



THE UNIVERSITY OF
ALABAMA

Alabama Transportation
Institute

Alabama Transportation Institute (ATI) Overview and Assistance Opportunities for MPOs and RPOs

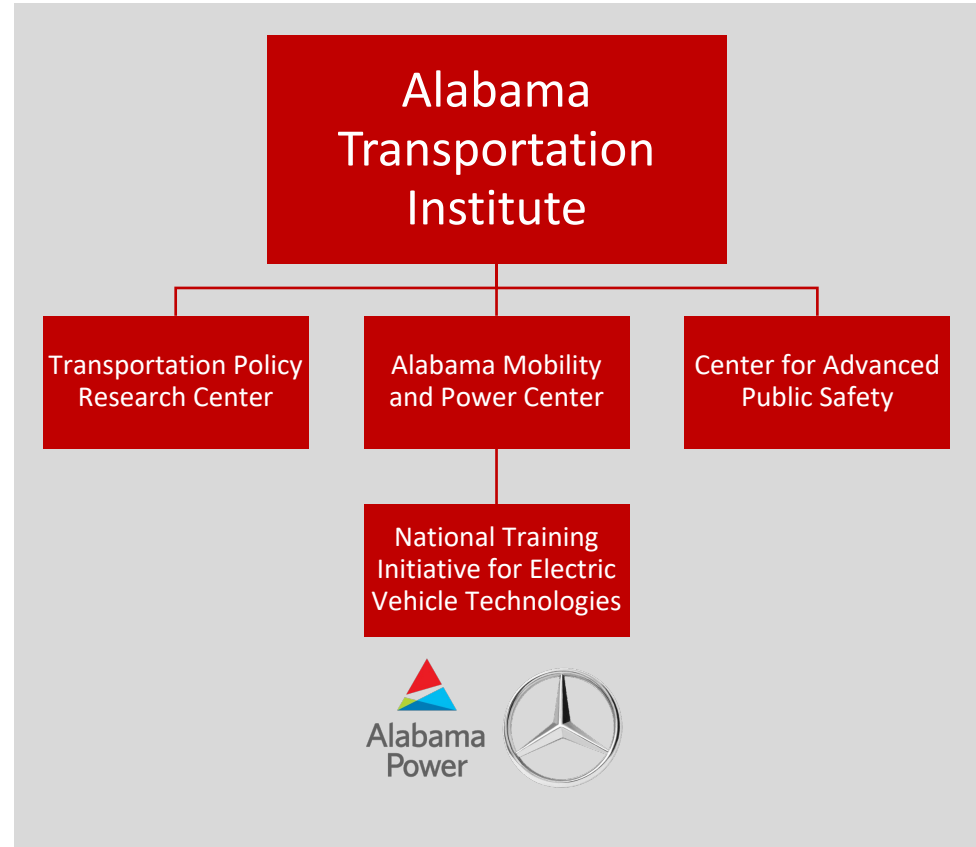
Steven Jones, *Interim Executive Director*, Alabama Transportation Institute
Director, Transportation Policy Research Center



Traffic Management Center
co-located with ATI
Collaborates on data and infrastructure



Support mission-critical operations

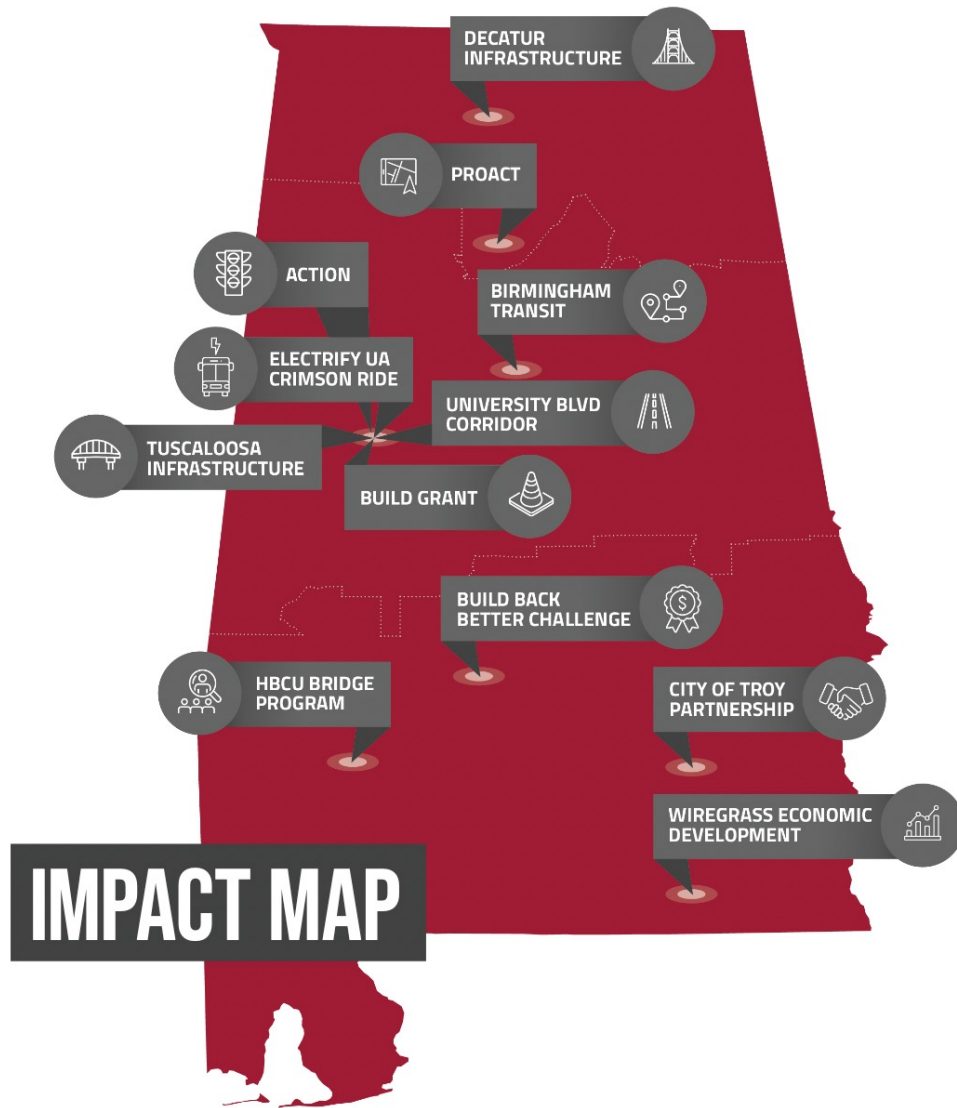


UA Collaborating Centers



Multi-institutional Centers

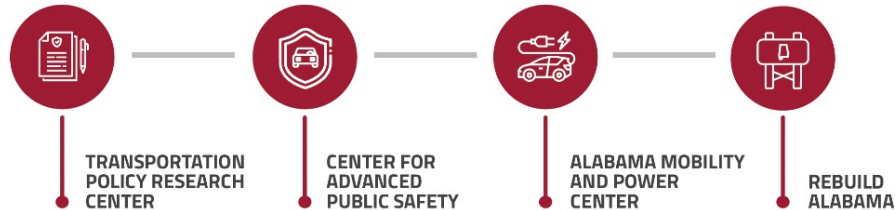




ATI Outcomes

- \$30M+ annual operation
- Improved safety of the public
- Improved efficiency of commerce
- Economic development and jobs
- Academic visibility

STATEWIDE



USDOT University Transportation Centers (UTC)

One of 5

National Center for Transportation Cybersecurity and Resiliency

Clemson University

Focus Area: Reducing Transportation
Cybersecurity Risks

UTC Director

Consortium Members:

- Benedict College
- Florida International University
- Morgan State University
- Purdue University
- South Carolina State University
- University of Alabama at Tuscaloosa
- University of California at Santa Cruz
- University of Texas at Dallas

Dr. Mashrur Chowdhury, PE
Clemson University
216 Lowry Hall
Clemson, SC 29634

Phone: 864-656-3313
Email: mac@clermson.edu
Website: TBA

5 years
\$20M

One of 10

Region: 4 University Transportation Center for Regional and Rural Connected Communities

North Carolina A&T State University

Focus Area: Improving the
Mobility of People and Goods

UTC Director

Consortia Members:

- Clemson University
- Florida Atlantic University
- University of Alabama Tuscaloosa
- University of Georgia
- University of Kentucky
- University of Tennessee Knoxville

Dr. Ali Karimoddini
North Carolina A&T State University
1601 East Market Street
Greensboro, NC 27411

Phone: 336-310-5061
Email: akarimod@ncat.edu
Website: TBA

5 years
\$15M

USDOT Programs

An official website of the United States government [Here's how you know](#)

United States Department of Transportation

 U.S. Department of Transportation
Federal Highway Administration

Search

About FHWA Programs Resources Newsroom

OFFICE OF RESEARCH, DEVELOPMENT, AND TECHNOLOGY AT THE TURNER-FAIRBANK HIGHWAY RESEARCH CENTER

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Explore Research and Technology

Technology and Innovation Deployment Research Programs

Technology and Innovation Deployment

Safety R&D Overview

Research Focus Areas

The research focus areas and objectives of the Safety R&D program reflect current Federal Highway Administration strategic focuses.

[Safety Data and Analysis](#) — Support safety resource allocation decisions through consistent high-quality data collection and analysis and analytical tool development, and evaluate safety improvements.

[Human Factors](#) — Examine drivers' capabilities and limitations when interacting with the vehicle and the roadway to inform better roadway design. Other research topics include distraction, older drivers, traffic management centers, and the effects of changes in visibility.

[Intersection Safety](#) — Increase our understanding of intersection safety, and establishing short- and long-term strategies for safety improvements. The research involves designing and evaluating nontraditional intersections and interchanges and developing systems to improve safety in or near intersections. This research effort also explores advanced computing technologies such as edge computing for real time detection of traffic events and real time decision making for improving safety starting with signalized controlled intersections.

[Pedestrians and Bicyclists Safety](#) — Foster professional awareness of pedestrian and bicyclist safety issues, develop and evaluate countermeasures, and provide engineering resources for practitioners at national, State, and local levels.

[Roadway Safety](#) — Conduct research that emphasizes two fundamental objectives: keeping vehicles on the roadway and minimizing the consequences of leaving the roadway. Roadway safety studies are conducted in five focus areas: roadway departure, speed management, intersection, safety and design, visibility, and intelligent transportation systems (ITS).

[Speed Management](#) — Research to develop and test engineering approaches to speed management and to encourage wider adoption of travel speeds appropriate for the class of road, roadway design, and travel conditions.



[Visibility](#) — Research to improve visibility on and along the roadway, and of traffic control devices.

Related Links

- [Safety Research Projects](#)
- [Safety Research Publications](#)
- [Safety Laboratories](#)


Contact Us

Turner-Fairbank Highway Research Center
United States Department of Transportation Federal Highway Administration
6300 Georgetown Pike
McLean, VA 22101
United States

 **National Center for Rural Road Safety** *Your trusted "safety sidekick" to make rural road travel safer!* 

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Read the Rural Road Safety Center's statement of support for the National Roadway Safety Strategy (NRSS) here

 **National Center for Rural Road Safety**

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Recent News

[National Center for Rural Road Safety Announces New Team and Structure](#)
February 28, 2022

[National Center for Excellence for Rural Road Safety; Statement on USDOT National Roadway Safety Strategy](#)
February 7, 2022


[Third Rural Road Safety Summit: Virtual Format Leads to Record Attendance](#)
December 21, 2020

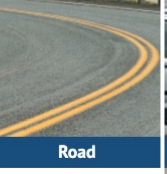
[Call for Posters – How to Make Rural Roads Safe for Everyone](#)
July 20, 2020


[Look Twice, Save a Life – May is Motorcycle Awareness Month](#)
May 15, 2020


Did you know...

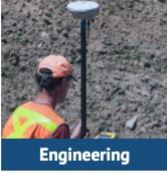
40% of crash fatality victims in rural areas were in vehicles that rolled over and more than 70% of these victims were not wearing seatbelts (NHTSA)


 **Road User**


 **Road**


 **Vehicle**

 **Safety Culture**

 **Engineering**

 **Education**

 **EMS**

 **Enforcement**

USDOT Programs

Fiscal Year 2022 Advanced Driver Assistance Systems (ADAS) for Transit Buses Demonstration and Automated Transit Bus Maintenance and Yard Operations Demonstration Program Project Selections

Click on a column header to sort by that column.

