

Emerging Technology Spotlight - Mobility

National Geospatial Advisory Committee

Maria Roat

Chief Technology Officer

June 2016

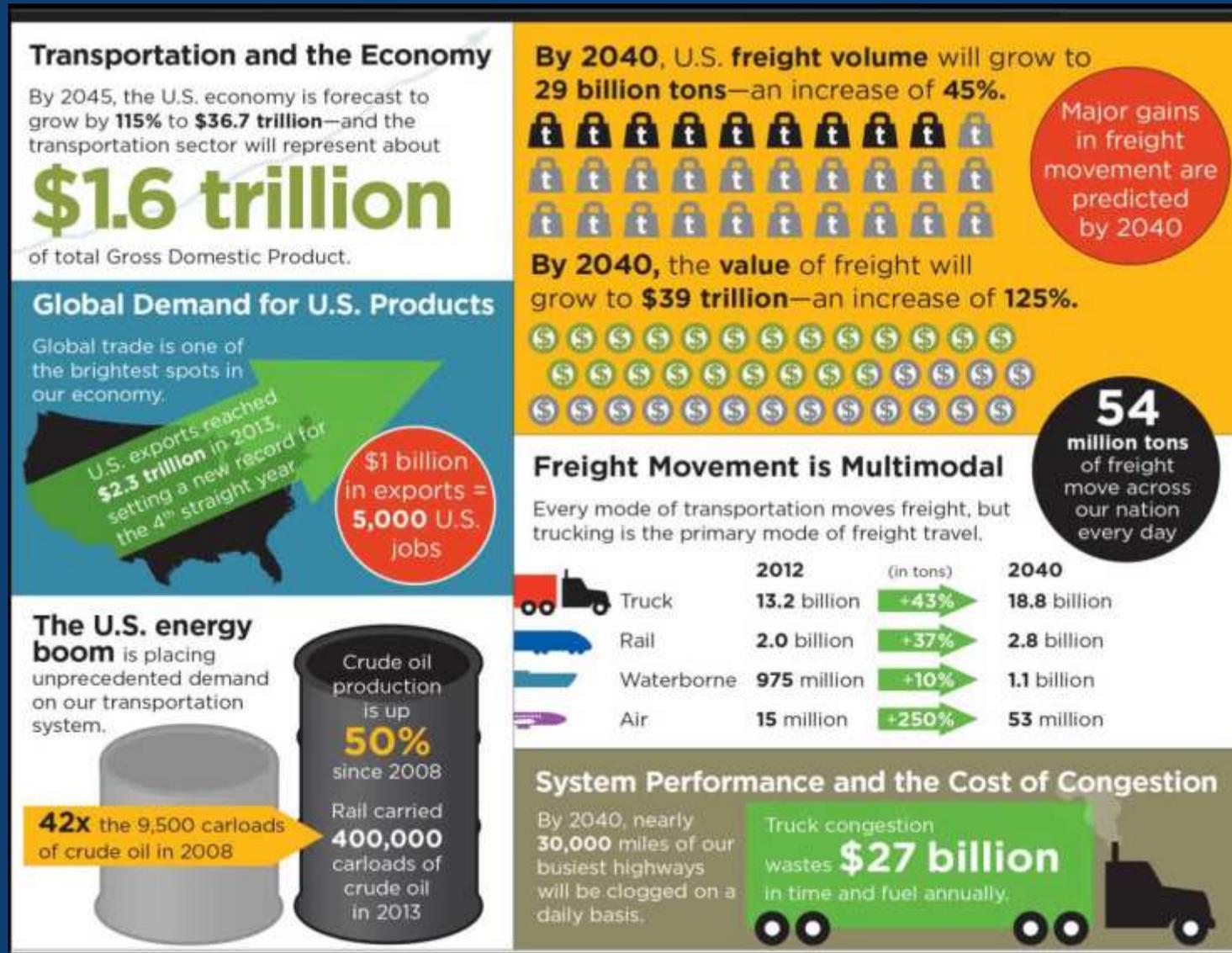


**U.S. Department
of Transportation**

The background features a dark blue gradient with numerous overlapping, glowing light trails in shades of purple, pink, and yellow. These trails are dynamic and appear to be moving across the frame, creating a sense of energy and motion.

**build what everybody
else is talking about**

Trends: How We Move Things



Trends: How We Move Things Better

More and more, the transportation sector is relying on data to drive decisions, and on technology to reimagine how we move people and goods.

Connected Vehicles

Vehicles that communicate are the latest innovation in a long line of **successful safety advances**.

The motor vehicle fatality rate has dropped by **80%** over the past 50 years.

