

# Automated, Connected, Electric, Shared, Safe Mobility

THE UNIVERSITY OF  
**ALABAMA** | Alabama Transportation  
Institute

**ACES<sup>2</sup>**  
Mobility



# ACES<sup>2</sup> Mobility Opportunities for ATI

Automated Mobility

Connected Mobility

Electric Mobility

Shared Mobility

Safe Mobility

# Indy Autonomous Challenge

- UA is partnered with The University of Milan – one of the top universities in the world.
- Object is to deploy software to drive a standard issue racecar at high speeds under challenging performance conditions.
- "Performance autonomy" can be an area of international collaboration and world leading strength.

Friday April 29, 2022 Daily Mail

## Robo-car breaks the world speed record! Fully autonomous PoliMOVE vehicle reaches an incredible 192.2mph on the Space Shuttle airstrip at NASA's Kennedy Space Center

- The car is a Dallara-built AV-21 that has hardware to enable automation
- It took to the track on the Space Shuttle airstrip in Cape Canavera on April 27
- The speed of 192.2mph was obtained as an average of over 0.6 miles (1km) in two consecutive attempts in opposite directions, to eliminate the effects of the wind

By [SHIVALI BEST FOR MAILONLINE](#) 

**PUBLISHED:** 10:59 EDT, 29 April 2022 | **UPDATED:** 10:59 EDT, 29 April 2022



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A robotic car has broken the world speed record, reaching impressive speeds of 192.2mph (309.3kph).

The car, developed by a team from the Politecnico di Milano, called PoliMOVE, is fully autonomous and took to the track on the Space Shuttle airstrip at [NASA's](#) Kennedy Space Centre this week.

During the test drive, the racecar clocked speeds of 192.2mph (309.3kph), smashing the previous record of 175.49mph (282.42kph), held by Roborace.

