## The Road to Economic Vitality

**Arizona's Transportation System Leads the Way** 

Floyd Roehrich, Jr., P.E. Executive Officer

Arizona Department of Transportation Nov. 16, 2016



## 60-Year Transportation Déjà Vu

"A modern highway system is essential to meet the needs of our growing population and our expanding economy."

— President Dwight D. Eisenhower Jan. 6, 1955

"Infrastructure investment strengthens our economic platform ... makes America more competitive, and reduces the costs of goods and services for American consumers."

President-elect Donald J. Trump
 2016 Campaign Platform

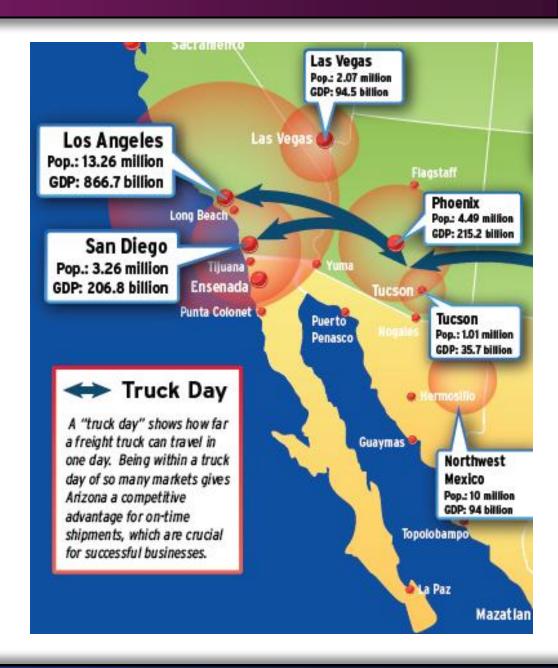
## **Key Commerce Corridors**

\$28.6 Billion
Gross State Product

\$59 Billion Cumulative Economic Output

47,000+ Annual Jobs

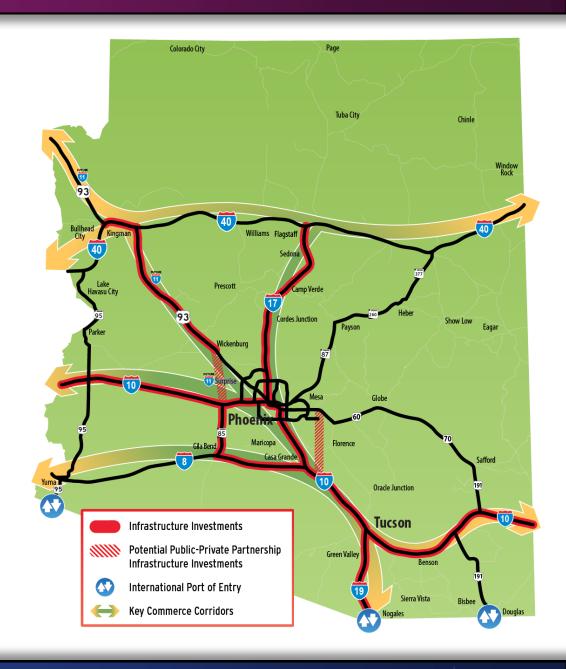
\$20 Billion Investment over 20 Years



# **Key Commerce Corridors**

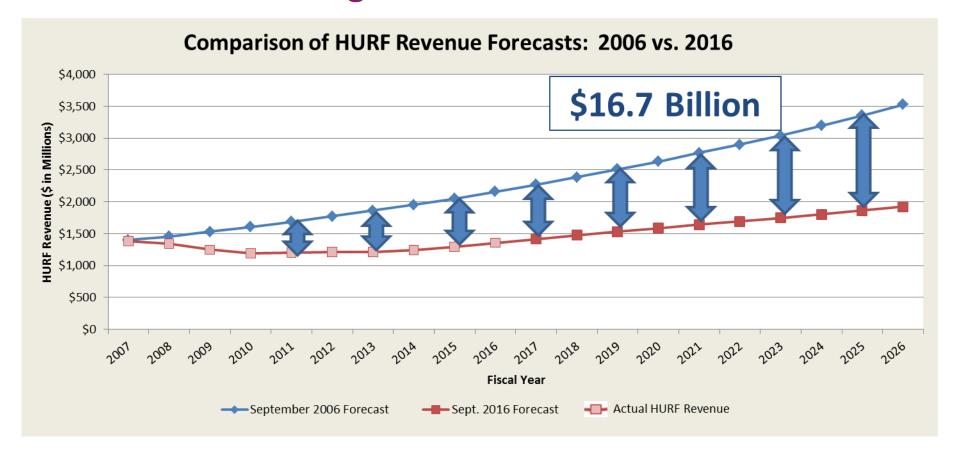