State	Project Sponsor	Project Type	Project Description	Funding
AL	University of Alabama	Automated Driver Assistance for Transit Buses	The University of Alabama will receive funding to test automation technologies for large transit buses using a lab simulation environment and real-world tests to demonstrate cost-effectiveness and equity impacts.	\$2,000,000

Federal EV infrastructure funding

AGENCY NAME: Department of Energy, Office of Energy and Renewable Energy (DOE-EERE)

SOLICITATION NUMBER: DE-FOA-0002893

SOLICITATION NAME: Fiscal Year 2023 Vehicle Technologies Office (VTO) Program

FOA TOPIC: Topic Area 10: Mobility System Approaches Supporting Public Transportation

PROJECT TITLE: Co-E3T: Energy-Efficient and Equitable Transit through user-centric hardware and software Co-development and community Co-design

APPLICANT: University of Alabama

BUSINESS TYPE: Academic

TEAM MEMBER:

1. THE UNIVERSITY OF ALABAMA (UA)
2. PURDUE UNIVERSITY
3. NATIONAL RENEWABLE ENERGY LABORATORY (NREL)
4. THE REGIONAL PLANNING COMMISSION OF GREATER BIRMINGHAM AREA (RPCGB)
5. BIRMINGHAM JEFFERSON COUNTY TRANSIT AUTHORITY (BJCTA/MAX TRANSIT)
6. CLASTRAN PARATARNSIT

TECHNICAL CONTACT:

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Phone: 205 348 1613
Email: xinwu.qian@ua.edu

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Lisa Joiner
Sponsored Programs Director
Phone: 205 348 5092
Email: ljoiner@research.ua.edu



NATIONAL ENERGY TECHNOLOGY LABORATORY
Albany, OR | Morgantown, WV | Pittsburgh, PA



July 14, 2023

Lisa Joiner
University of Alabama
ljoiner@research.ua.edu

SUBJECT: Funding Opportunity Announcement Number DE-FOA-0002893, "Fiscal Year 2023 Vehicle Technologies Office Program Wide Funding Opportunity Announcement"

Project Title: Co-E3T: Energy-Efficient and Equitable Transit through usercentric hardware and software Co-development and community Co-design

Control Number: 2893-1891

Dear Lisa Joiner:

Thank you for your concept paper submitted in response to the subject Funding Opportunity Announcement (FOA). The Department of Energy (DOE) recognizes the significant effort your organization expended to prepare an initial response to this announcement. Your concept paper was carefully reviewed in accordance with the concept paper evaluation criteria in the FOA. The results of your concept paper review are as follows:

☒ **Encouraged to Submit a Full Application**

Receiving a letter of encouragement is not a guarantee that an application will be selected for negotiations leading to award.

☐ **Discouraged from Submitting a Full Application**

☐ The Concept Paper did not adequately describe the proposed technology, project, or goal.

☐ The Concept Paper did not adequately establish how the proposed technology or project is unique and innovative.

Other Funded Research

NextGen Alabama Traffic Monitoring Program, *funded by Alabama DOT, \$1.9M*

Data and Information Technology Support for Alabama Traffic Safety Programs, *funded by ADECA, \$2M*

Critical Analysis Reporting Environment, *funded by the Alaska DOT, \$142k*

Understanding the fundamental redox chemistry and transport of chloroaluminate anions in ionic liquid electrolytes in developing earth-abundant and ultra-long-life aluminum ion battery, *funded by the National Science Foundation, \$360k*

Humvee Powertrain & Automotive Enhancements, *funded by AM General, \$1.7M*

Validation and Vulnerability Testing of Biometric Technologies at Access Control Points, *funded by the US Army, \$575k*



Automated
Connected
Electric
Shared
Safe

self-driving cars
V2V, V2I, V2X
electric vehicles
Uber or Lyft
towards zero deaths

AUTOMATED

Indy Autonomous Challenge

- Partnership between Milan Polytechnic and UA
- Deploy software to operate a standard issue racecar at high speeds under challenging performance conditions.
- Won 3rd at Indy in 2021, and won 1st at the Consumer Electronics Show 2022 and 2023
- "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 Canavara 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



CONNECTED

Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)



Smart infrastructure
Vehicle to infrastructure communication
Automated traffic flow management
Autonomous freight delivery
Fiber optics
Deep learning camera detection
DSRC Radios and Cellular communication
Advanced data-logging traffic controllers
Active signal control

\$8+ million

Dr. Alex Hainen, Associate Professor, Civil, Construction & Environmental Engineering

Advanced Connected Transportation Infrastructure and Operations (ACTION) Project

\$5 million

Dr. Alex Hainen, Associate Professor, Civil, Construction & Environmental Engineering

Proactive Route Operations to Avert Congestion in Traffic (PROACT) Alabama Project

\$8+ million

Dr. Mizan Rahman, Assistant Professor in Civil, Construction and Environmental Engineering

Smart and Connected Atlantic City Expressway Project

ELECTRIC

INDUSTRY

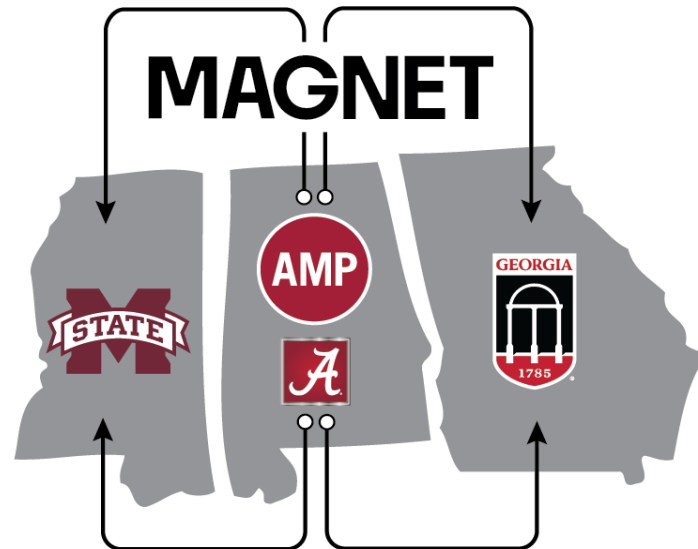
GOVERNMENT

Alabama Mobility & Power Center

- Use-inspired research
- Industry-driven research
- Workforce and economic development



- \$1M planning grant, 2 years
- **\$160M** full grant, 10 years



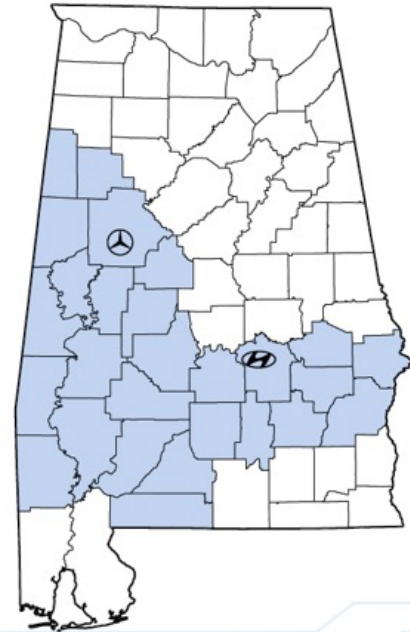
Center for Advanced Vehicle Technologies

- Electric buses - FTA (\$10M)
- Second-Use Batteries – DOE (\$8M)
- Military Vehicle Power-Train Electrification – DOD (\$11M)



Transportation Policy Research Center

Driving Regional Innovation through Vehicle Electrification (DRIVE)



- \$500K planning grant
- Seeking further funding
- Equity, access to jobs, healthcare, rural transit



Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

Recipient	Project Name	Funding	Project Type	Project Summary
Regional Planning Commission of Greater Birmingham	Community-driven Regional Mobility Engine for Accessible and Equitable Multimodal Public Transportation in Central Alabama	\$1,492,204	Transit Innovation	Convert existing public transportation systems in Central Alabama into an integrated mobility system leveraging cyberinfrastructure, route optimization and planning, service integration, trip dispatching, and more.



Envisioning Shared Autonomous Vehicles for 374 Small and Mid-sized Urban Areas in the United States

Jun Liu, Ph.D.

Co-Authors: Xinwu Qian, Shuocheng Guo, Zihe Zhang, Chenxuan Yang, Steven Jones



IMPLEMENTING INNOVATION FOR ALL | #ITSA2023



Birmingham Jefferson County Transit Authority
\$780K for post-COVID route planning

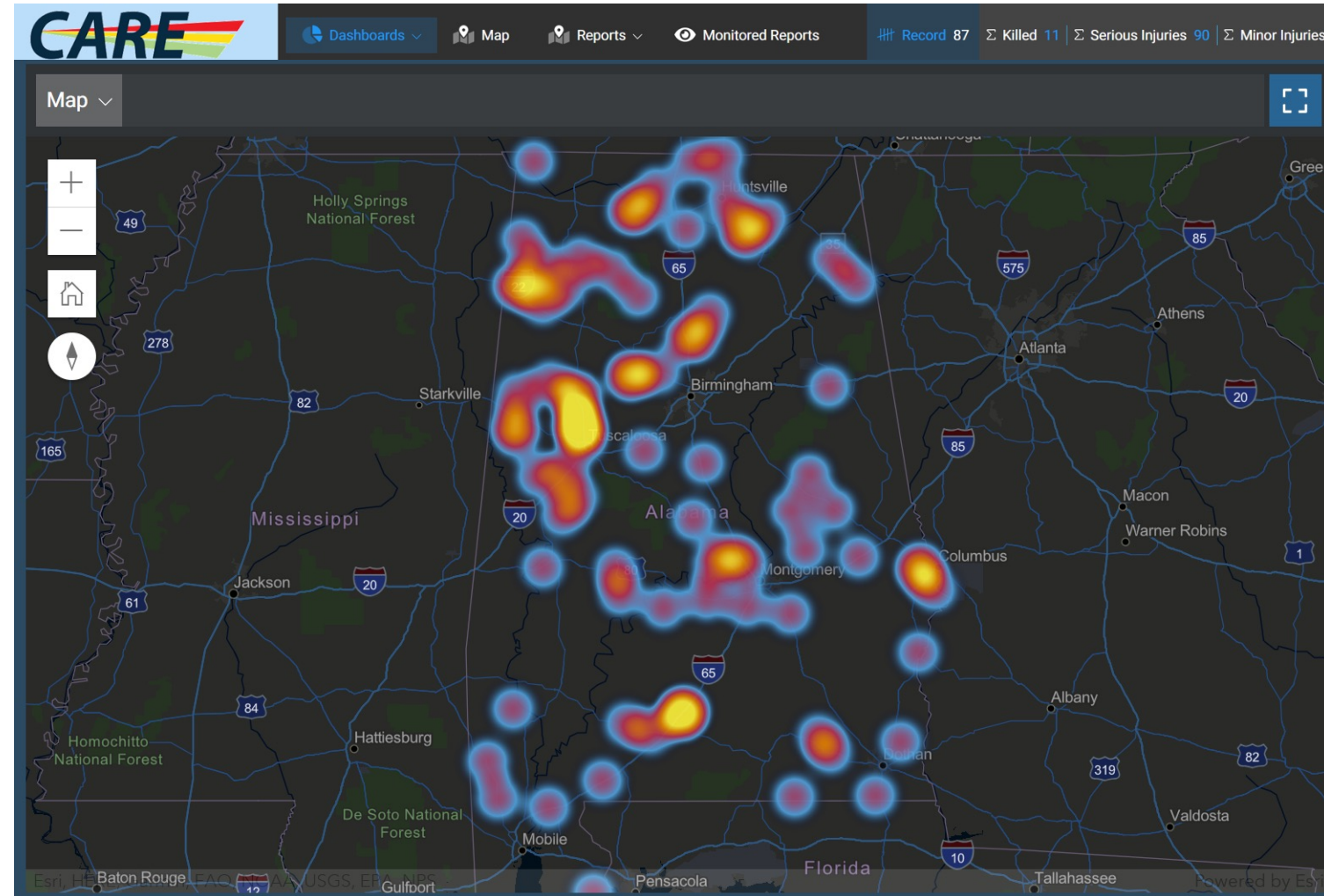
Center for Advanced Public Safety

Traffic safety projects

- Alabama Click-It-Or-Ticket evaluation
- Safety plans for NHTSA and FHWA
- Alabama Traffic Records Coordinating Committee
- Critical Analysis Reporting Environment (CARE)

Technology projects

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



AUTOMATED

Technological Forecasting & Social Change 143 (2019) 9–13

Contents lists available at ScienceDirect

Technological Forecasting & Social Change

journal homepage: www.elsevier.com/locate/techfore

Perceptions and expectations of autonomous vehicles – A snapshot of vulnerable road user opinion

Praveena Penmettsa^{a,*}, Emmanuel Kofi Adanu^a, Dustin Wood^a, Teng Wang^b, Steven L. Jones^c^a Alabama Transportation Institute, The University of Alabama, Cyber Hall, Tuscaloosa, AL 35487, United States of America^b Texas A&M Transportation Institute, 1100 NW Loop 410, Suite 400, San Antonio, TX 78213, United States of America^c Department of Civil, Construction, and Environmental Engineering, The University of Alabama, Cyber Hall, Tuscaloosa, AL 35487, United States of America

SAFE

Contents lists available at ScienceDirect

Accident Analysis and Prevention

journal homepage: www.elsevier.com/locate/aap

How did the COVID-19 pandemic affect road crashes and crash outcomes in Alabama?

Emmanuel Kofi Adanu^{a,*}, David Brown^b, Steven Jones^a, Allen Parrish^a^a Alabama Transportation Institute, The University of Alabama, United States^b Center for Advanced Public Safety, The University of Alabama, United States

CONNECTED



ASCE

Analytical and Empirical Evaluation of Freight Priority System in Connected Vehicle Environment

Md Abu Sufian Talukder¹; Elsa G. Tedla²;
Alexander M. Hainen, Ph.D., M.ASCE³; and Travis Atkison, Ph.D.⁴

Abstract: The transit signal priority (TSP) strategy has been widely adopted as a practical approach to improving the efficiency and reliability of transit operations. Over the years, few studies have adopted the concept of TSP to implement freight signal priority (FSP) for improving the safety and operational performances of freight vehicles. Despite the promising outcome in previous studies, several drawbacks, such as inaccurate estimation of a freight's arrival time at a stop bar and inefficient use of priority measures, have prevented their wide applications. This paper aims to develop a FSP system that utilizes emerging connected vehicle technology to overcome the challenges associated with conventional FSP systems. An estimated time of arrival (ETA)-based FSP logic was developed and analytically examined to demonstrate the operational efficiency that can be achieved. The proposed FSP system was implemented in a real-world coordinated signalized corridor for systematical analysis and validation of its field operation. Analysis results showed that the proposed FSP system can effectively address the shortcomings in traditional FSP systems by accurately estimating a freight's arrival time and providing accurate and efficient priority measures. DOI: [10.1061/JTEPBS.0000673](https://doi.org/10.1061/JTEPBS.0000673). © 2022 American Society of Civil Engineers.

