# **SB-43**

Providing Federal funds for the improvement and incorporation of technology for The United States roads, bridges, highways, and other such related infrastructure.

#### IN THE SENATE OF THE AMERICAN LEGION BOYS NATION

Mr. Seaton of Indiana introduced the following bill;

## A BILL

Providing Federal funds for the improvement and incorporation of technology for The United States roads, bridges, highways, and other such related infrastructure.

Be it enacted by The American Legion Boys Nation Senate assembled,

#### **SECTION 1. SHORT TITLE.**

This Act may be cited as the "The Infrastructure Modernization Act".

### **SECTION 2. ALLOCATION OF FUNDING**

There are funds hereby allocated from the Federal budget amounting to \$600,000,000 for a period of 30 years for the implementation of retrofitting roads, bridges, highways, and other such infrastructure-

- (1) These funds are necessary for the redevelopment and modernization of the United States' systems of transportation.
  - (2) Such funds are necessary for the research and development of innovative and newer forms of

transportation.

(3)Such funds are necessary for the establishment of programs to which the states may receive funding for the improvements herein.

(4) Funds herein are necessary for the investment in-

(A)research and development programs aimed at advancing autonomous vehicle technologies, including sensor systems, vehicle-to-infrastructure communication, and real-time data processing.

(B)Establishment of a system of camera technologies to work in coordination with State Law enforcement on State roads, highways, and other such roads in coordination with the states.

(C)AI-Based Sensor Systems: Research and development programs shall focus on enhancing the capabilities of AI-powered sensor systems, including LiDAR, radar, and camera technologies, to enable improved perception and situational awareness for autonomous vehicles.

(D)Reinforcement Learning for Autonomous Vehicles: Research efforts shall explore the application of reinforcement learning algorithms to train autonomous vehicles for complex driving scenarios and improve their decision-making capabilities.

- (E) AI for Traffic Prediction and Optimization: Research programs will aim to develop AI models and algorithms to accurately predict traffic patterns, optimize traffic flow, and reduce congestion in conjunction with intelligent infrastructure.
- (5) Such funds are necessary for the subsidizing of jobs in the field of autonomous vehicle technology and infrastructure retrofitting. The Federal government in cooperation with the state and local governments shall prioritize hiring and training individuals for the development, installation, and maintenance of intelligent infrastructure systems.
- 2. Workforce Training Programs: The DOT, in collaboration with relevant stakeholders, will establish workforce training programs to provide necessary skills and knowledge to individuals seeking employment in the emerging autonomous vehicle industry.

### SECTION 3. FEDERAL AND STATE COOPERATION & REGULATIONS

The Department of Transportation shall encourage collaborations between public agencies, private companies, and academic institutions to accelerate research and development efforts and promote innovation in transportation and infrastructure.

(1) The Department of Transportation shall provide regular progress reports on the retrofitting projects, research, and development activities in coordination with state agencies and private entities to ensure transparency and accountability.

(2) The Department of Transportation in coordination with state agencies, shall conduct periodic evaluations to assess the impact of infrastructure retrofitting on road safety, traffic efficiency, and the adoption of autonomous vehicles.

### **SECTION 4. IMPLEMENTATION**

1. The Department of Transportation shall establish an implementation timeline within 1 year of this bill's passage to ensure the efficient execution of the retrofitting projects. The timeline will outline specific milestones, deadlines, and deliverables to track progress and ensure the timely completion of the infrastructure retrofitting initiatives.

#### **SECTION 5. TERMINATION**

This bill shall remain in effect for a period of 30 years from its enactment date until whichever occurs:

- (1) the enactment of a law altering or changing this bill is adopted and made law.
- (2) The enactment of a law that addresses the clauses herein or any other such law is passed that is determined to supersede the clauses established herein in this bill.