



Leonard Transportation Center  
CAL STATE SAN BERNARDINO

# STRATEGIC ACTION PLAN 2024

## 2024 Strategic Plan: Leonard Transportation Center

### Introduction

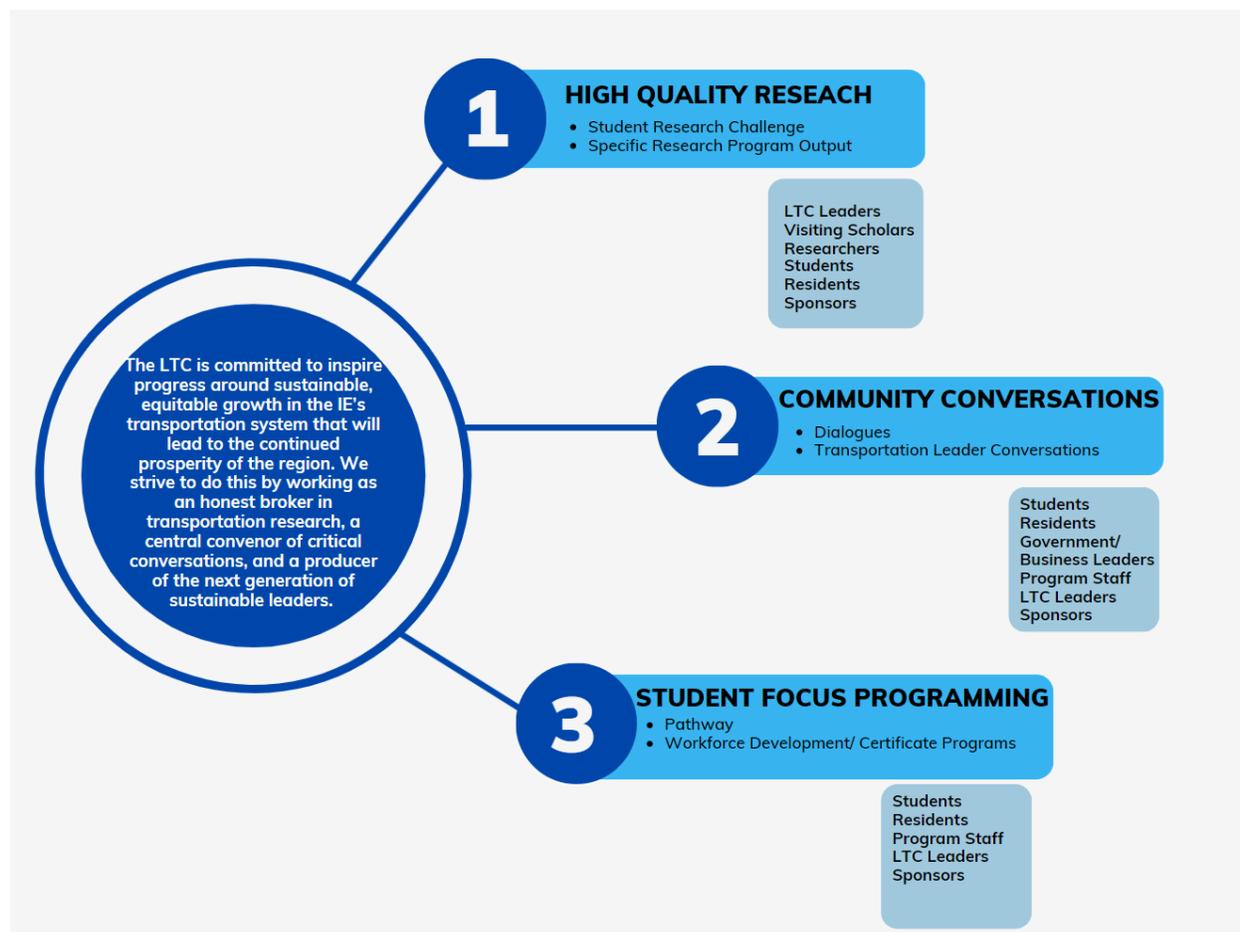
During the March Council Meeting, the Advisory Council worked on the vision for the Leonard Transportation Center (LTC). Our new vision reflects our dedication to fostering a region that thrives on continuous progress and prosperity through sustainable and equitable growth.

