# Moving America: How Policymakers Can Accelerate Automation in Freight Transportation

Joe Kennedy Senior Fellow

February 12, 2019

Join the Conversation: #ITIFTransport

@JV\_Kennedy





### ITIF Report on Automation in Transportation

- Overview of current developments.
- Describes opportunities for automation in different freight industries including trucking, trains, and drones.
- Lists regulatory challenges.
- Suggests principles that should guide regulators as they oversee the implementation of new technology.



#### How Regulatory Reform Can Advance Automation in the Freight Transportation Sector

BY JOE KENNEDY | JUNE 2017

Although technological advancements are creating the potential to increase automation in many industries, regulations often prevent companies from capitalizing on these opportunities, in part because regulators often give less emphasis to productivity and innovation than they deserve. Intelligent regulatory reform can remove barriers to innovation and significantly increase economic growth. Unfortunately, regulatory reform is much more difficult to accomplish than other major initiatives, such as tax or health-care reform, because change requires a detailed knowledge of the forces shaping each individual industry. The transportation sector offers a good case study of these opportunities and challenges. In industries such as railroads, trucking, and commercial drones, regulators are struggling with rapid advances in automation that promise significant safety and efficiency benefits to society. Examining how different regulators have encouraged or hindered this automation offers important lessons for other sectors.

Resulatory reform offers tremendous benefits to society in a number of economic sectors, corresponding social benefits. In highly innovative industries, these costs can slow or even stop the introduction of productivity-enhancing technology. 1 But, perhaps even more important, wise regulation can actually speed valuable innovations by reducing uncertainty

INFORMATION TECHNOLOGY & INNOVATION FOUNDATION | | JUNE 2017



#### **Basic Facts About Automation**

- Automation does not reduce the number of jobs in the mediumor long-term.
- Automation boosts productivity, which is necessary for a rise in living standards.
- In many cases, automation produces better safety and performance than humans are capable of.
- Automation is a process, not a sudden result.

#### **Automation in Freight Transportation**

- Freight industries are experiencing a shortage of qualified workers, especially in trucking and airlines.
- Industries both compete and cooperate with each other to deliver millions of deliveries across the country.
- Each industry has a different regulator.
- If the U.S. does not lead in these technologies, others will.

### **Principle 1: Welcome Technology**

- Technological advance will continue.
- Automation promises several benefits; lower costs, better safety, less pollution, and faster delivery times.
- Regulators should help the industry get the technology to where it needs to be while protecting public safety and confidence.

## Principle 2: Acknowledge the Other Forces Encouraging Companies to Act Responsibly

- Industry has many incentives to act safely.
  - The high cost of capital sunk into a rail car or truck.
  - Tort laws that protect victims of an accident.
  - The need to maintain not just safety but also the public reputation for safety.
  - The importance of brand, consumer, and worker loyalty.

#### **Principle 3: Allow for Different Technology Futures**

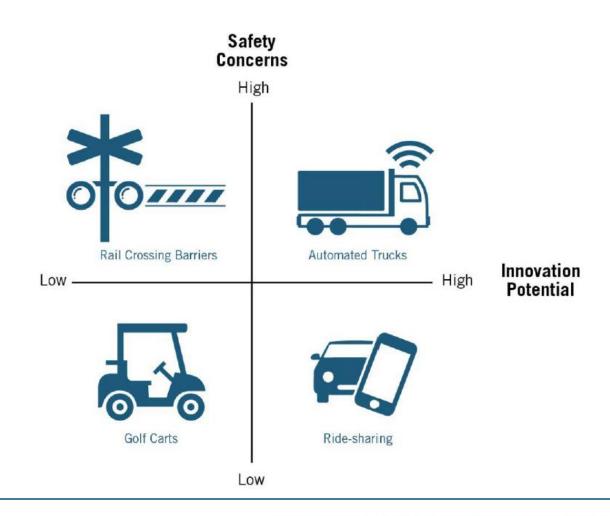
- Accept that change, including technology, is constant.
- Avoid a bias for the status quo and welcome the opportunity for better performance and price.
- Regulators should avoid favoring particular technologies or business models.

## Principle 4: Distinguish Between Substantially Different Technologies

- Tailor regulation to specific technologies rather than treating all technologies the same.
- Allow technology to be introduced gradually.
- Be agnostic about which technology is chosen.

### Principle 5: Prioritize Regulation According to Safety and Innovation Potential

- Concentrate on issues that have a high effect on safety and show significant potential for rapid innovation.
- Cases with few safety concerns and rapid innovation should be allowed to proceed rapidly.



#### **Principle 6: Improve the Decision Process**

- Rulemaking can take two years or more, not including court challenges.
- Write rules with broad safety and other standards that can be achieved by many technologies.
- Maintain a constant dialogue with industry to form a common understanding of what technology is capable of.

#### **Principle 7: Provide Regulators the Necessary Resources**

- Regulators must have resources to understand the latest technologies, make timely decisions, and do adequate enforcement.
- Need to adequately compensate and motivate skilled and competent regulators.

#### Thank You!

Joe Kennedy JKennedy@ITIF.org @JV\_Kennedy





#### **Panelists**

- Adrian Arnakis
   Senior Vice President of Government Affairs
   Association of American Railroads
- Thomas F. Jensen
   Senior Vice President of Transportation Policy
   UPS
- Greg Rogers
   Director of Government Relations and Mobility Innovation
   Securing America's Future Energy