

OFFICE OF STRATEGIC INNOVATIONS

Hari Sripathi, P.E. March 20, 2019

Team



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Bring ideas to reality

- Scan Innovations
- Bring Innovation and Apply to VDOT Business in an orderly fashion
- Work with VDOT business units and industry
- Champion and promote innovations in the Department
- Innovations
 - touch citizens
 - improve efficiency
 - foster economic growth



Learn from the past



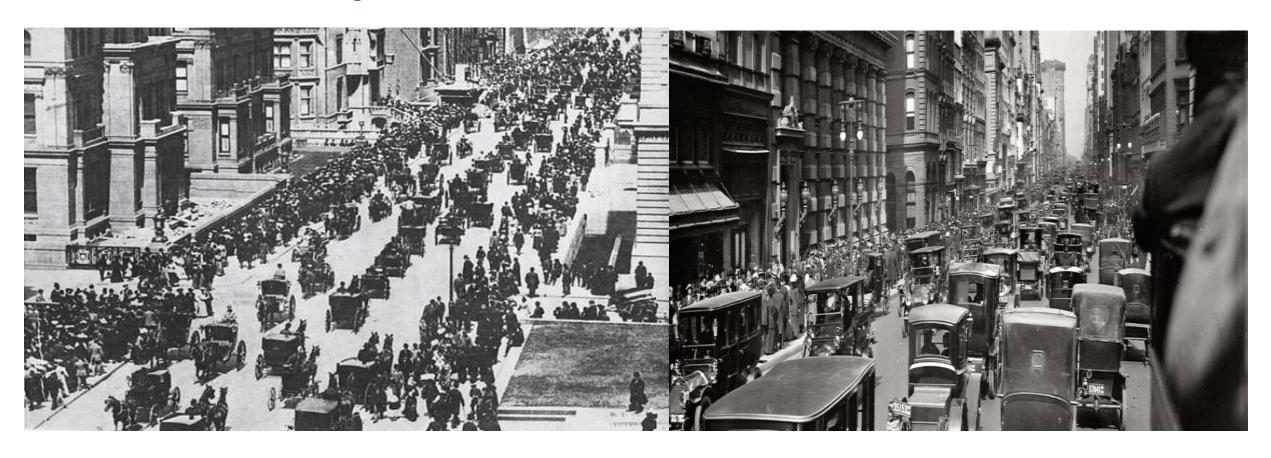




Some things do not go away but change



Learn from the past



Manhattan 1903 to 1913



Learn from the past



An evolution – devices, applications, coverage Glass half full or half empty?







Paradigm shifts



Innovations — cone of vision

- Automation CAV, UAS
- Mobility as a service (MaaS) / Mobility on demand
- Electric vehicles with wireless charging
- Crowdsourcing and shared use culture
- VR/AR and voice commands
- Communications systems 5G, LoRa, Small Cell Satellite etc.
- Data Analytics, Cloud computing, Al/predictive tools
- Cybersecurity
- Digital workplace



Innovations — cone of vision

- 3D, 4D and 5D model based design and construction (EDC-2 and 3) and 3D printing (Ex., Bridges)
- Robotics in dull or dangerous work (chatbots, process automation, construction and maintenance)
- Nano technology and IoT

..... and more



Path Forward

- ITTF
- Business Plan
- Collaboration
- Adjust the cone of vision incrementally





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