Connected vehicles and new crash avoidance technology could potentially address

81% of crashes involving unimpaired drivers.

Robotics

Advances in robotics are changing transportation operations and will impact **the future transportation workforce**.

Robots will perform vital transportation functions, such as critical infrastructure inspection.

NextGen

GPS and new technologies are leading to a **safer, more efficient** U.S. airspace.

By 2020, **one-second updates** will pinpoint the **aircraft location and speed** of 30,000 commercial flights daily.

Real-time Travelers

Mobile access to everything from **traffic data** to **transit schedules** informs our travel choices.

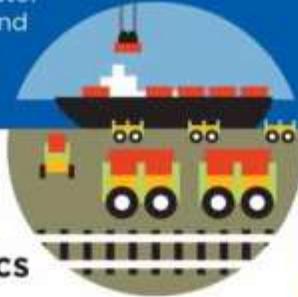
90% of American adults own a mobile phone.

20% use their phones for **up-to-the-minute** traffic or transit information.

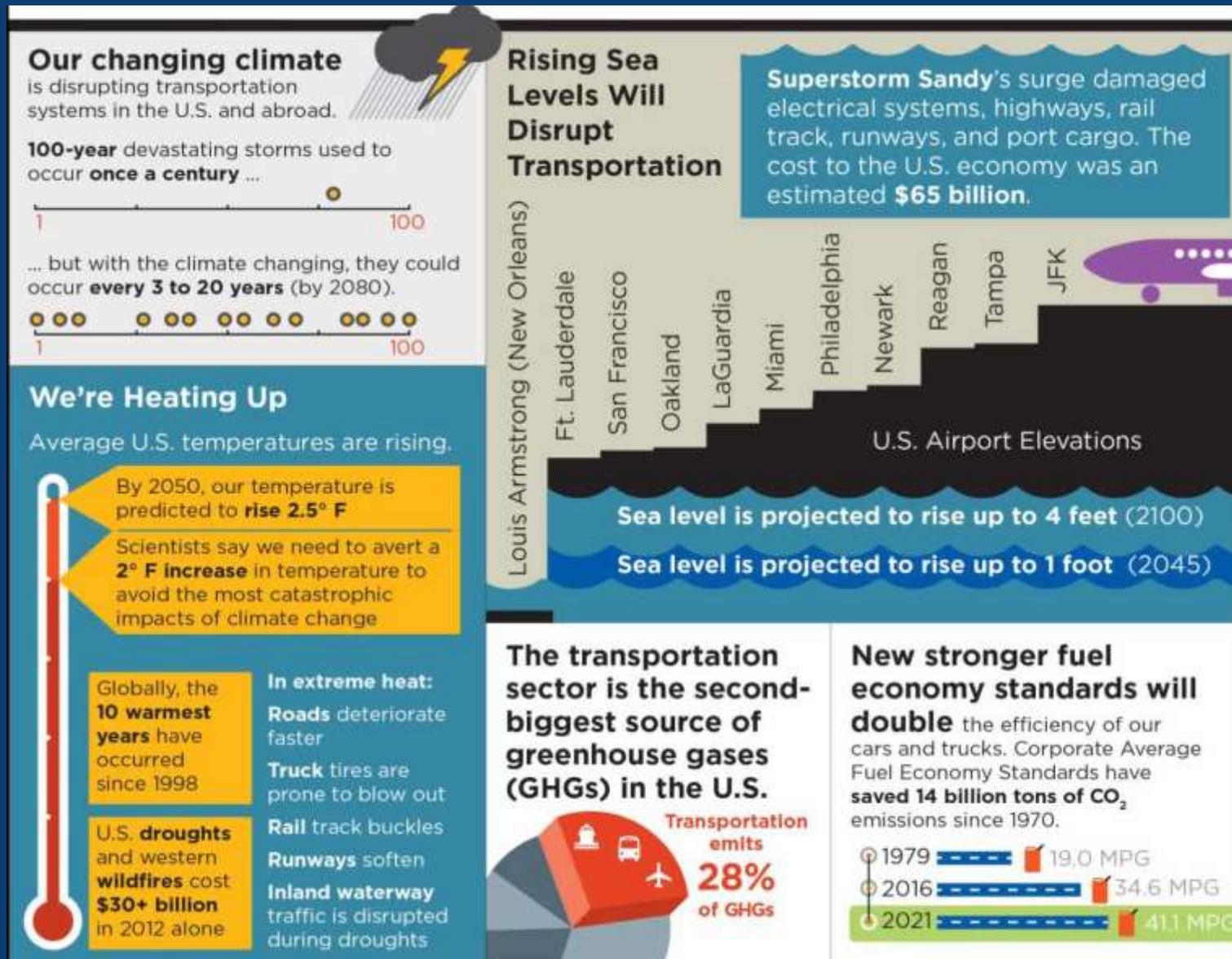
Smartphones are regularly used for **turn-by-turn navigation**.