Author keywords: Freight signal priority (FSP); Signal control; Priority logic; Connected vehicle; Field experiment.

ELECTRIC



Article

Novel Design of Six-Phase Spoke-Type Ferrite Permanent Magnet Motor for Electric Truck Application

Hoyun Won¹, Yang-Ki Hong^{1,*}, Minyeong Choi¹, Jonathan Platt¹, Briana Bryant¹, Seungdeog Choi², Shuhui Li¹, Hwan-Sik Yoon³, Timothy A. Haskew¹, Jongkook Lee⁴, Taegyu Lee⁴ and Tae-Won Lim⁴¹ Department of Electrical and Computer Engineering, The University of Alabama, Tuscaloosa, AL 35487, USA; hwon@crimson.ua.edu (H.W.); mchoi11@crimson.ua.edu (M.C.); jtplatt@crimson.ua.edu (J.P.); bmbryant1@crimson.ua.edu (B.B.); slh@eng.ua.edu (S.L.); thaskew@eng.ua.edu (T.A.H.)² Department of Electrical Engineering, Mississippi State University, Starkville, MS 35762, USA; seungdeog@ece.msstate.edu³ Department of Mechanical Engineering, The University of Alabama, Tuscaloosa, AL 35487, USA; hyoon@eng.ua.edu⁴ Institute of Fundamental and Advanced Technology (IFAT), Hyundai Motor Company, Uiwang-si 16082, Korea; samemind@hyundai.com (J.L.); xorb9@hyundai.com (T.L.); twlim@hyundai.com (T.-W.L.)

* Correspondence: ykhong@eng.ua.edu

SHARED

Taylor & Francis
Taylor & Francis GroupTRANSPORTATION LETTERS
<https://doi.org/10.1080/19427867.2019.1694202>

Challenging human driver taxis with shared autonomous vehicles: a case study of Chicago

Jun Liu, Steven Jones and Emmanuel Adanu

Department of Civil, Construction and Environmental Engineering, The University of Alabama, Tuscaloosa, AL, USA

ABSTRACT

When autonomous vehicles (AVs) are fully functional, they will compete with existing mainstays in the transportation system. Sharing AVs can mitigate the inefficient use of privately-owned AVs (e.g., empty-vehicle miles), and to improve the productivity of AVs (i.e., less time parked than personal vehicles). Further, sharing AVs will enable people to travel without vehicle ownership costs and responsibilities. In this regard, taxi travelers will likely be the first users of shared autonomous vehicles (SAVs). This study investigates the trips made by taxi users in Chicago and develops an agent-based modeling framework to simulate a fleet of SAVs operating in the network, competing with human driver taxis. Results show that SAVs may attract more users than conventional taxis because of reduced driver-associated costs (driver not required in SAV services). The results provide insights to both private and public sectors who seek to implement SAVs to challenge or eventually replace existing taxis.

KEYWORDS

Shared autonomous vehicles; taxis; agent-based model; mode choice

Interdisciplinary

Attitude and Responses to the Pandemic and COVID-19 Vaccination in Rural Alabama: The Importance of Transportation

Hee Yun Lee, Cho Rong Won, Zhichao Hao, Yan Luo, Rebecca Allen, and Steven Jones

Abstract

Background: As of June 2021, the United States had been greatly affected by the global COVID-19 pandemic. This study aims to explore self-care measures during the pandemic, the impact of the pandemic, and attitudes toward COVID-19 vaccination among residents living in rural Alabama.

Methods: Focus group interviews were conducted in designated local communities in the rural areas of Alabama in September 2020. Recruited from a pool of individuals living in a local community, focus group members voluntarily participated in this study after providing informed consent. A semi-structured interview revolved around the following topics: (1) the impact of the pandemic on participants' health and health care access, (2) self-care activities during the pandemic, and (3) opinions on COVID-19 vaccination.

Results: Three major themes and corresponding subthemes were identified: (1) self-care activities during the pandemic with four subthemes: physical health care, relationships with others, hygiene maintenance, and keeping informed; (2) impact of the pandemic with two subthemes: negative mental health and online services and activities;

Hee Yun Lee, PhD, is professor, associate dean for research, and endowed academic chair on social work (health), School of Social Work, University of Alabama, Tuscaloosa. Cho Rong Won, MSW, is doctoral candidate, School of Social Work, University of Alabama, Tuscaloosa. Zhichao Hao, MSW, PhD, is assistant professor, Southwest University, Chongqing, China. Yan Luo, MSW, is doctoral candidate, School of Social Work, University of Alabama, Tuscaloosa. Also at the University of Alabama, Tuscaloosa, Rebecca Allen, PhD, ABPP, is professor and interim chair, Department of Psychology, Alabama Research Institute on Aging, and Steven Jones, PhD, is professor and deputy director, Alabama Transportation Institute, Department of Civil, Construction & Environmental Engineering.

This research was funded by the Alabama Transportation Institute, University of Alabama, Tuscaloosa.

A SYSTEMATIC LITERATURE REVIEW OF SCHOOL TRANSPORTATION AND ACADEMIC OUTCOMES

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School of Social Work
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Interdisciplinary

NATIONAL SCIENCE FOUNDATION

Panel Summary Review

Proposal:2303284

PI Name:Liu, Jun

INSTITUTION:

University of Alabama Tuscaloosa

NSF PROGRAM:

S&CC: Smart & Connected Commun

PROPOSAL TITLE:

SCC-PG: Building a smart and connected rural community for improved healthcare access through the deployment of integrated mobility solutions

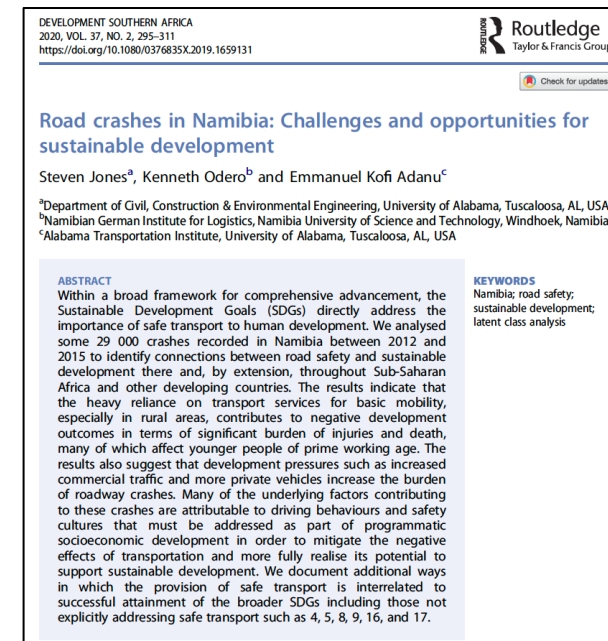
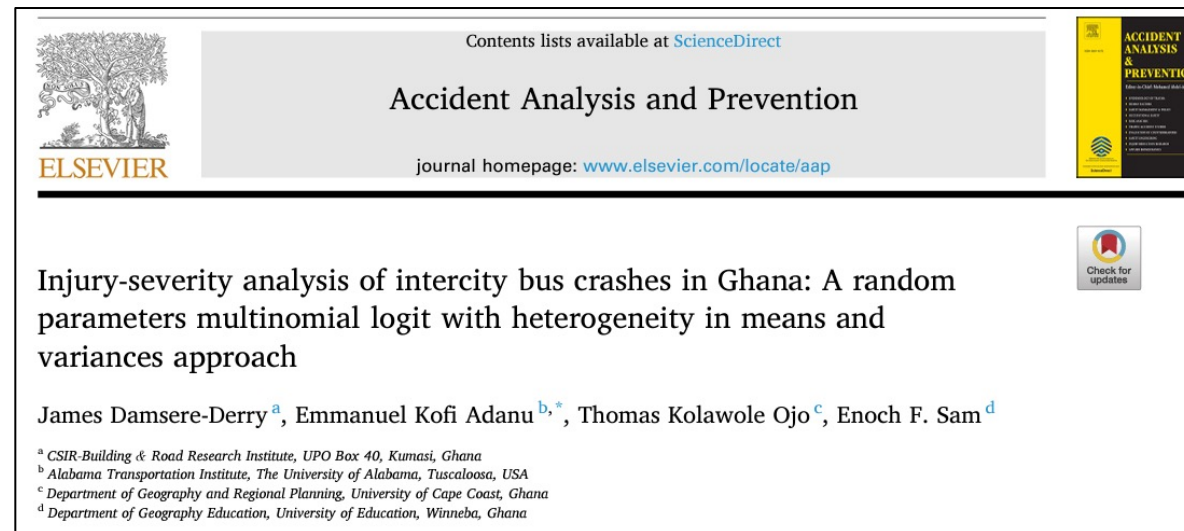
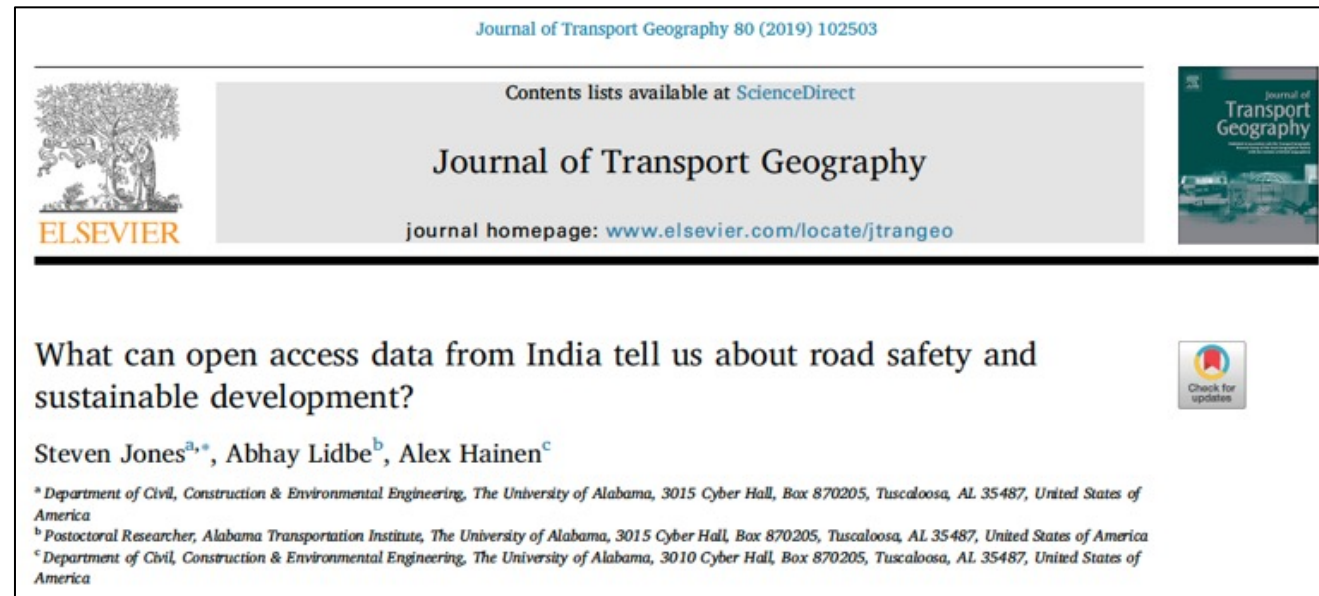
PANEL SUMMARY:

Panel Summary

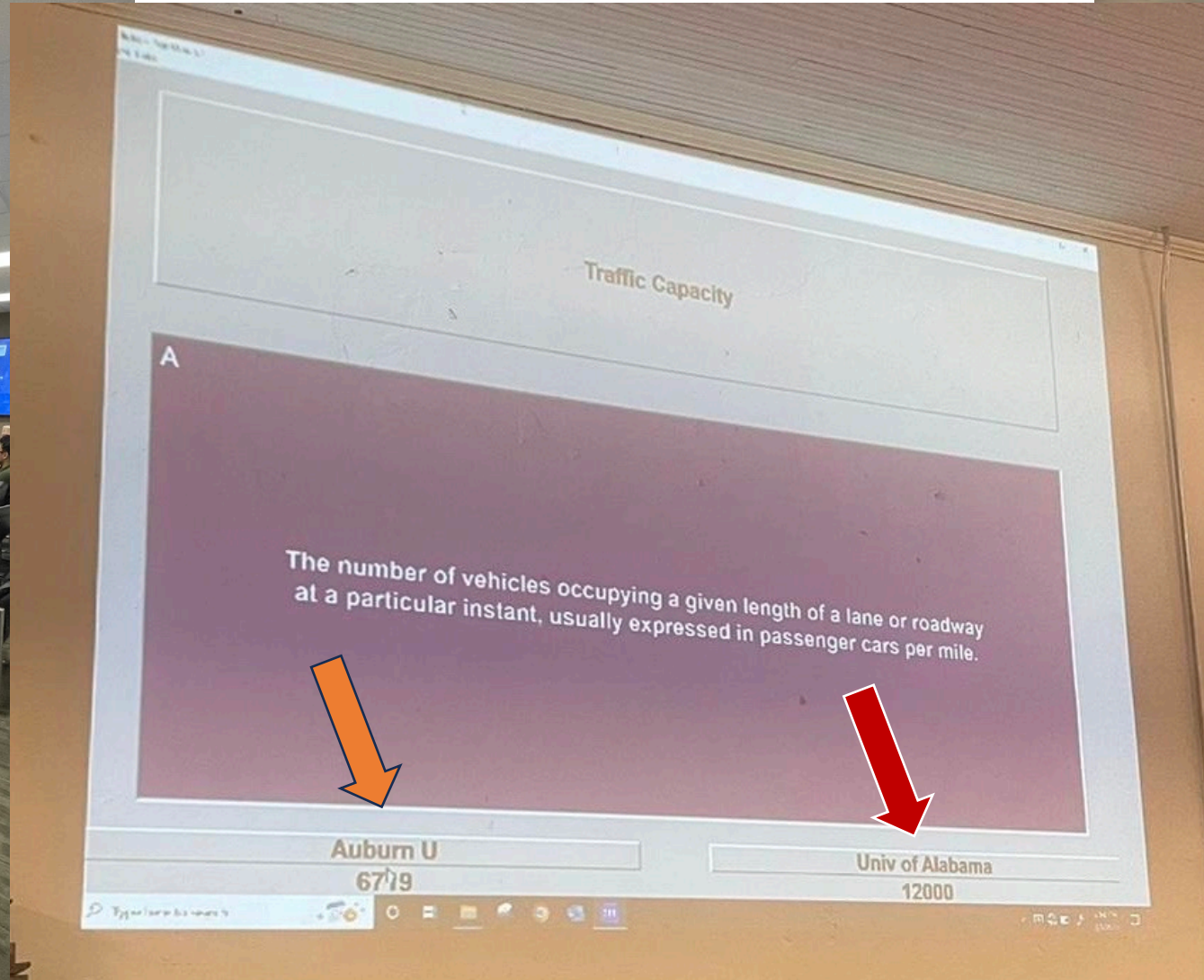
Description of project:

The project aims to develop a framework for helping patients in disadvantaged rural communities gain access to health care services through on-demand mobility services. The proposed research consists of the development of a Smart Health and Mobility System (SHMS) that integrates patient needs and mobility services, the examination of patient behavioral dimensions related to health care and transportation, and agent-based modeling of the system. The study focuses on an area in Alabama that is part of the Black Belt Region and engages with a range of transportation providers, health providers, and community leaders.

