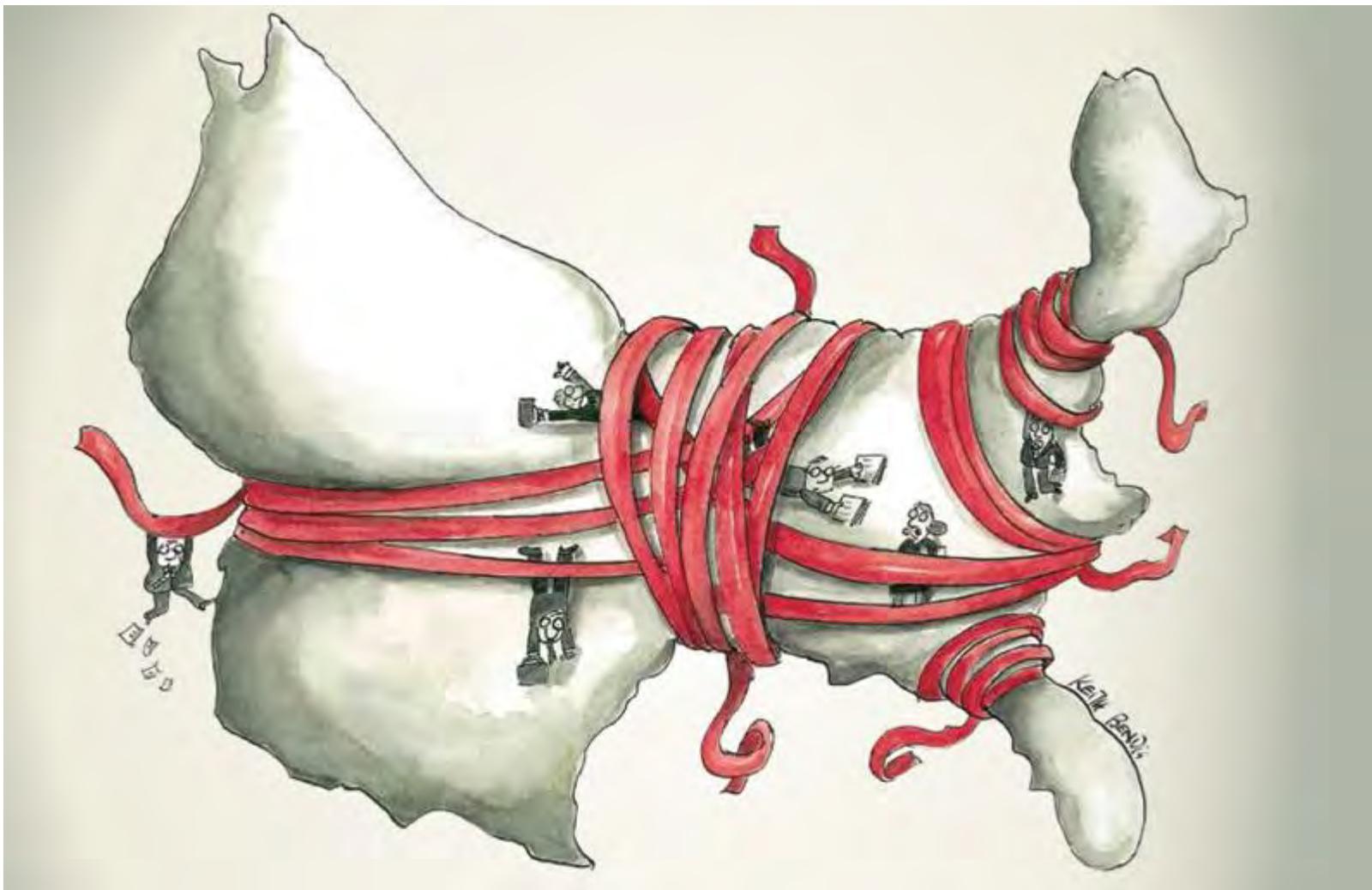
*A Family Commitment to Quality Since 1920™*



