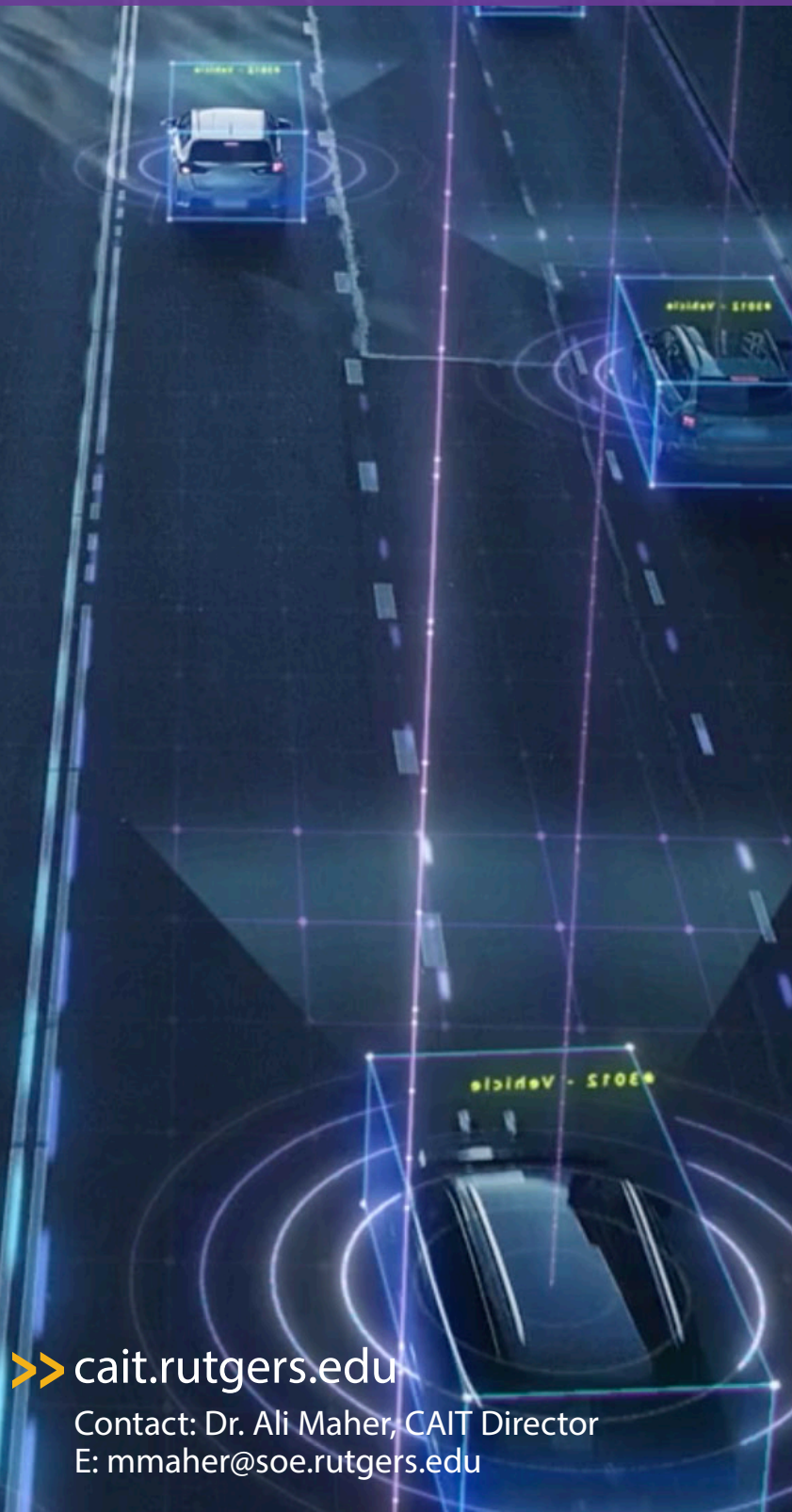




# DataCity Smart Mobility Testing Ground (SMTG)

*A Smart and Autonomous Mobility Initiative*



**The Rutgers Center for Advanced Infrastructure and Transportation (CAIT) is helping Middlesex County implement DataCity into downtown New Brunswick to establish an urban, open-road living-laboratory testbed for smart mobility technology.**

The Middlesex County DataCity initiative in partnership with the New Jersey Department of Transportation (NJDOT), Rutgers CAIT, The City of New Brunswick, DEVCO, The New Jersey Economic Development Authority (NJEDA), and industry collaborators such as Iteris and Verizon, is equipping a 2.4-mile multi-modal corridor between Route 27 to Route 18 in downtown New Brunswick with self-driving-grade high-resolution roadside sensors, edge computing devices, and the latest 5G and Cellular-Vehicle-to-Everything technologies to enable smart-mobility services to all travelers.

This living-laboratory is creating new ways to study urban mobility that can improve traffic management, safety, and economic development opportunities in the area.

The testbed also creates opportunities for underserved communities and partners with NJDOT Commissioner Diane Gutierrez-Scaccetti's vision on "Commitment to Communities," through delivering accessible safety applications and deploying innovative technology locally.

As part of establishing the testbed, this project will create a data-sharing portal and marketplace providing high-resolution mobility data to attract startups, industry, and academic partners interested in autonomous vehicle research and development to the area.

# DataCity Testing Ground Impacts & Goals

This testbed represents some of the most densely populated transportation network nationwide, home to a NJ Transit rail station serving the Northeast Corridor, a flagship regional hospital, and a thriving city with more than 56,000 residents and commuters.

LiDAR sensors at corridor intersections will give planners real-time traffic analytics to ease congestion and avoid accidents, digital twins and 3D maps generated will map traffic flow in real-time, and dynamic data will show officials how pedestrians and vehicles interact at critical points on the transportation network.

The upgraded traffic monitoring through Artificial Intelligence will provide city officials with knowledge to make streets safer, startups with data resources to develop new technologies — and overall will transform mobility within the region.

Building a Living Lab	The research team is establishing a testbed for smart mobility and smart city research promoting connected and autonomous vehicles in the region that can help make transportation safer, more efficient, and more equitable for New Brunswick.
Improving Mobility & Safety	The living laboratory will generate safety, mobility, and economic benefits to the local New Brunswick community and greater region through real-life data on how pedestrians and vehicles travel along the corridor and interact with infrastructure.
Attracting the CAV Industry	This project will create a data-sharing portal and marketplace providing high-resolution mobility data to attract startups, industry, and academic partners interested in autonomous vehicle research and development to the area.



## Features

- Industrial-grade computer vision and LiDAR sensors from autonomous vehicles to the roadside for all travelers and vehicles.
- A sensor enriched Infrastructure-ECAV environment where systems can work from the “get-go” without solely relying on V2V data.
- Mobility as a Service (MaaS) for safe, efficient, and environment-friendly multi-modal community mobility services; and Data as a service (DaaS) to Mobility, Health Services, Energy and Infrastructure Applications.

## Our Partners



Center for Advanced Infrastructure and Transportation