# ACES<sup>2</sup> Mobility Opportunities for ATI

Automated Mobility

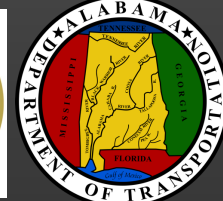
Connected Mobility

Electric Mobility

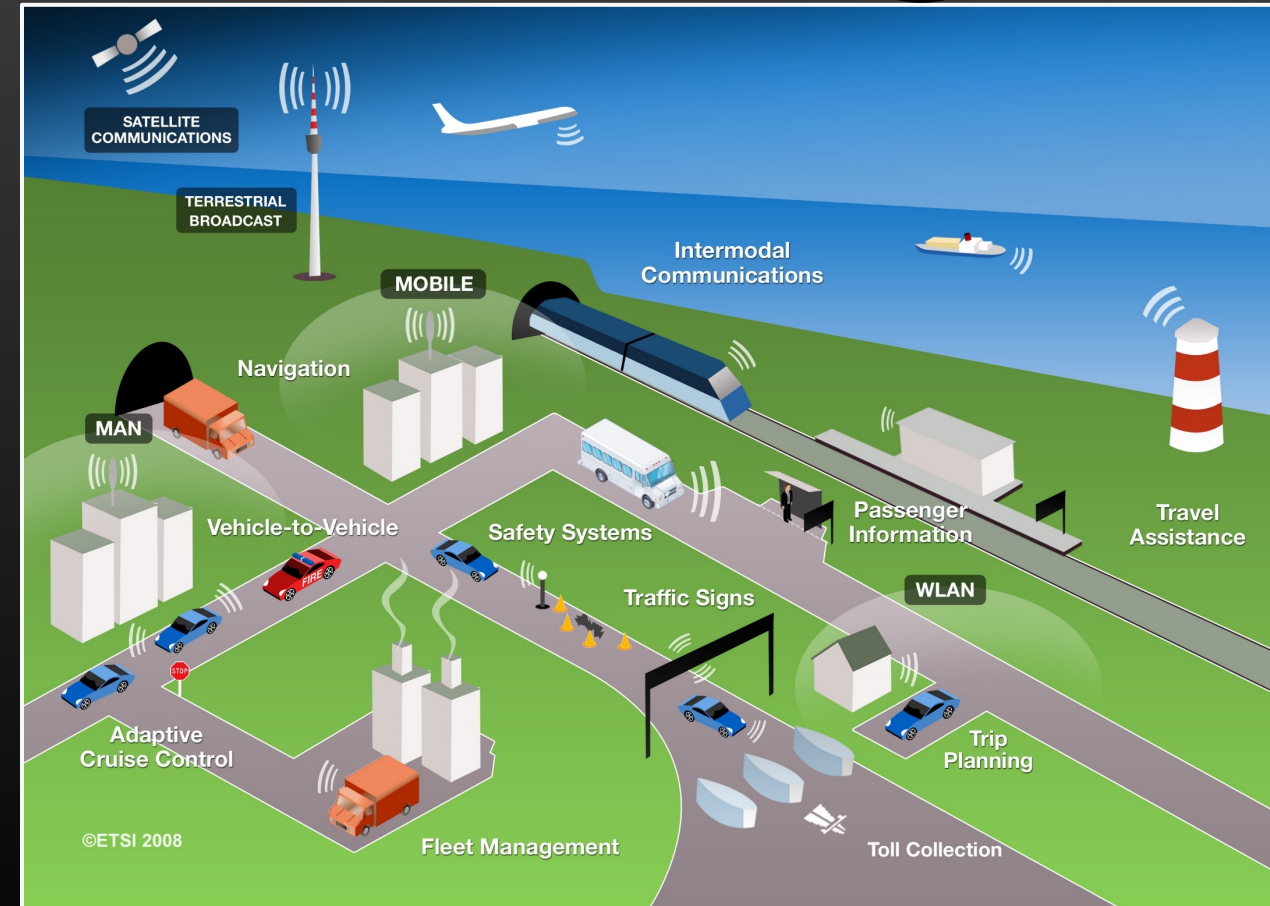
Shared Mobility

Safe Mobility

# ACTION Project

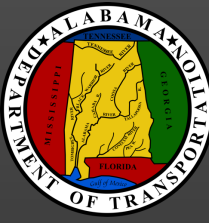


- Tuscaloosa County Alabama
- \$16.8M 5 year project
- Smart infrastructure
- Vehicle to infrastructure communication
- Automated traffic flow management
- Autonomous freight delivery
- Specific technologies:
  - Fiber optics
  - Deep learning camera detection
  - DSRC Radios and Cellular communication
  - Advanced data-logging traffic controllers
  - Active signal control
  - Traffic management centers
  - Crowdsourced probe data





# ALDOT West Central Regional Traffic Management Center



- Located on UA Campus
- 24/7 Operation
- Staffed by ALDOT Engineers and Regional Traffic Operation Program (RTOP) staff
- **Goal:** Enhance traffic flow and safety, while reducing vehicle emissions and congestion through improved signal timing

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# Alabama Mobility and Power (AMP) Center



## FOCUS

Electric vehicles  
Battery storage  
Electric/Connected infrastructure

## ADVANTAGE

Workforce development  
Talent attraction  
Industry solutions  
New technology commercialization  
New energy-tech start ups



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North Central Alabama Regional Council of Governments

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**Etowah County**  
ALABAMA

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★ **Probate Office**

★ **Revenue Department**

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Lora Weaver

Director of Transportation

#### Rural Transportation

*Etowah County Commission*

800 Forrest Avenue  
Second Floor Room 215  
Gadsden, AL 35901  
Phone (256) 547-1014

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[Riders Guide](#)

[Passenger Safety on Vehicles](#)

[No Show Policy](#)

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## Mission Statement

It is the goal of the Etowah County Rural Transportation (ECRT) Program to offer safe, affordable, and reliable transportation to the citizens of Etowah County in order to help promote a strong economy, protect our environment, conserve energy, and enhance our lives.

## About Us

Etowah County Rural Transportation is committed to providing transportation to the citizens of Etowah County for a minimal fee. We transport individuals to a variety of daily appointments such as kidney dialysis, physical therapy, cancer treatments, shopping, work, or simply to visit with family or friends. Our services are developed primarily through a demand/response basis with the public.

If you are interested in inquiring more about our services, please contact our office for details. If you have never utilized our public transit system, be sure to notify our scheduler and your driver that you are a first-time rider so they will allow for additional time to assist you in learning how to independently use our transit system. We want your experience to be a positive and enjoyable one.

Funding for Etowah County Rural Transportation is provided by the Etowah County Commission, Federal Transportation Administration grants which are administered by the Alabama Department of Transportation, and the fares that we receive.

ECRT has a ZERO Tolerance Policy on substance abuse, harassment, discrimination, and is an equal opportunity employer.



**Southeast Alabama**  
**Regional Planning**  
**and Development**  
**Commission**

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## Wiregrass Transit Authority



Jarrod  
Weed

Transit Director: Jarrod Weed

Assistant Director: Lisa Culbreth

Dispatcher: Chet Atwell

## Our Mission?

**The Alabama-Tombigbee Regional Council represents Choctaw, Clarke, Conecuh, Dallas, Marengo, Monroe, Perry, Sumter, Washington, and Wilcox Counties.**



[About](#)

[Development](#)

[Rural Transportation Program](#)

[Area Agency of Aging](#)