## AgriBusiness



# The Growth of the Administrative State



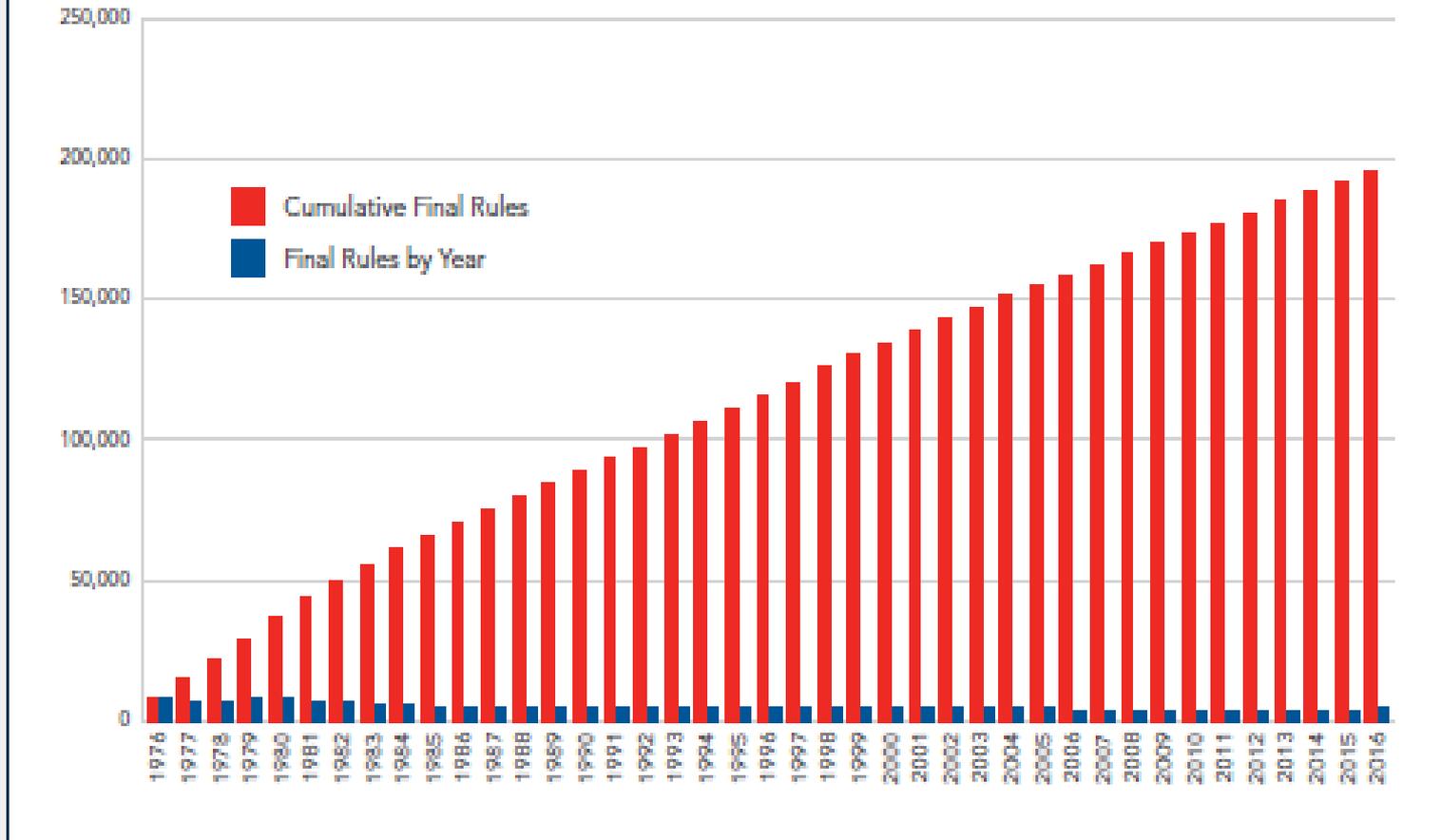
U.S. Chamber of Commerce, March 2017

**“If you have ten thousand regulations, you destroy all respect for the law.”**

*Winston Churchill, British Statesman*