Arizona's primary freight routes

\$20 Billion Investment over 20 Years



#### **Highway User Revenue Fund (HURF):**

#### The World According to 2006

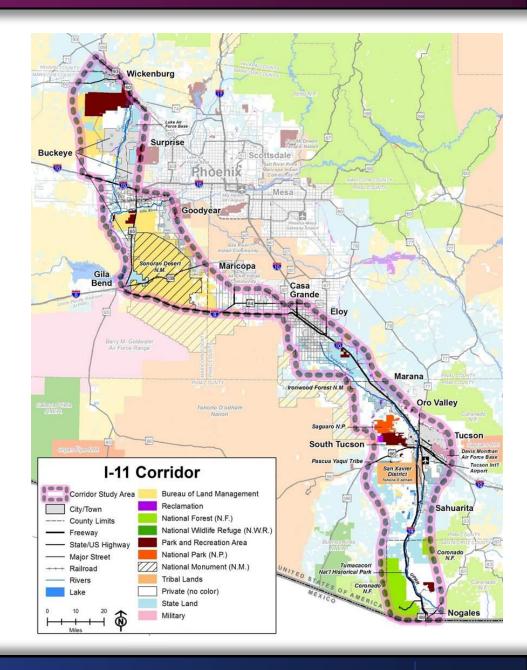


#### **Interstate 11 Study**

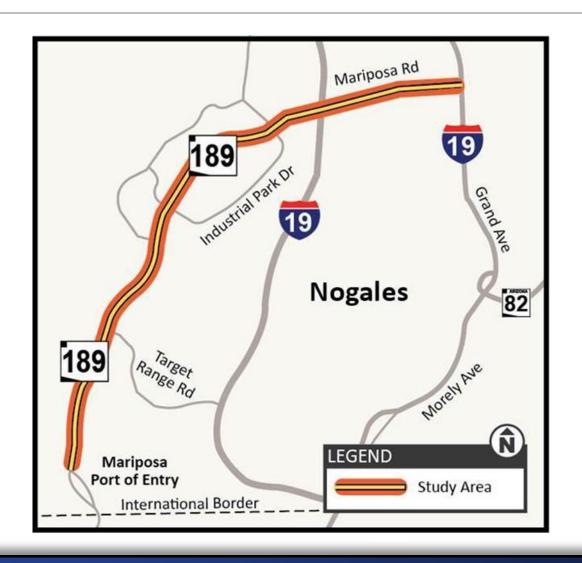
 280-mile study area from Nogales to Wickenburg

2,000-foot corridor alternatives

i11study.com



#### **State Route 189**





#### **Interstate 17**

▶ 20-mile corridor prone to crashes and road closures

 ADOT studying improvement options, including reversible lanes, widening and a new parallel freeway corridor



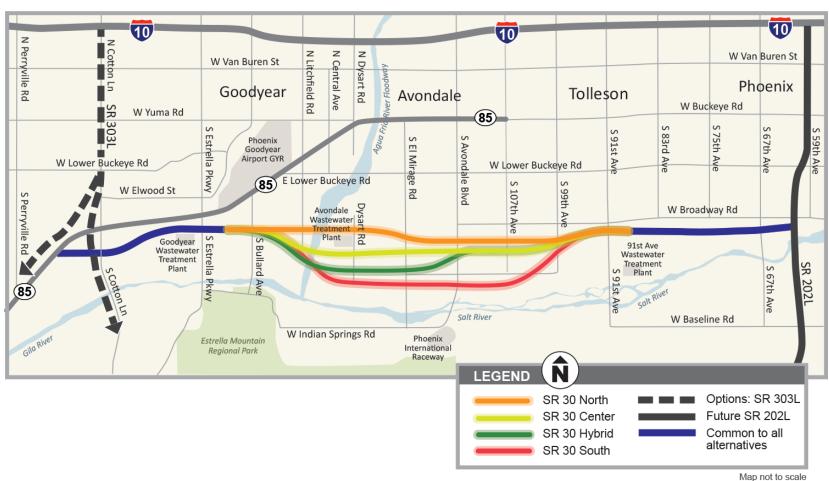
## North-South Corridor Study

Route alternatives being evaluated

State Route 24 study area included



#### **State Route 30**





# ADOT Black & Green Sustainable Pavement Systems Program



- BMPs of six lifecycle phases into a single sustainable pavement systems framework
- One of the first state DOT programs in the U.S.