Global Impact



Student Engagement



Student Engagement



University of Alabama ITE Student Chapter

Student Engagement



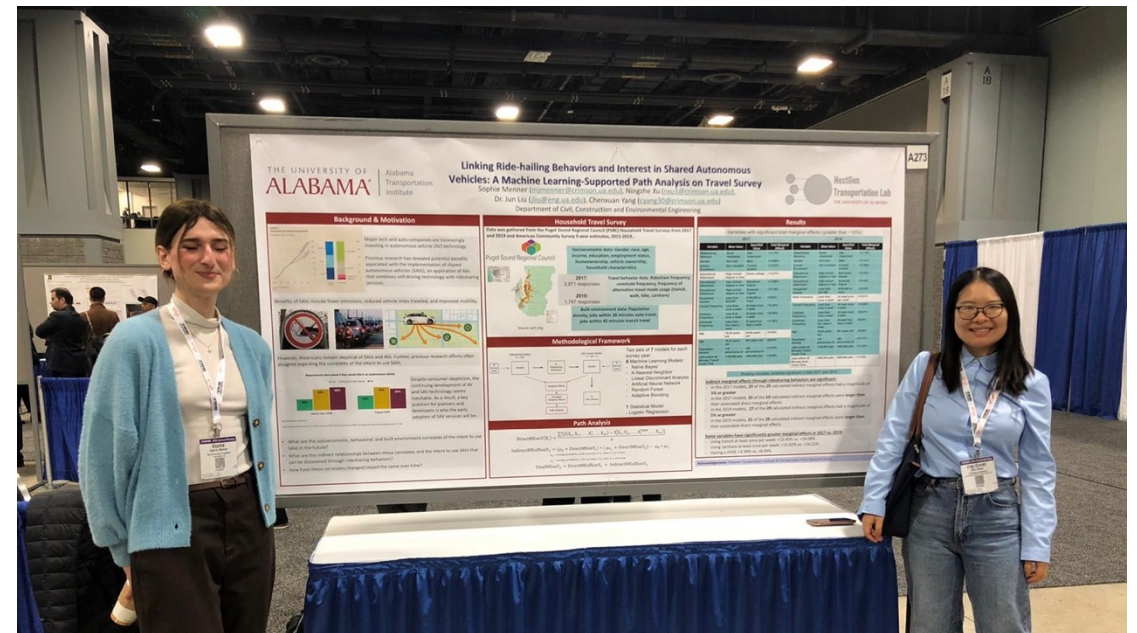
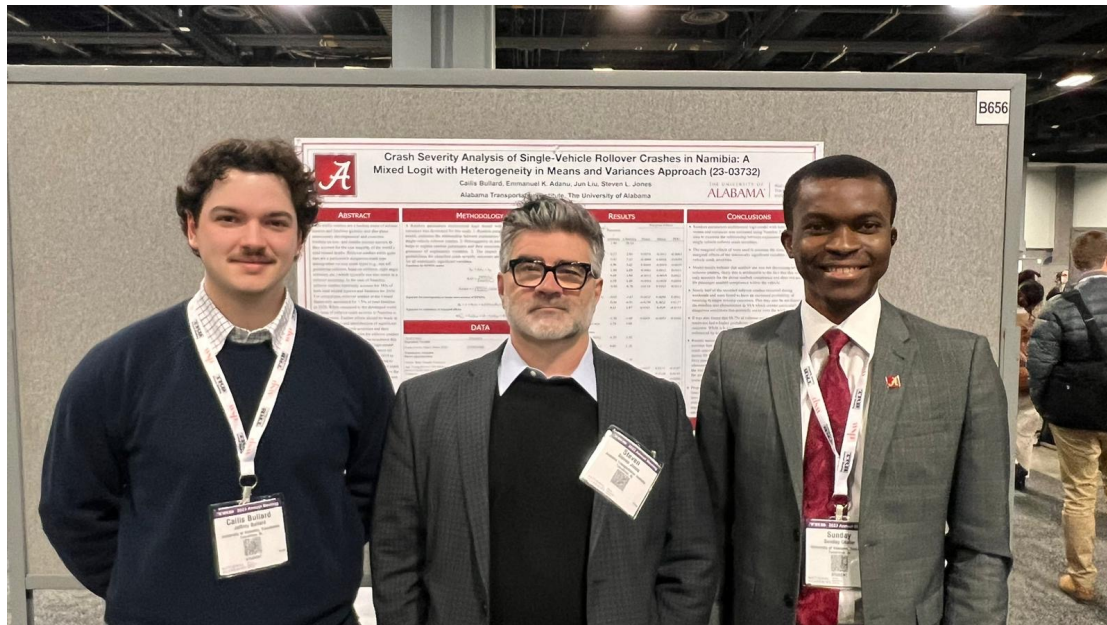
The University of Alabama EcoCAR

Student Engagement



Fieldwork

Student Engagement



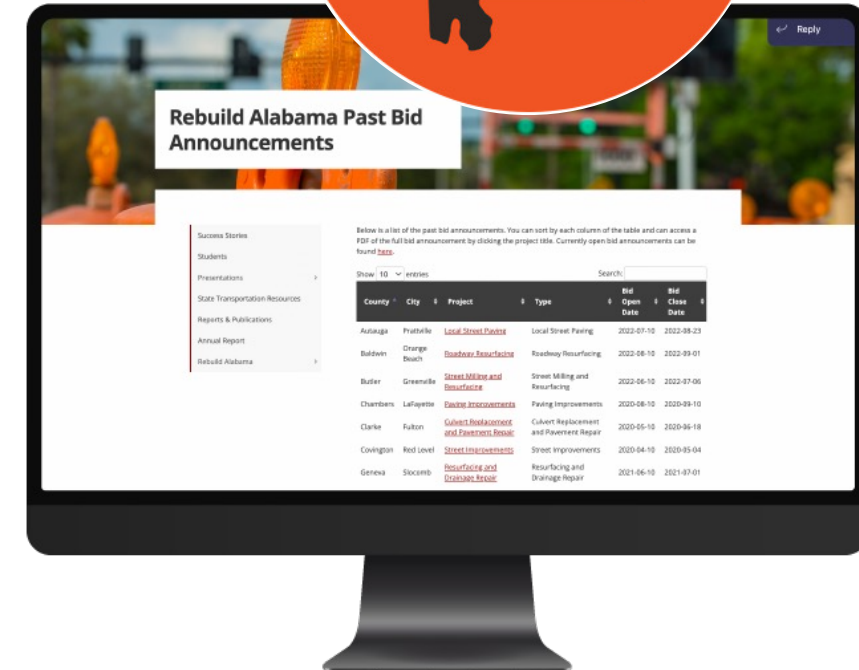
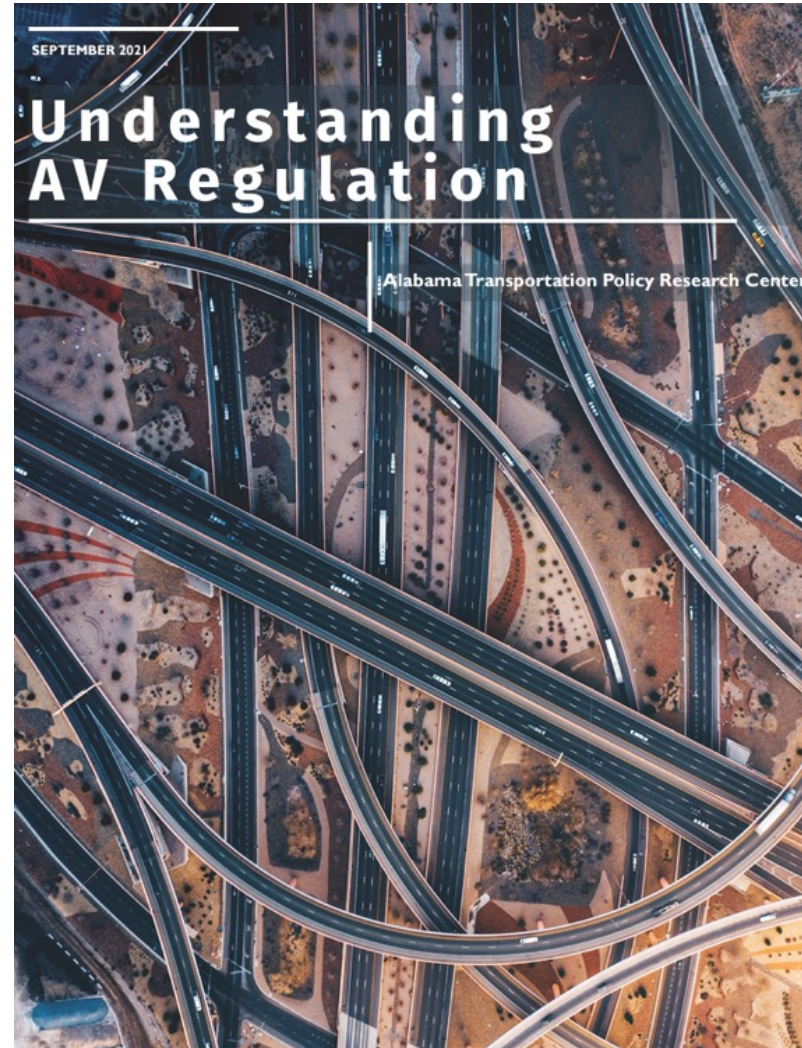
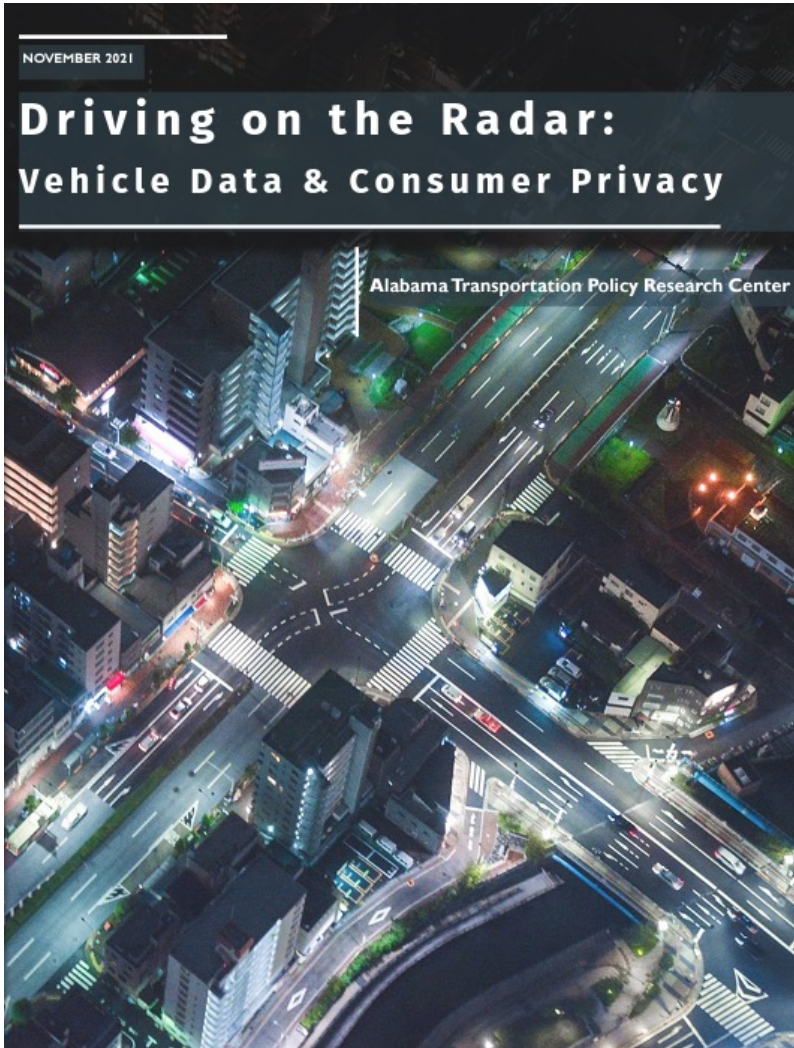
Transportation Research Board Annual Meeting