# CUMULATIVE FINAL RULES

Since 1976



U.S. Chamber of Commerce, March 2017

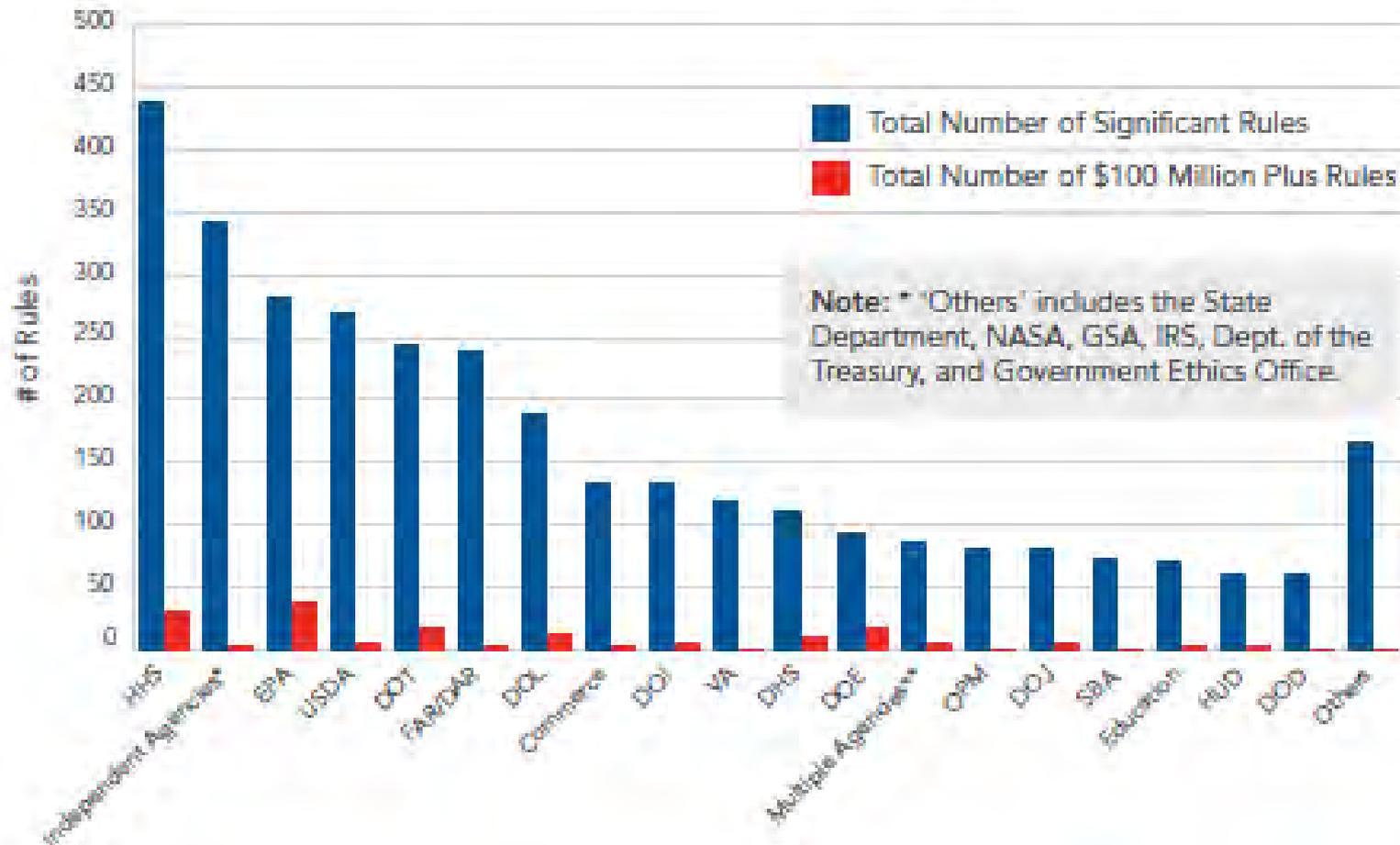
**“It will be of little avail to the people if the laws are so voluminous that they cannot be read or so incoherent that they cannot be understood.”**