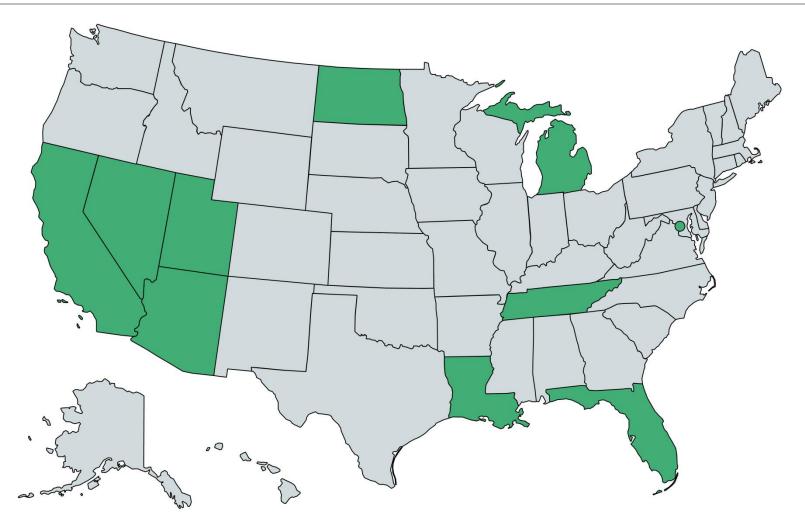
## **Autonomous and Self-Driving Vehicles**

- Safety
- Mobility
- Sustainability



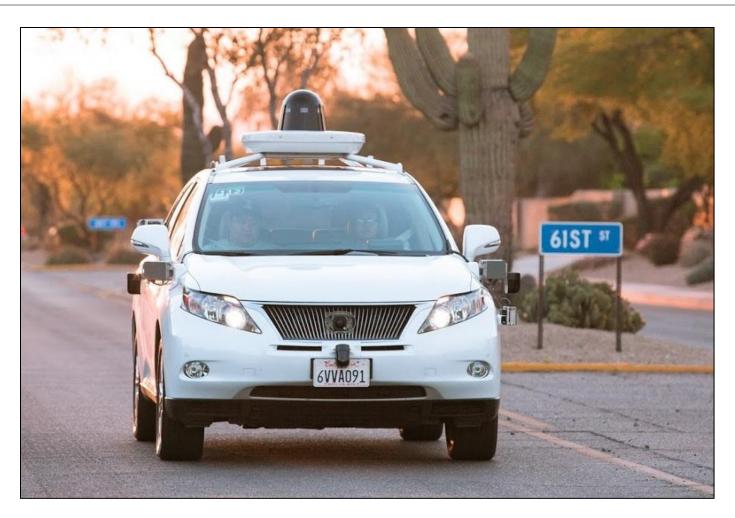
**Image: General Motors** 

## **Arizona among the Leading States**



**Data: National Conference of State Legislatures** 

#### **Arizona's R&D Contributions**



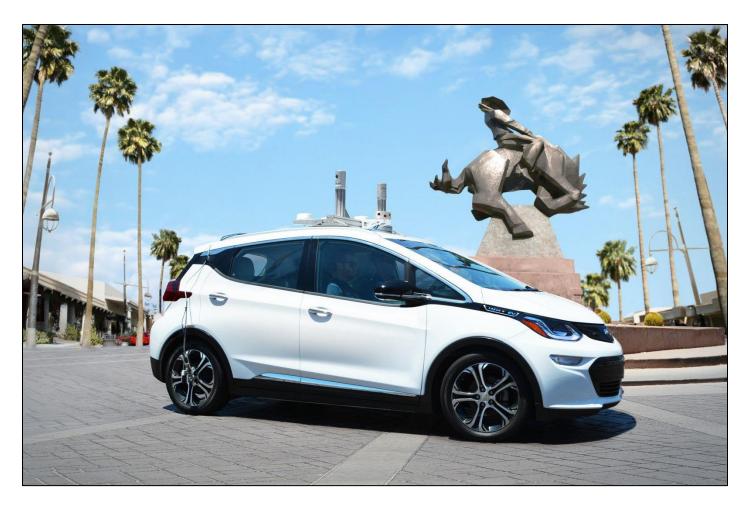
**Image: Google** 

#### **Arizona's R&D Contributions**



**Image: Ford Motor Company** 

## **Arizona's R&D Contributions**



**Image: Cruise Automation** 

## **Robot Truckers**



Image: Otto

## **Connected Vehicle Technologies**

#### **Vehicle-to-Infrastructure (V2I)**

 Vehicles communicating with roadway infrastructure

#### Vehicle-to-Vehicle (V2V)

Vehicles communicating with other vehicles

#### Vehicle-to-Any Entity (V2X)

Vehicles communicating with anything