Student Engagement



Transportation Research Board Annual Meeting

TPRC



TPRC and you

THE UNIVERSITY OF ALABAMA

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Transportation Policy Research Center

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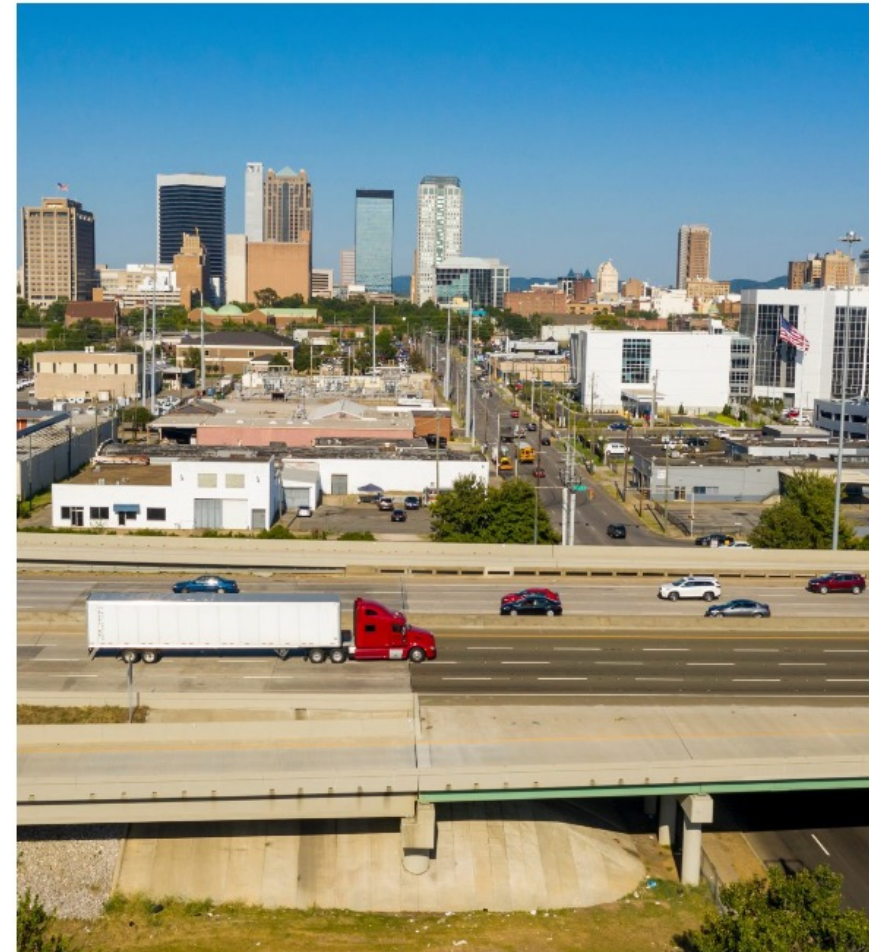
Services

News

Transportation Policy Research Center

The mission of the Transportation Policy Research Center is to conduct interdisciplinary transportation research and policy analysis that serves the State and elevates the national and international reputation of the transportation research enterprise of the Alabama Transportation Institute.

LEARN MORE



SERVICES



Alabama Transportation Legislation

The TPRC tracks transportation-related legislation presented during each session. In addition, annual legislative summaries are compiled for each year.



Rebuild Alabama

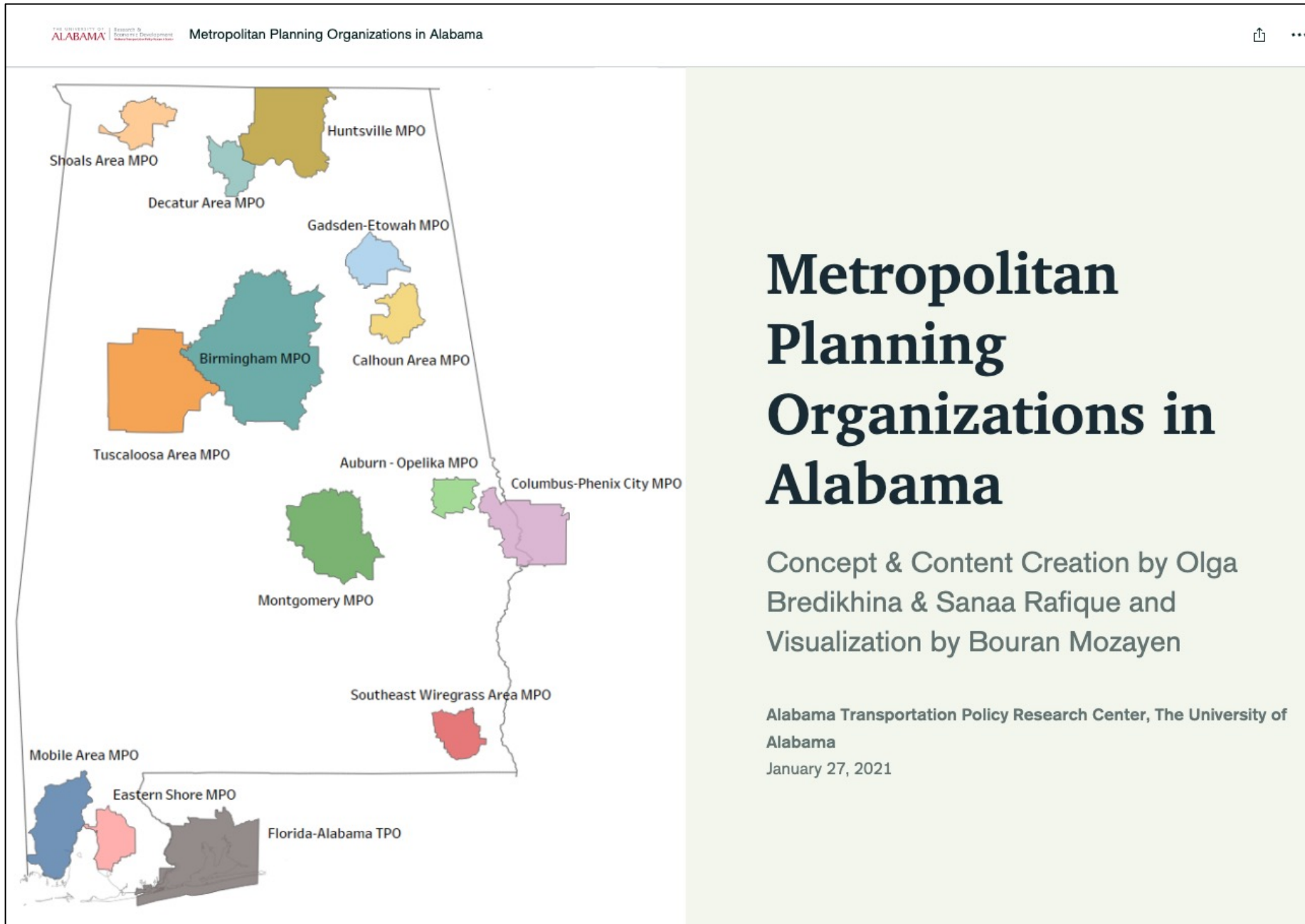
In compliance with the Rebuild Alabama Act, TPRC compiles bid announcements for roadwork and other infrastructure projects.



Metropolitan Planning Organizations

TPRC provides information about the organizational structure, demographics, and mobility data for each of Alabama's fourteen MPOs.

TPRC and you



TPRC and you

Services

Alabama Transportation
Legislation >

Metropolitan Planning
Organizations

Rebuild Alabama >

[View the Alabama MPO Story Map](#)

What is a Metropolitan Planning Organization?

A Metropolitan Planning Organization (MPO) is a transportation policy-making body comprising representatives from local government and various transportation authorities. Every metropolitan area with a population of 50,000 or more is federally mandated to have an MPO.

Why do MPOs exist?

- **Legal reasons:** formation of MPOs is required by Federal Aid Highway Act of 1962 and subsequent acts for 50,000+ population urban areas.
- **Planning reasons:** MPOs promote cooperation and open planning processes and ensure local concerns are addressed.

What are MPOs' functions?

- Identify and assess transportation improvement options
- Engage and coordinate stakeholders, produce data and facilitate information sharing across jurisdictions
- Make decisions about the allocation of federal highway and transit funds within the metropolitan areas

Development of MPOs in Alabama

The transportation planning process for the first MPOs in Alabama started as early as 1963 and included Birmingham MPO, Huntsville MPO and Tuscaloosa MPO.

TPRC and you

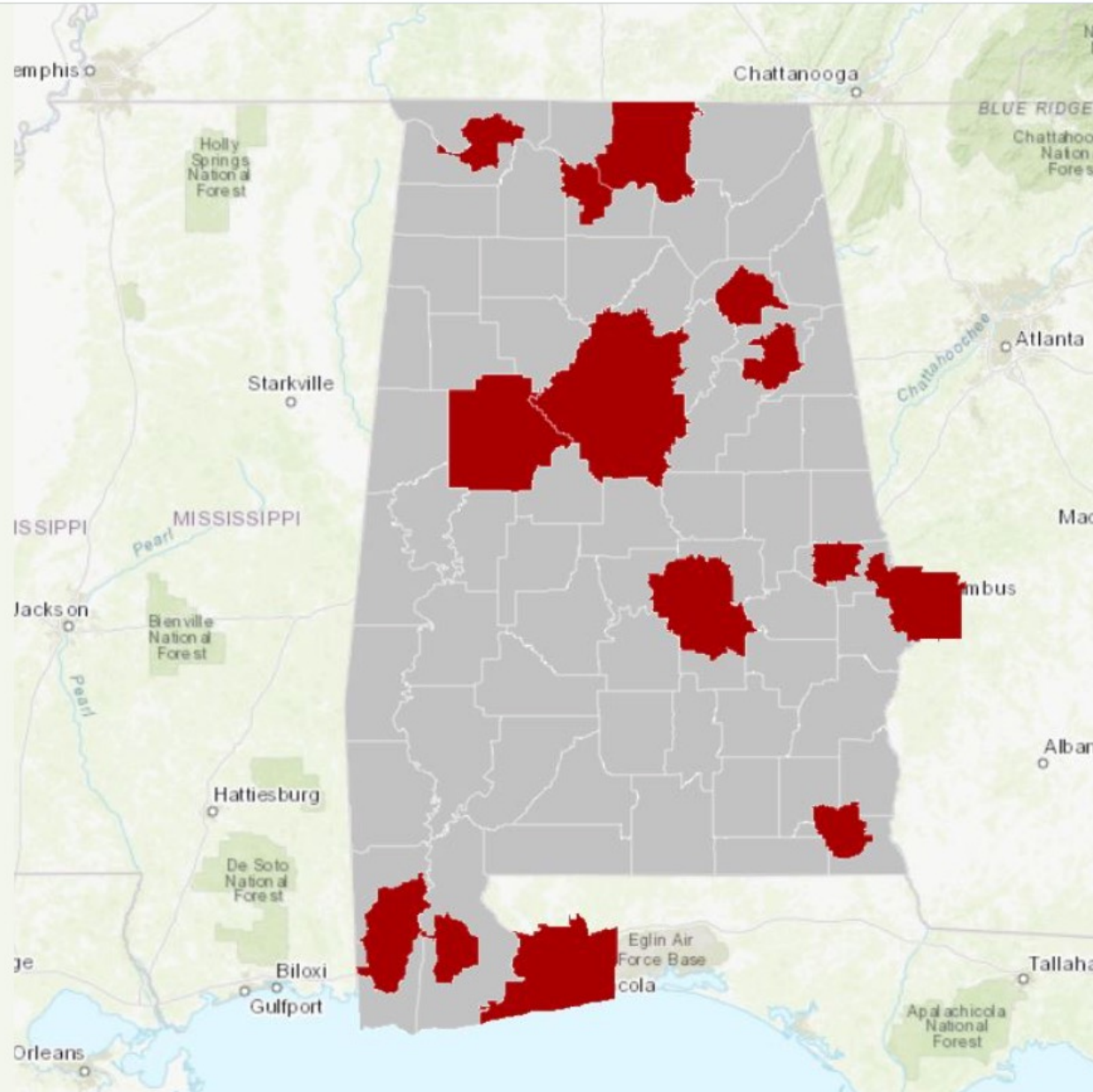
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A Metropolitan Planning Organization (MPO) is a transportation policy-making body comprising representatives from local government and various transportation authorities. Every metropolitan area with a population of 50,000 or more is federally mandated to have an MPO.

Why do MPOs exist?

Legal reasons: formation of MPOs is required by Federal Aid Highway Act of 1962 and subsequent acts for 50,000+ population urban areas.

Planning reasons: MPOs promote cooperation and open planning



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Auburn-Opelika MPO

I. MPO Composition

Year of statutory authorization:
1982

Most recent MPO self-certification
date: 18 July 2019

Number of full-time MPO staff
members: 1

Links to key MPO transportation
planning documents: [\(1\) FY 2020-2023 Transportation Improvement Program \(TIP\)](#); [\(2\) 2040 Long-Range Transportation Plan](#); [\(3\) FY2020-2023 Public Participation Plan](#); [\(4\) FY2020 Unified Planning Work Program \(UPWP\)](#).