*James Madison, Fourth U.S. President*

MARS, July 11, 2017

# COMPARISON OF NUMBER OF SIGNIFICANT VS. \$100 MILLION PLUS RULES BY AGENCY

Rules from 2008 through 2016



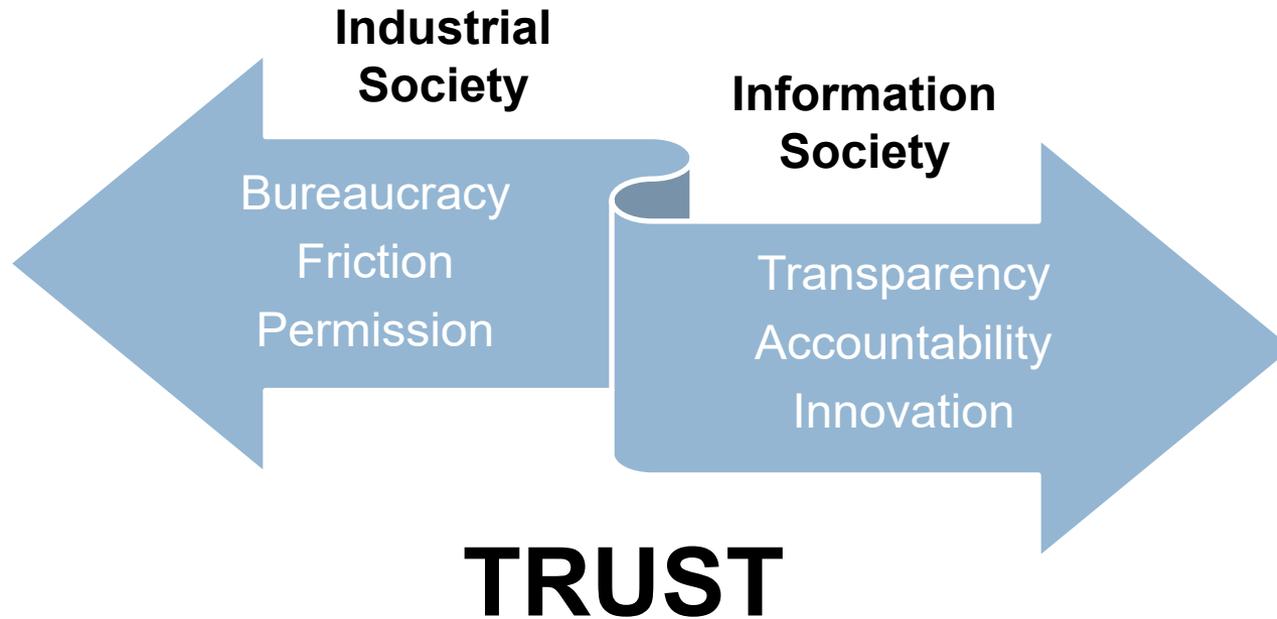
# USDOT Rail and Truck Rules Cost by Year

Year	Rule	2013 Annual Cost (\$ millions)
2008	Electronically Controlled Pneumatic Brake Systems	\$ 222.6
2009	Motor Vehicle Safety Standards: Roof Crush Resistance	\$1,139.9
2010	Real-Time System Management Information Program	\$ 153.6
2010	Electronic On-Board Recorders for HOS Compliance	\$ 146.4
2010	Positive Train Control	\$1,106.8
2011	Greenhouse Gas Emission and Fuel Efficiency Standards	\$1,672.0
2011	Motor Vehicle Safety Standards: Ejection Mitigation	\$ 540.3
2011	Hours of Service of Drivers	\$ 500.9
2014	Motor Vehicle Safety Standards: Rear Visibility	\$ 620.0
2015	Electronic Logging Devices and HOS Supporting Docs	\$1,836.0
2015	Hazardous Materials: Enhanced Tank Car Standards	\$ 234.4
2016	Training Requirements for Commercial Drivers	\$ 368.0
2016	Commercial Driver's Drug and Alcohol Clearinghouse	\$ 154.0