Big data is all around us. Global data generated is projected to grow by **40%** annually.

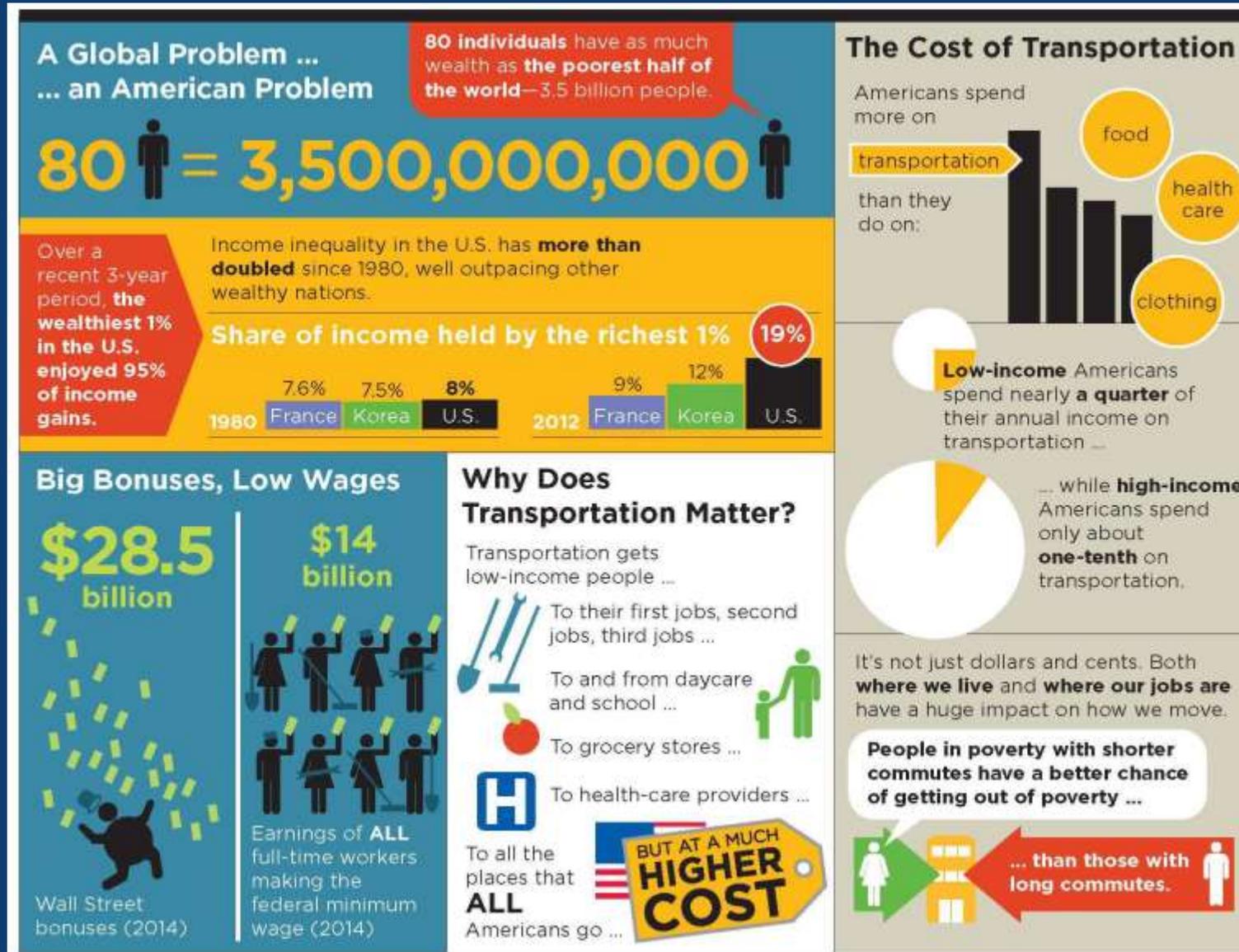
Data enables innovative transportation options, such as **car-sharing**, **ride-sharing**, and **pop-up bus services**, and more **rapid delivery of goods**.



Trends: How We Adapt



Feedback: Equity and the Opportunity Gap





**Not every innovation
in transportation
is going to come from government
or even a large enterprise.**

Anthony Foxx

U.S. Secretary of Transportation

Smart City Challenge Applicants



**Creating a culture of
innovation requires a
thoughtful approach**