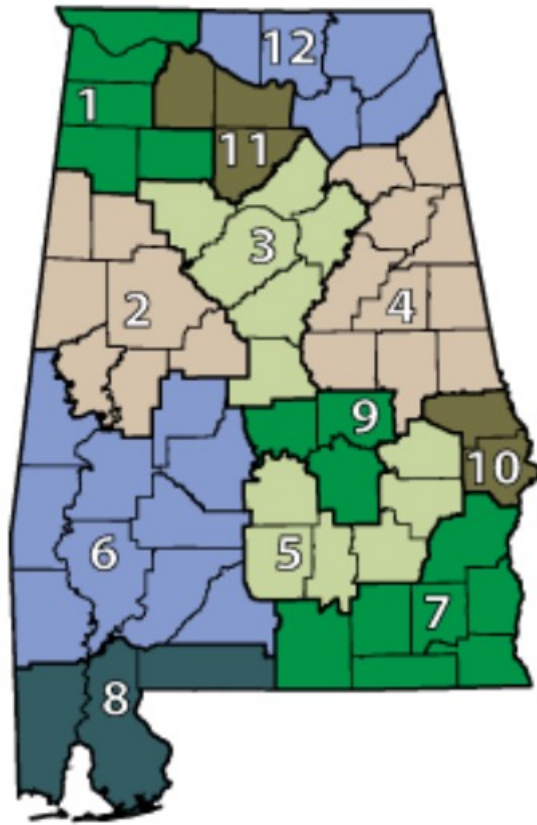
Geographic coverage of the



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Please select the region where your organization is located:

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What type of organization do you represent? Please select all that apply.

Metropolitan Planning Organization (MPO)

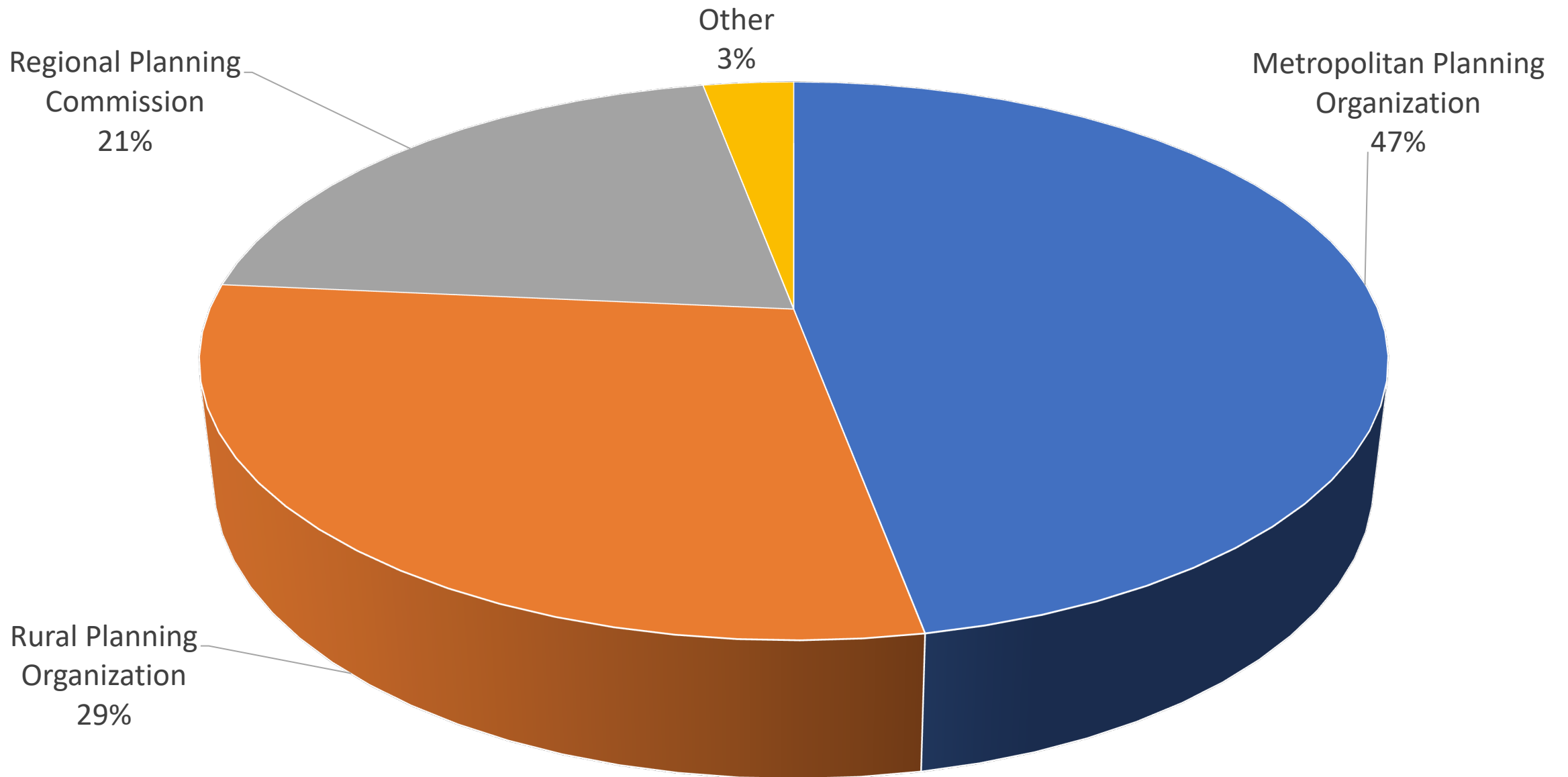
Regional Planning Commission (RPC)

Rural Planning Organization (RPO)

Other (please specify in the text box below)



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Survey Responses by TPO Type

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Please share what types of technical capabilities and resources you currently have available in-house. Please select all that apply.

Legal review and analysis

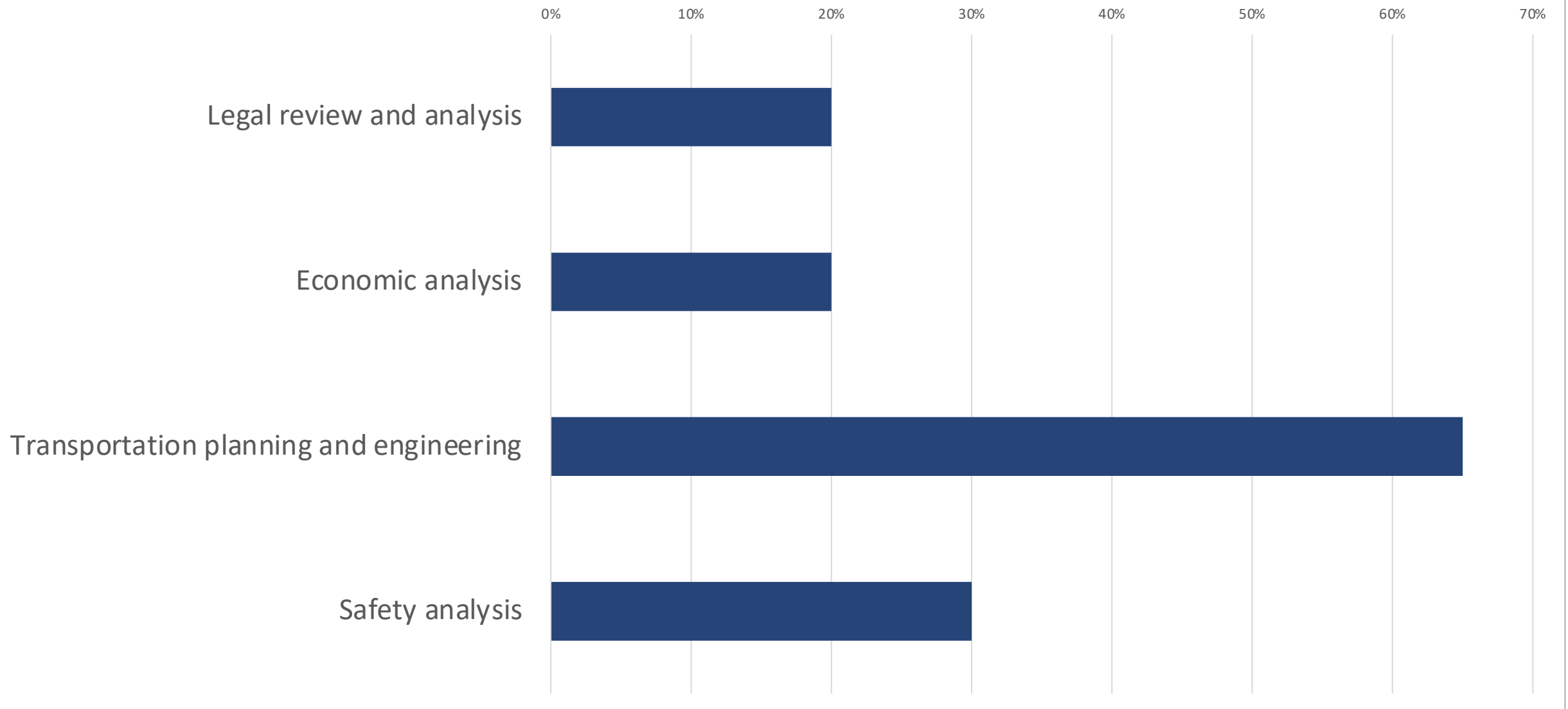
Economic analysis

Transportation planning and engineering

Safety analysis

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In-house Technical Capabilities Available In-House



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Please select the federal initiatives that you are currently engaged in and whether you need support with this area:

Tackling the Climate Crisis - Transition to a Clean Energy, Resilient Future: accelerating the transition toward electric and other alternative fueled vehicles, planning for a sustainable infrastructure system that works for all users, and undertaking actions to prepare for and adapt to the impacts of climate change.

Equity and Justice 40 in Transportation Planning: advancing racial equity and support for underserved and disadvantaged communities.

Complete Streets: planning, developing, and operating streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists.

Public Involvement: increasing meaningful public involvement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices.

Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination: coordinating with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities.

Federal Land Management Agency (FLMA) Coordination: coordinating with FLMA in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands.

Planning and Environment Linkages (PEL): implementing PEL as part of the transportation planning and environmental review processes.

Data in Transportation Planning: addressing the emerging topic areas of data sharing, needs, and analytics by incorporating data sharing and consideration into the transportation planning process.

Other (please specify in the field below):

What type(s) of technical support may be helpful in your transportation planning work?
Please select all that apply.

State and federal legislation review, compliance, guidance, and interpretation (e.i. American with Disabilities Act (ADA), Infrastructure Investment and Jobs Act (IIJA), etc.). Please specify the type of legal assistance needed in the field below

Identification of grant opportunities (e.g. Safe Streets and Roads for All (SS4A), Thriving Communities Program, and others)

Preparation of grant applications / cost-benefit analysis and economic impact analysis

Preparation of grant applications / operational analysis (e.g. crash data)

Development of Transportation Improvement Plans (e.g. prioritizing projects)

Transit planning

Bicycle and pedestrian planning

Freight transportation planning

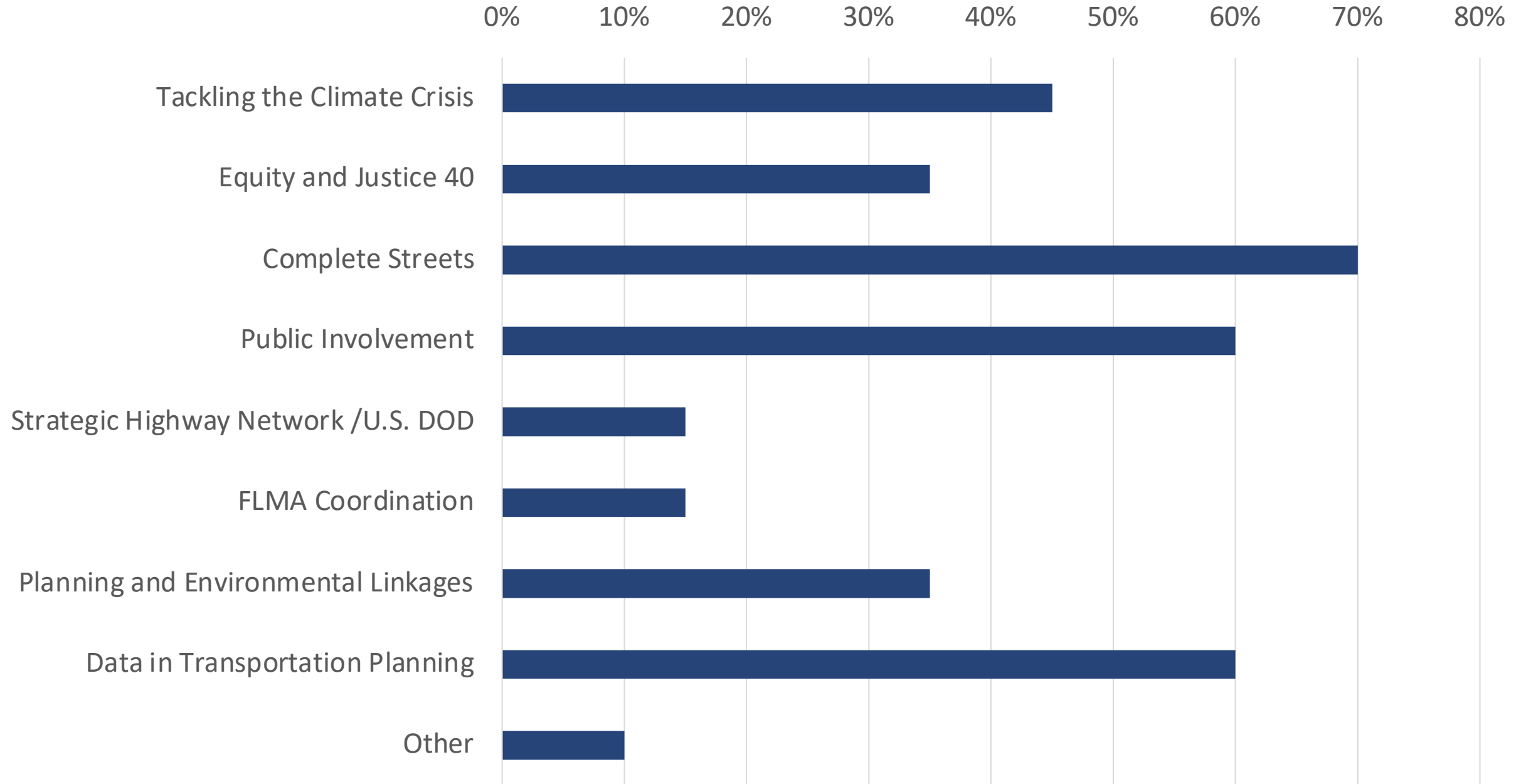
Travel demand modeling and forecasting

Safety planning and analyses

Traffic engineering

Other types of assistance (please specify in the text box below)

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Please select the federal initiatives that you are currently engaged in and whether you need support with this area:

Tackling the Climate Crisis - Transition to a Clean Energy, Resilient Future: accelerating the transition toward electric and other alternative fueled vehicles, planning for a sustainable infrastructure system that works for all users, and undertaking actions to prepare for and adapt to the impacts of climate change.