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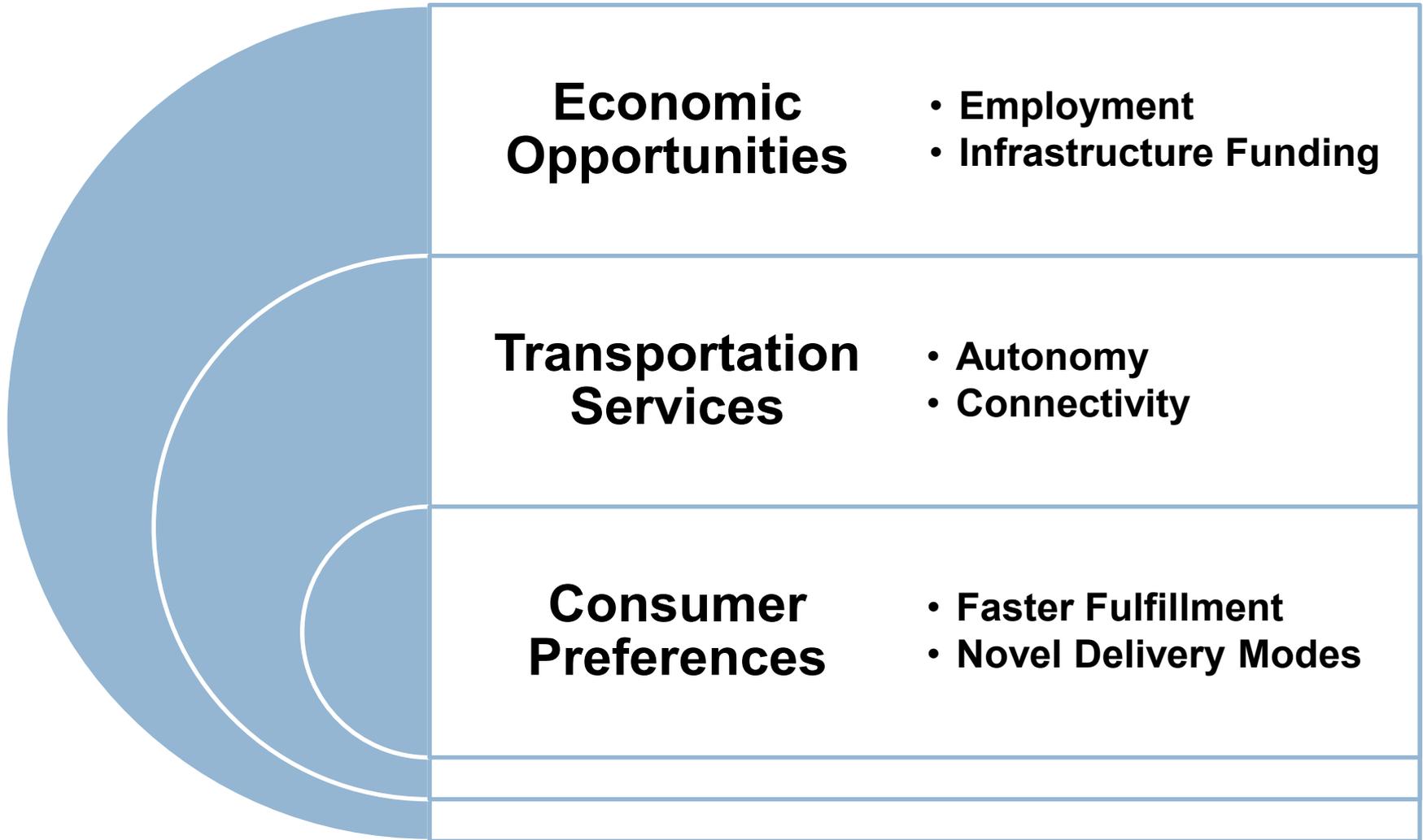
# Regulation, Innovation and the Supply Chain

## Regulatory Approaches



**“[In the future], the Internet will disappear... you won’t even sense it, it will be part of your presence all the time.”** *Eric Schmidt, Executive Chairman, Google*

# Regulation, Innovation and the Supply Chain



**“Never before in history has innovation offered promise of so much to so many in so short a time.”** *Bill Gates, co-founder of Microsoft*

# Economic Opportunities

## Employment and Infrastructure Funding

- How do we overcome government's slowness in adopting emerging technologies?
- How do we re-engineer the social safety net to protect job losses and provide job opportunities from tech innovations?
- Who will coordinate and pay for well-maintained public roadways, signals, signage, and sensors to support AVs?

Public

- How do we encourage, not legislate, responsibility with large technology companies?
- What is Silicon Valley's role in creating new jobs in rural America?
- How will City Planners redesign infrastructure that was centered on car ownership e.g. fewer parking spaces, more green spaces?

Private

- Where can technology bring measurable returns?
- What businesses prosper and/or fail in a "mobility-on-demand" economy?
- How will local, targeted deployment of inventory reshape the logistics industry?

Industry

**"The future is already here. It's just not very evenly distributed."**

*William Gibson, fiction writer*

# Economic Opportunities

## Employment and Infrastructure Options

- **Employment**
  - **Re-train workers in technology skills**
    - **Employment in new AV service sectors e.g. fleet maintenance, recycling**
  - **Publish real-time labor market data**
    - **Data transparency to allow market to match job training with businesses**
  - **Fund and create thriving college towns across the country**
    - **Incent regional economic hubs e.g. partner colleges with local business**
- **Infrastructure**
  - **Vehicle Miles Traveled (VMT) or Mileage-Based User Fee (MBUF)**
    - **Fee per mile of road usage – more equitable/sustainable**
  - **Expand Tolling**
    - **Increase use of fully-electronic managed traffic lanes in congested areas**
  - **Income Tax and Sales Tax Revenues**
    - **Dedicated revenue stream for transportation/infrastructure**

# Transportation Services

## Autonomy and Connectivity

- How do we establish public trust in the safety of automation e.g. moving hazmats?
- How will insurance provide protection from financial loss and liability?
- How can we balance prototyping with safety and risk when deploying new technology?