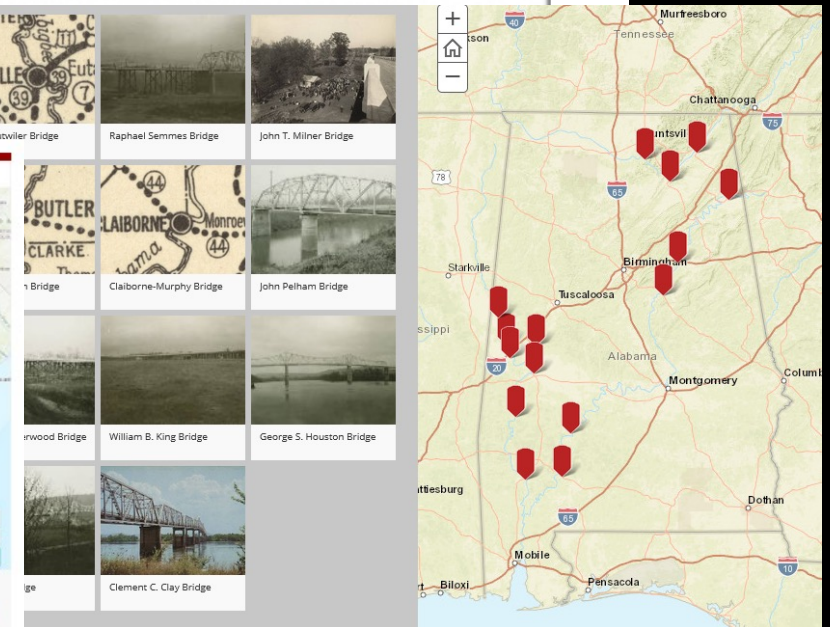
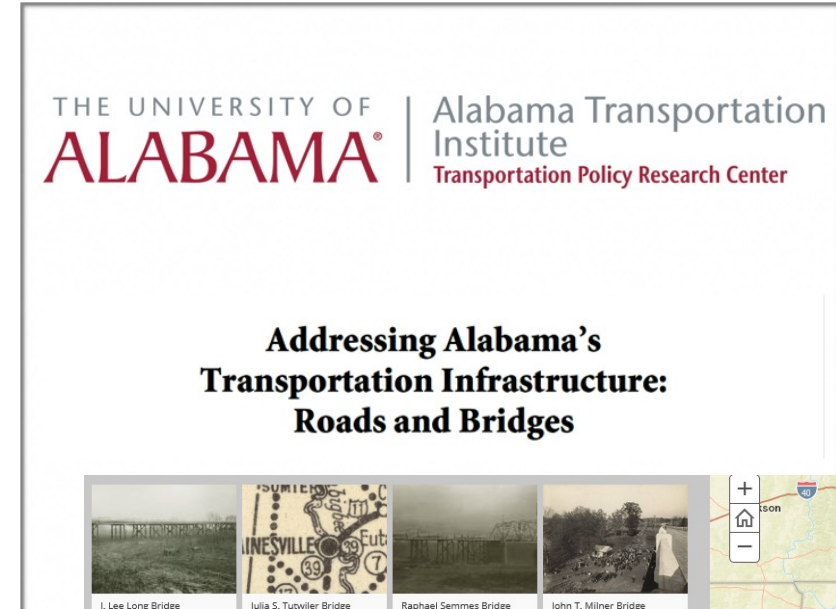
[RESOURCES](#)

# Rural Transportation Program

The Alabama-Tombigbee Regional Commission Section 5311 Rural Transportation Program is currently operating in four of the ten counties: Clarke, Conecuh, Monroe and Wilcox. Within these counties ATRC Rural Transportation provides demand response transportation to anyone in need. The Rural Transportation Program also contracts for services to transport dialysis patients, Welfare to Work participants and the mentally impaired and physically handicapped. Also provided is transportation for the elderly to the Alabama-Tombigbee Regional Commission Area Agency on Aging Nutrition Centers, which are located in these counties.

# Transportation Policy Research Center

- 4 full time staff researchers (law & economics)
- 31 policy reports (plus peer-reviewed publications)
  - Legislative Summaries
  - Texting Laws
  - Electric Vehicles
  - Port Funding Opportunities
  - Cybersecurity
  - Pandemic Impacts
  - MSA Designations
  - County Level Statistics
- 2 Web Interactives
  - Metropolitan Planning Organizations
  - Memorial Toll Bridges



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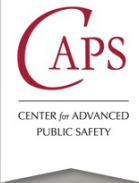
Safe Mobility



# Center for Advanced Public Safety

- Electronic traffic citations
- DUI reports
- Crime reports
- Crash reports
- Person lookups/DL Photos
- Commercial vehicle enforcement
- Titles
- State vehicle registration repository
- Ambulance run reports

## MOBILE OFFICERS VIRTUAL ENVIRONMENT



### MOVE



A glowing lightbulb is centered in the image, with its filament visible. The background is dark with numerous out-of-focus, warm-toned circular lights (bokeh) scattered throughout. A white rectangular border frames the text.

# Questions & Discussion