Equity and Justice 40 in Transportation Planning: advancing racial equity and support for underserved and disadvantaged communities.

Complete Streets: planning, developing, and operating streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists.

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Transit planning

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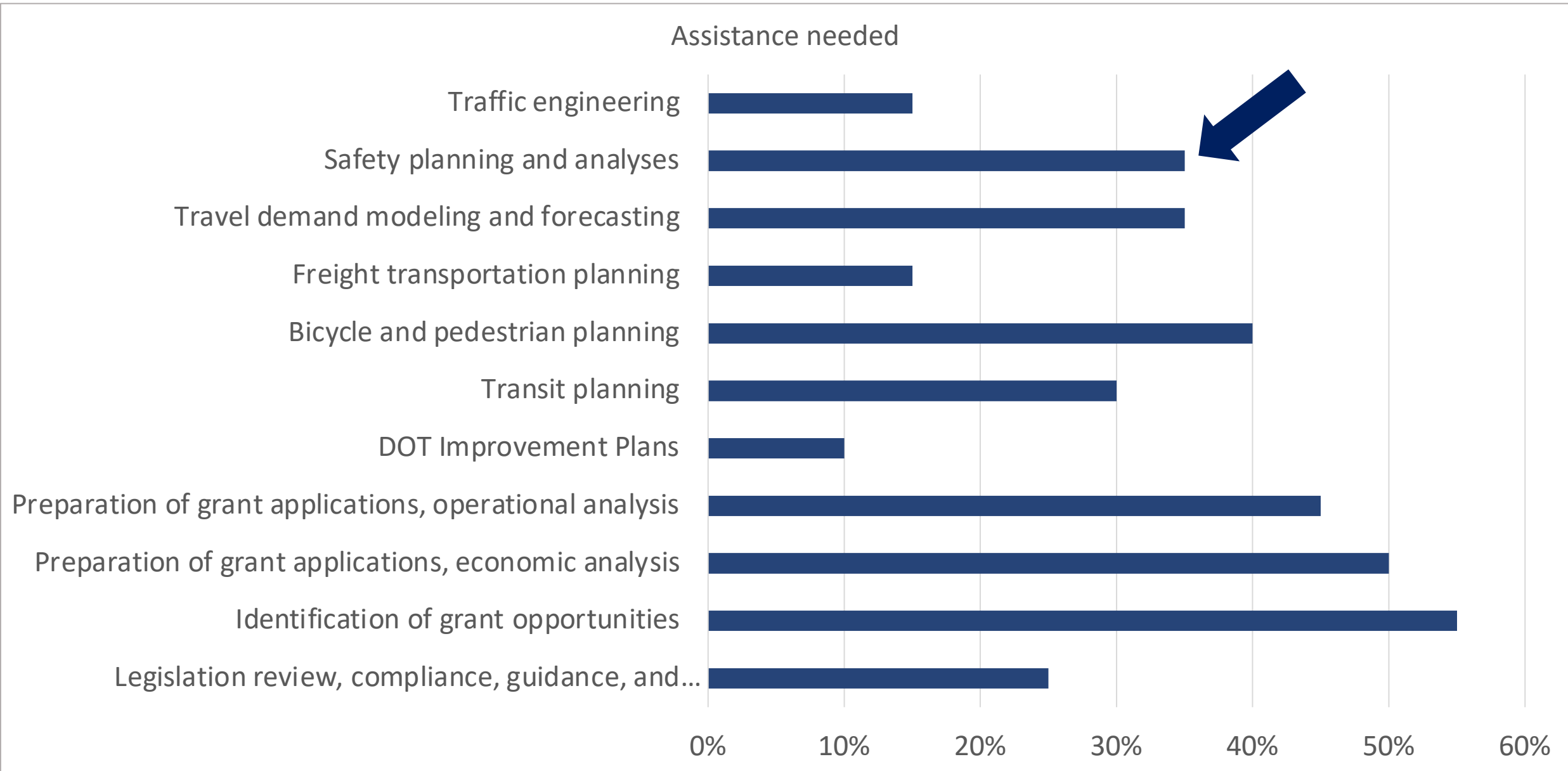
Travel demand modeling and forecasting

Safety planning and analyses

Traffic engineering

Other types of assistance (please specify in the text box below)

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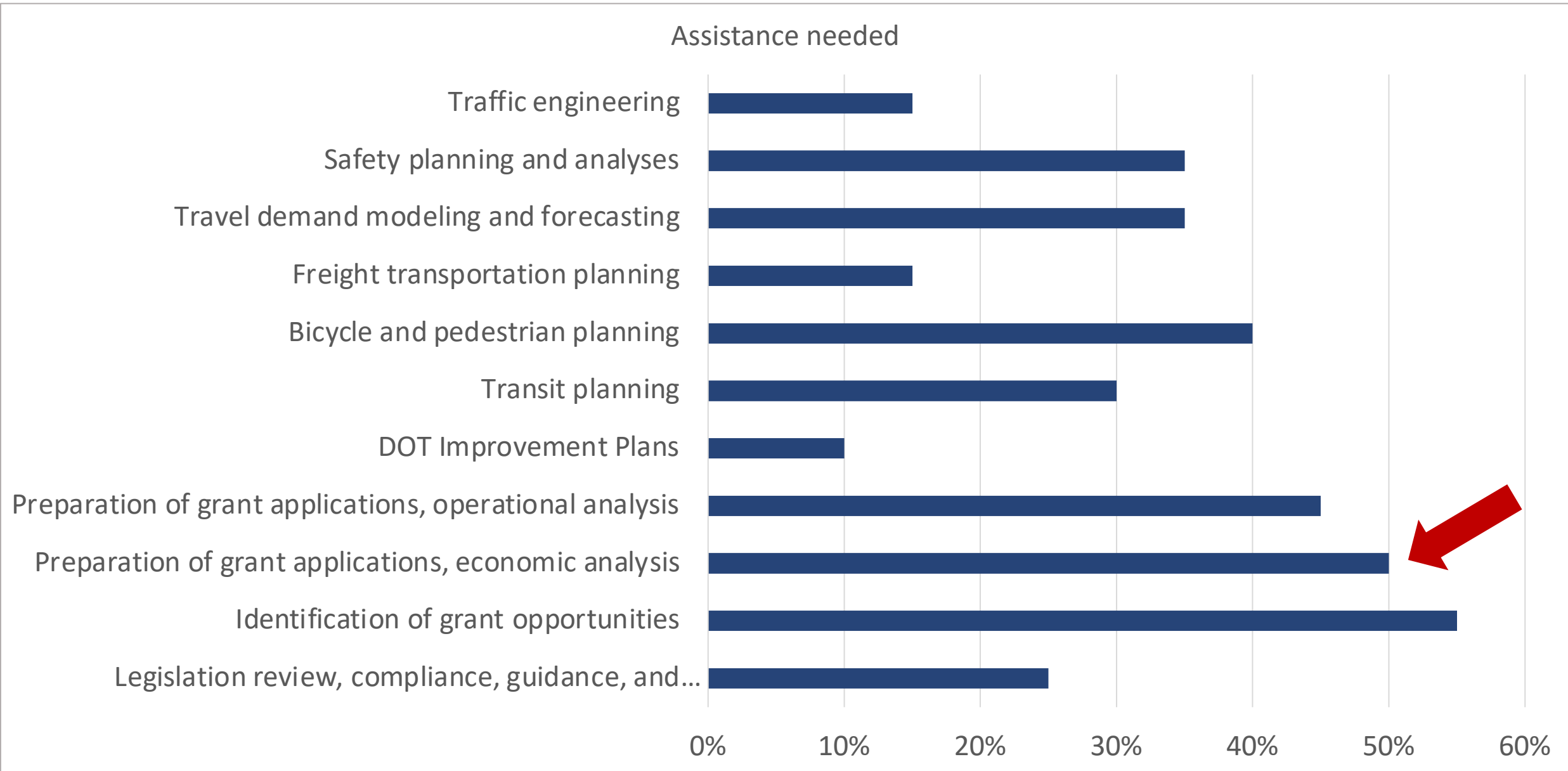
Safety Technical Assistance for Counties and Cities

The Alabama Department of Transportation is partnering with the Alabama Transportation Assistance Program at Auburn University to administer a Safety Technical Assistance for Counties and Cities (STACC) program. STACC provides technical support, training, and other activities to Alabama counties and cities to support their efforts to reduce fatalities and injuries on city and county roads. STACC also supports the goals of both the Alabama Strategic Highway Safety Plan and the Alabama Department of Transportation (ALDOT) Towards Zero Deaths strategy (TZD).

In Alabama, counties and cities are responsible for about 88% of the public road mileage. However, some of these local governments, particularly smaller jurisdictions, may lack the personnel resources and/or expertise to perform safety reviews and analyses. The STACC program makes road safety technical assistance services available to cities and counties that otherwise would be unobtainable due to their limited resources. The program's focus is primarily for counties with a population of less than 50,000 and cities with a population of less than 20,000 but is intended to be valuable to all local governments.



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February 22, 2023

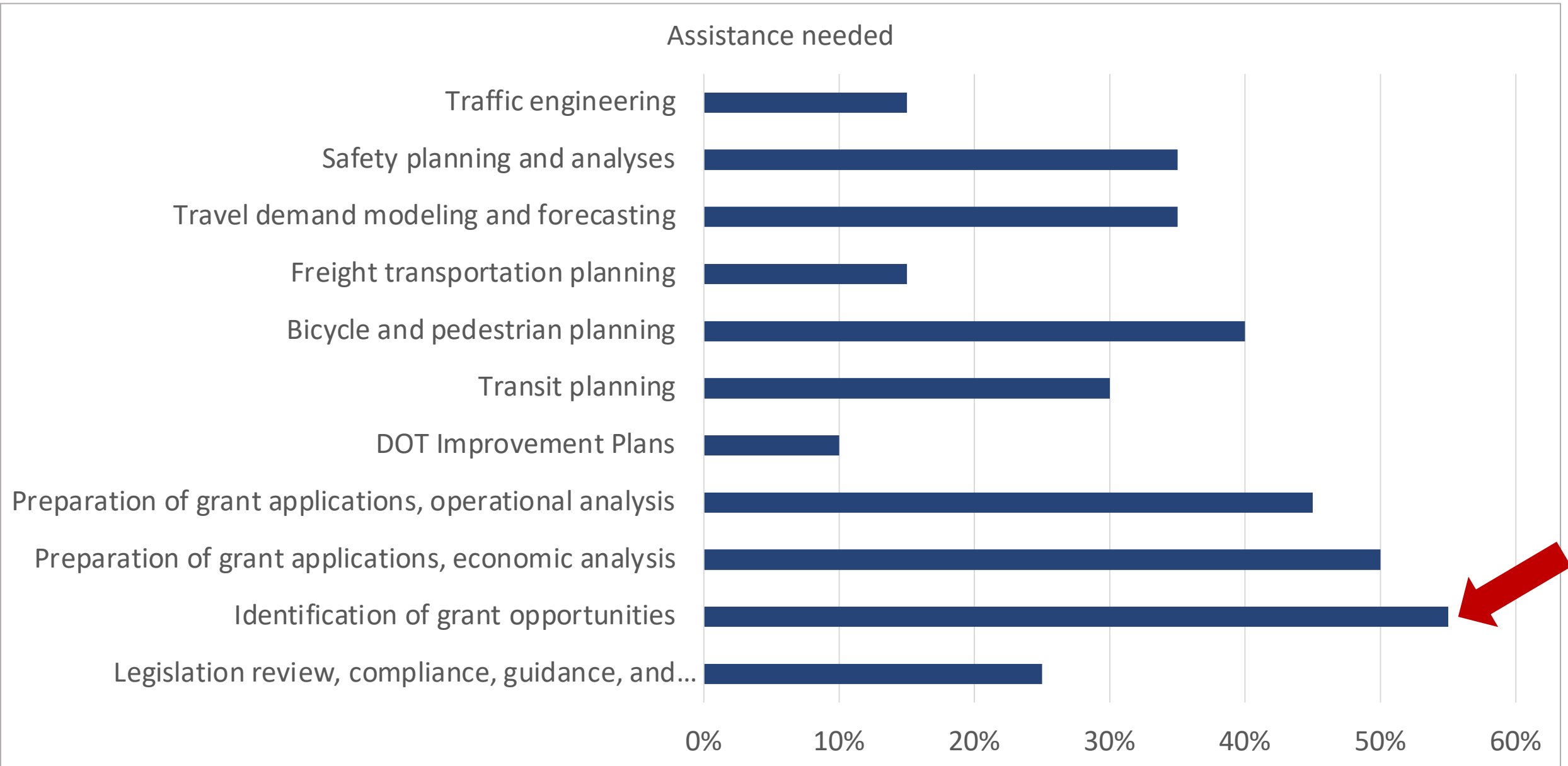
To: City of Anniston

From: Olga Bredikhina, Transportation Policy Research Center


RE: 2023 Raise Grant Application City of Anniston Chief Ladiga Trail Extension Project

This benefit-cost analysis (BCA) was conducted for the City of Anniston Chief Ladiga Trail Extension Project. To the maximum extent possible given available data, the formal BCA prepared in connection with this RAISE grant application reflects quantifiable economic benefits. The analysis follows the methodology, procedures and parameters in [USDOT 2023 Benefit-Cost Analysis Guidance for Discretionary Grant Programs](#). All analyses contain live formulas, clear documentation of assumptions, and assume 2021 constant dollars. To conduct the analysis, all 2023 cost estimates were assumed to be provided in 2022 Q4 dollar values (2022 Q4 is the latest period with implicit price deflator values available through the [Bureau of Economic Analysis National Income and Product Accounts Data](#) that is recommended for use by the USDOT 2023 BCA Guidance as a general method of converting nominal dollars into real dollars). As recommended by the USDOT 2023 BCA Guidance, all current (2022 Q4) values were deflated to 2021 dollar values (annual average deflator values). The results of the BCA presented in this document were inflated to 2022 Q4 dollar values. All the calculations and results are included in the spreadsheet accompanying this document. Table 1 in this Memo presents quantifiable benefits for the project segment. Table 3 of the report presents the cumulative BCA results for the project in 2021 \$ and Table 4 of the report presents the cumulative BCA results for the project in 2022 \$.






