The Transformation of Transportation: The Potential of Distributed Ledger Technologies in Transportation Applications

To understand the potential, current, and future applications of Distributed Ledger Technology in improving transportation.

WHAT IS THE NEED?

In this project, California State University, Long Beach (CSULB) will work on a comprehensive study of possible applications of Distributed Ledger Technology (DLT) in transportation.

CSULB plans to conduct a thorough review of the state-of-the-art DLT technology from other public agencies, academia, and industry. CSULB will conduct interviews with experts to depict a more complete picture of possibilities, benefits, challenges, and current limitations in this space. Finally, CSULB will provide California Department of Transportation (Caltrans) with a final white paper that summarizes their findings, as well as recommendation on next steps to leverage this technology.

WHAT ARE WE DOING?

Despite the benefits of providing transportation and accessible public information, it raises new challenges and concerns about privacy and security of data. DLT offers potential of enhancing quality, integrity, and security of data using cryptography without sacrificing transparency. The need is to explore the potential of improving Caltrans’ business processes using DLT, to transition to digital project delivery and one stop grants management system within Caltrans.
WHAT IS OUR GOAL?

The goal of this project is to understand the possible applications and key strategic use cases of DLT in California’s transportation and public-sector transportation in general.

WHAT IS THE BENEFIT?

This project will help Caltrans to identify and leverage the use of new and promising DLT; to improve transparency, reduce friction, enhance security, integrity, and quality of data used in department’s business process.

WHAT IS THE PROGRESS TO DATE?

Currently this research contract is in process of getting executed.