Public

- How will mobility options for people of all ages change demand for resources and services?
- How will consumers use their time and money saved from reduced traffic congestion?
- How will AV technology and connectivity, coupled with electrification for a cleaner environment, transform the way we live?

Private

- How do businesses utilize AV technology to reshape their business and support their customers?
- Do transport mode shares shift with increased productivity of trucks and other automated vehicles?
- How do we develop an “Ethical Framework” for how algorithmic decisions are made and their impact on transport safety and cost?

Industry

**“Automation is a vision of the future that’s upon us right now.”**

*Robert Anderson, Vice President-Research & Development, 3M*

# USDOT Advisory Committee on Automation in Transportation (ACAT)

- ACAT's objective is to provide information, advice and recommendations to the U.S. Secretary of Transportation on the development and deployment of automated transportation systems.
- Recommendations may include automated and connected road and transit vehicle technologies, enhanced freight movement technologies, railroad automated technologies, aviation automated navigation systems technologies, unmanned aircraft systems, and advanced technology deployment in surface transportation environments.
- Three Themes discussed at inaugural meeting January 16, 2017
  - Innovation: We need to harness it and use it as a catalyst.
  - Value proposition: Whether it be safety, environmental gains, or productivity gains, technology can bring to light all the value.
  - Framework: Everyone is looking for their role (fed, state, local). This Committee has the ability to shape guidance to these levels but also to Congress, which influences autonomy in multiple industries and other departments.

# Consumer Preferences

## Faster Fulfillment and Novel Delivery Modes

- How do we establish trust in technology between tech providers and regulators so the public can benefit?
- How do we test and evaluate technologies with embedded artificial intelligence?
- How do we ethically ensure protection of information used for automation and transportation data?

Public

- How do we build consumer trust in automation and connectivity?
- Are consumers willing to risk privacy and cyber security in exchange for faster goods fulfillment?
- How will we address design challenges to ensure accessibility for disabled populations?

Private

- How will consumers react to shadow-mode data capturing to prove out algorithms to improve service?
- How will real time routing of personnel, equipment and freight change current business models?
- How will fully automated warehousing, inventory management and distribution change current business models?

Industry

**“We believe in connecting everyone to affordable transportation at the push of a button.”**

*Rachel Holt, Regional GM-Uber*

# Federal Trade Commission Office of Technology & Research (OTech)

- **OTech oversees consumer protections and new technologies.**
- **OTech conducts independent studies, evaluates new marketing practices, and provides guidance to consumers, businesses and policymakers on technology's impact on consumers.**
- **OTech is housed in the Bureau of Consumer Protection and its work supports all facets of the FTC's consumer protection mission including issues related to privacy, data security, connected cars, smart homes, algorithmic transparency, emerging payment methods, fraud, big data, and the Internet of Things.**

# Regulation, Innovation and the Supply Chain

## How to Regulate Innovation – Without Killing it

- **Consider other models, such as co-regulation and delegated regulation**
  - **Assumes businesses know the most about their market and, if they are well-meaning, can develop mechanisms that achieve the goals of the regulators without government intrusion**
- **Make regulation itself more algorithmic, more data-driven**
  - **Data transparency between regulators and businesses**
  - **Consider exempting industries from regulation if they provide real time data and audit capability to regulators**
- **Flip regulatory framework from ‘permission’ to ‘accountability’**
  - **Trades some up-front risk for broader market participation, backed with strict accountability based on data**
  - **Regulators could operate in ‘permanent beta’ with constant adaptation, evolution and improvement**
  - **Extend peer-to-peer regulation systems to address externalities and improve public safety**

**“I’m arguing for an openness and a recognition that ‘regulation’ isn’t a dirty word.”**

*Kevin Werbach, Professor, Legal Studies & Business Ethics, Wharton School*

# Regulation, Innovation and the Supply Chain

## The speed of change...



**Autonomous high-speed trains are expected to operate in France by 2023 with trials of 'drone trains' to begin next year...**



# AgriBusiness

## *Our Customer Promise*

*Helping customers prosper with flexible, forward-thinking solutions for agriculturally based products from a uniquely trusted name.*