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PROGRAMS AND PROJECTS




Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program




Reconnecting Communities Pilot Program




Rural Opportunities to Use Transportation for Economic Success (ROUTES)




Build America Bureau for Innovative Project Financing








Federal Railroad Administration (FRA) Grants and Loans



Federal Transit Administration (FTA) Grant Programs

 U.S. Department of Transportation

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FY 2023 Thriving Communities Program Coming Soon!

The Fiscal Year (FY) 2023 Thriving Communities Program opportunity for Capacity Builders and communities is expected to open in summer 2023. USDOT will update this webpage with more information when it becomes available. [Subscribe to email updates](#) to receive updates about upcoming Thriving Communities Program opportunities and other technical assistance and funding opportunities from across USDOT.

Through the Thriving Communities Program, USDOT selects and funds Capacity Builder teams to provide deep-dive technical assistance, planning, and capacity building support to under-resourced and disadvantaged communities across the U.S. to help ensure these communities have the technical tools and organizational capacity to comprehensively plan for and deliver quality infrastructure projects and community development projects that enable their communities and neighborhoods to thrive. USDOT selects Capacity Builders and communities through separate but coordinated application and review processes.

What Can I Do to Prepare?

If the Thriving Communities Program sounds like a good fit for your organization or community, here are some suggestions to prepare for the FY 2023 program:

- If you are a community that needs technical assistance, planning, and capacity building support:
 - Begin identifying community partnerships and discussing your community's specific needs and vision for transformative transportation and community revitalization projects.
 - Review the [list of selected FY 2022 communities](#) to see the types of issues and places that USDOT is supporting and check out the [selected Capacity Builders](#) to see what types of technical assistance, planning, and capacity building support is available.
- If you are a technical assistance provider:
 - Begin forming partnership teams with other technical assistance providers. [This list of potential Capacity Builders](#) includes information from potentially interested organizations from the FY 2022 program and may be a good place to start.
 - Review the [list of communities who submitted Letters of Interest](#) for the FY 2022 program to better understand the diversity of places seeking support.

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RE: [EXTERNAL] Webinar: How to Compete for **RAISE** Grants -- Rural & Tribal Communities



Justin Fisher <jwfisher1@ua.edu>

Monday, January 30, 2023 at 12:25

To: Steven Jones



2023 RAISE NOFO -...
1.7 MB

[Download](#) • [Preview](#)

Steven,

I have attached the slides I downloaded from the webinar. I also wanted to share some of my main takeaways that may be helpful as we move forward through the proposal process.

- The webinar hosts stressed the importance of making sure the entity applying for funding is registered at sam.gov and has obtained its Unique Entity ID. Also, the entity must be registered at grants.gov. The registration process may take 2-4 weeks, so the hosts stressed the importance of starting that process ASAP.
- The hosts confirmed that 100% funding is an option and it does not impact the chances of whether funding will be awarded.
- However, the funding is a reimbursement program, NOT a lump sum award. Costs must be incurred by the entity, and it will then seek reimbursement on a monthly or quarterly basis.
- Of the 8 merit criteria, the hosts said Safety, Environmental Sustainability, Quality of Life, and Mobility and Community Connectivity are the most important.
- Projects that are related can be included in one application. Applicants may submit up to 3 applications.

From: Steven Jones <steven.jones@ua.edu>

Sent: Friday, January 20, 2023 2:51 PM



US Department of Transportation



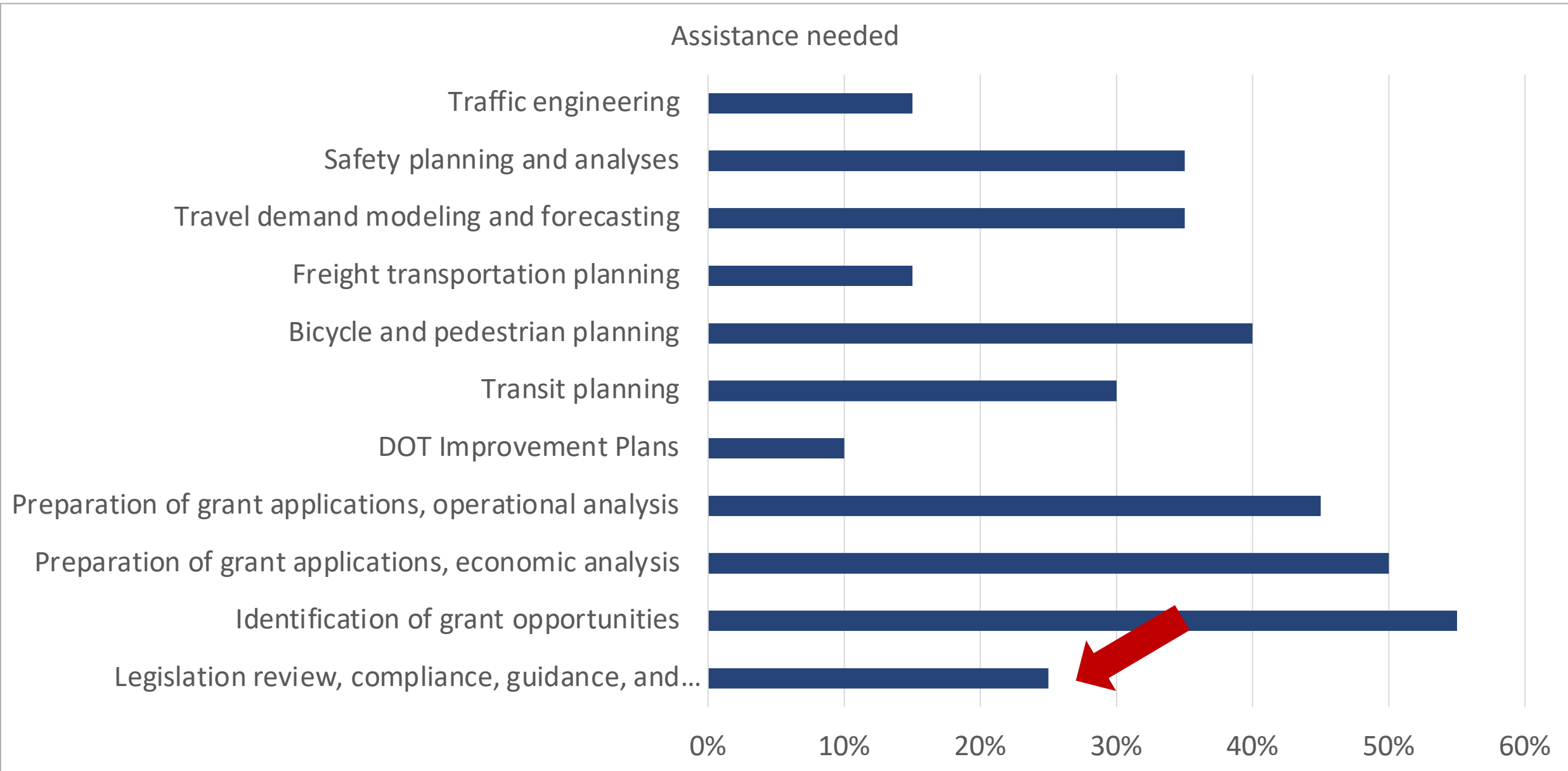
RAISE Grants

Rebuilding American Infrastructure with Sustainability and Equity

How to Compete Webinar – Rural and Tribal Applicants

January 24, 2023

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GAS TAX ALTERNATIVES: MILEAGE-BASED USER FEES



Historically, federal surface transportation programs have been funded primarily through taxes on motor fuels.^{1,2} However, the fuel tax system may not be a sustainable source of funding in the long run because of a projected decrease in energy consumption³ due to improving fuel efficiency,⁴ increasing use of electric vehicles,⁵ and growth in the number of vehicle miles traveled (Figures 1-3).⁶

Figure 1: Projections for U.S. Transportation Fuel Consumption, 2018 – 2050, Trillion BTU. Source: EIA

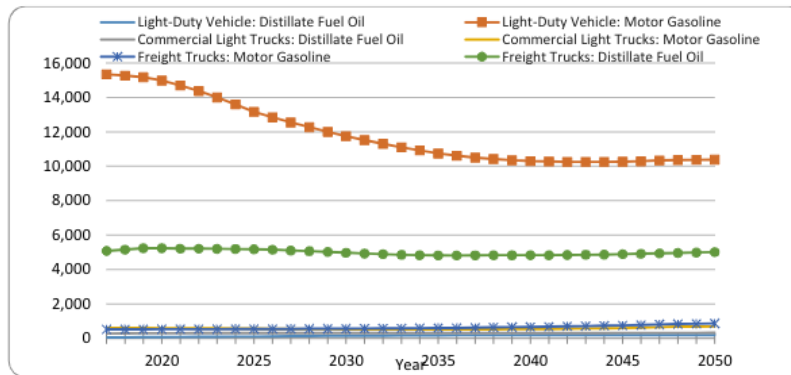


Figure 2: Annual vehicle miles traveled in the U.S., Millions. Source: EIA

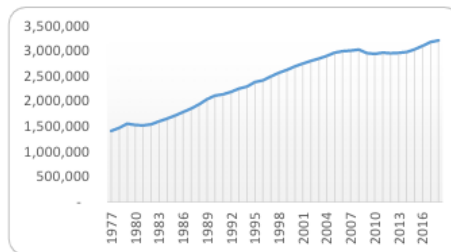
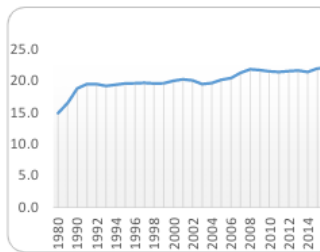


Figure 3: Average Fuel Efficiency of U.S. Light-Duty Vehicles, Miles per Gallon, 1980-2016. Source: EIA



Parking Infrastructure Finance



Executive Summary

Local governments historically have been the main providers of core economic infrastructure; they fund the vast majority of the nation's roads, transit systems, drinking water, and wastewater systems as well as public safety, educational facilities and buildings, health care, and amusement and recreation. But local governments currently face significant challenges to the funding and provision of local infrastructure. Cities and counties are dealing with a major investment gap in funding infrastructure projects. In light of this mounting pressure, municipalities are using various combinations of traditional and alternative financing methods to fund infrastructure.

Pay-As-You-Go Financing Cash and Savings	Pay-As-You-Use Financing Debt Financing
Taxation <ul style="list-style-type: none"> • General taxes • Special dedicated taxes User charges <ul style="list-style-type: none"> • Capital reserves and fund balance • Federal grants and aid • State grants and aid 	Loan financing <ul style="list-style-type: none"> • Private bank loans Bond financing <ul style="list-style-type: none"> • General obligation bonds • Revenue bonds • Private activities bonds • Leasing-revenue bonds

Figure ES 1: Traditional Methods of Local Infrastructure Financing; Source: "Infrastructure Financing"

States, cities, counties, and other forms of local government have the option to issue municipal bonds. These can be general obligation bonds, which are backed by a community's general taxation revenues, or revenue bonds, which are typically paid off through revenues from parking fees. Virtually all municipal bonds for public parking improvements are tax exempt. Revenue bonds are an effective choice when the parking garage being constructed will be charging fees for parking. The net income from the parking garage is pledged toward repayment of the bonds.

Beyond traditional bond funding, a variety of alternative financing options exist. Shared Parking converts private parking into public parking during certain hours. For example, residential tenants park in a parking facility at night, and take their cars to work elsewhere, while those spaces are available to meet the demands of office, retail and commercial tenants who typically require daytime parking. Additional funding options include rental income subsidies, local option taxes, impact fees, special assessment districts, tax increment financing, joint development projects, and state and federal grants.



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Can you help Scott out on this? Please feel free to reply to him directly (and copy me).

Steven

From: Scott Tillman <stillman@rpcgb.org>

Date: Wednesday, March 29, 2023 at 12:38

To: Steven Jones <steven.jones@ua.edu>

Subject: [EXTERNAL] FW: Records Disposition

Question for your lawyers!! What is the most current version for the attached document.

Thanks for the help!

Thanks,
Scott

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What next?