AUTONOMOUS/CONNECTED VEHICLES: TRANSFORMING LAND USE, TRANSPORTATION & SAFETY

Circulate San Diego

Paul Brubaker – September 25, 2017
Maersk’s tanker unit invests in quant hedge fund

Danish company takes undisclosed stake in CargoMetrics to improve fleet deployment

“It’s a very volatile industry,” said Soren Christian Meyer, head of strategy at Maersk Tankers.

“It’s an industry that has been based on gut feeling . . . we want to challenge that industry paradigm

SOREN CHRISTIAN MEYER, HEAD OF STRATEGY, MAERSK Tankers

CargoMetrics is a computer-powered hedge fund that crunches global shipping, satellite, and even weather data to track and trade international commodity flows.

About 40 per cent of all global trade moves by sea, and the fund tracks the movements
THE INTERNET OF THINGS
AN EXPLOSION OF CONNECTED POSSIBILITY

IPv6 – $3.4 \times 10^{38}$
If you aren’t thinking about the possibilities of 5G you are not thinking seriously about the future of mobility.
Think Holistically - Metcalfe’s Law*

*Metcalfe's law states that the value of a telecommunications network is proportional to the square of the number of connected users of the system (n²).
Elon Musk: artificial intelligence is our biggest existential threat

The AI investor says that humanity risks ‘summoning a demon’ and calls for more regulatory oversight.

Elon Musk has spoken out against artificial intelligence (AI), declaring it the most serious threat to the survival of the human race.
Autonomy – Its Data, Connection, Compute
Its (WAY WAY) Early – Yet Our Approach to Regulating AV’s Today is Critical

- ATI21 Strategic Framework
- Federal AV Policy
- AV Policy Series
- House Legislation
- Coalition for Future Mobility
- Federal AV Policy 2.0
- Senate Legislation
- State Regulation
- Local, Regional and Campus

OST
NHTSA
FMCSA
FTA
PHMSA (OHMS)
States
8 Key Challenges Described in the ATI21 National Strategic Framework

1. Earning public trust
2. Increasing confidence in self-driving technology
3. Ensuring robust cybersecurity
4. Developing standards and regulations that encourage self-driving
5. Creating the legal, liability and insurance framework for accelerating the deployment of self-driving vehicles
6. Adopting reasonable data and privacy policies
7. Accelerating the transition to a fully self-driving fleet
8. Understanding and planning for economic disruption and labor transition
Key Challenges/Opportunities

- Understand What Will Impact the Future
  - Think Wayne Gretzky

- Transportation Planning Culture (Expand the Box)
  - Disconnect Between the Innovation and Planning Cycle
  - Think Differently/Question Assumptions
  - Silos of Excellence – think/act/plan holistically
  - Beware of the Echo Chamber

- Resources
  - Gas Tax
  - People – KSAs (where are the data scientists)

- Jurisdictional Stovepipes – not how people and goods move.
Thank you

Paul Brubaker
pbrubaker@ati21.org