

# AMS Forum on Observing the Environment from the Ground Up

## **Intelligent Transportation: The Next Revolution**

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Intelligent Transportation System Joint Program Office (ITS JPO)

U.S. Department of Transportation (USDOT)

#### ITS JPO Vision and Mission

#### VISION

Transform the Way Society Moves



#### MISSION

Conduct research, development, and education activities to facilitate the adoption of information and communication technology to enable society to move more safely and efficiently.

Learn more at: http://www.its.dot.gov/strategicplan/



#### The Next Revolution

Technology convergence will revolutionize transportation, dramatically improving safety and mobility while reducing costs and environmental impacts



- · Connected Vehicles
- Vehicle Automation
- · Internet of Things
- Machine Learning
- Big Data
- Cloud Computing
- MobileSharing Economy
- Smart Cities
- · Order of magnitude safety improvements
- Reduced congestion
- Reduced emissions and fossil fuels
- Improved access to jobs and services
- Reduced transportation costs for government and users
- · Improved accessibility and mobility



### A Data Explosion

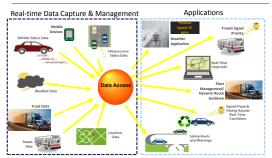
As part of the Safety Pilot Model Deployment in Ann Arbor, MI, 2,836 vehicles generate Basic Safety Messages (BSMs) on 73 miles of freeways and arterials (approx. 2% of vehicles)



	October 2012	April 2013
Unique vehicles	1,626	2,069
BSMs generated	1.3 Billion	2.7 Billion
Data generated	96 GB	197 GB



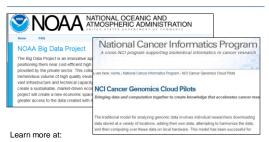
## **Research to Operations**



Get research data at: https://www.its-rde.net/



## **Beyond Transportation**



https://data-alliance.noaa.gov/

https://cbiit.nci.nih.gov/ncip/nci-cancer-genomics-cloud-pilots





## Thank You!

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