### LTC's Vision Statement

The LTC is committed to inspire progress around sustainable, equitable growth in the IE's transportation system that will lead to the continued prosperity of the region. We strive to do this by working as an honest broker in transportation research, a central convenor of critical conversations, and a producer of the next generation of sustainable leaders.

### LTC's Mission

Our mission is to advance transportation solutions that support the well-being and success of our community through innovative research, strategic partnerships, and student focus programming.



## High Quality Research

Our objective is to conduct innovative research to address transportation challenges and promote sustainability and equity. Current research initiatives include:

- Transportation Mobility Policy and Management

The focus of this initiative is to set a broad agenda to understand the challenges and identify potential solutions for enhanced transportation mobility policy and the management of inland ports. Economically, the Inland Empire's geographic location, transportation infrastructure, availability of land, and growing demand from e-commerce have made it an ideal region for goods movement and home ownership. However, from a transportation perspective, this growth in residents and logistics facilities has led to congestion, environmental pollution, and stress on public services, all of which negatively impact the region's future economic viability and livability. In light of these observations, the LTC is committed to researching solutions for system improvements that will lead to transportation sustainability, equity, and improved mobility.

- Medium- and Heavy-Duty Vehicle Research

Our commitment remains to advance sustainable transportation research and initiatives in the Inland Empire. At the forefront of our agenda is the strategic development and optimization of medium- and heavy-duty vehicle opportunity charging. This pivotal endeavor will focus on a policy analysis of the transition to zero-emission vehicles in the commercial market, pinpoint optimal locations and methodologies for establishing opportunity charging stations, and research the social equity factors for IE businesses and the community.

- VMT Policy Impacts on the Inland Empire

Concurrently, we will conduct in-depth vehicle miles traveled (VMT) studies in specific cities within San Bernardino counties. The transition to VMT as an indicator aims to create more sustainable and climate-friendly urban environments, impacting the development of the region. The Center's research team will analyze travel behavior to provide possible solutions. Our goals are to contribute to the conversation of transportation equity and sustainability, engage students in research on the local transportation system, and prepare them for careers where they can use the knowledge gained.

- The Nexus Between Housing and Transportation

The nexus between housing and transportation in the Inland Empire is a complex interplay of spatial, economic, and socio-demographic elements. The area's relatively lower housing costs than coastal regions have made it attractive to homebuyers; however, it also hosts a higher proportion of low-wage earners, underscoring the affordability paradox. This growing population necessitates longer commutes, often to job-rich coastal areas, increasing dependency on automobile transportation. This exacerbates traffic congestion and environmental concerns

while straining transportation infrastructure. In a broader context, this relationship between housing affordability and transportation indicates a spatial mismatch, which, if not addressed, can further deepen socio-economic disparities. Hence, there is a clear imperative for integrated housing and transportation policies to mitigate these challenges, thereby contributing to the sustainability and inclusivity of the region's urban development.

The Student Research Challenge participants will investigate the intertwined relationship between housing and transportation in the Inland Empire. This investigation explores housing affordability, commuting patterns, and transportation and their socio-economic implications. They will contribute to a deeper comprehension of urban development and actively participate in the conversation to foster a sustainable, inclusive, and resilient region.

## **Community Conversations**

### Regional Mobility Dialogue Series

Mobility is key to the Inland Empire's future economic growth and quality of life. The Dialogue series has been developed to address the numerous regional projects and initiatives designed to improve mobility. Advanced technology will play a dominant role in our automobiles, rail transportation, freight movement, and community organization. The upcoming changes in transportation in the 21st century will be as significant as those of the early 20th century, when we transitioned from horse-drawn carriages to planes, trains, and automobiles.

As we anticipate this exciting future, it is crucial to remember that we live in a democratic society where an informed electorate is essential for maintaining a strong and stable society. However, given the rapid pace of developments, most people today are not fully informed about the many issues related to imminent changes in our transportation infrastructure. Few are aware of the numerous transportation-related projects and initiatives, and even fewer are involved in meaningful ways in the decision-making processes.

There are differing opinions regarding the magnitude of the problems and the relative merits of various potential solutions. Additionally, there is currently no authoritative source where those not directly involved in ongoing discussions can obtain a comprehensive overview of our mobility needs, the related social concerns, and the projects and initiatives being discussed to address them.

Over the past seven years, the LTC has successfully hosted 41 Regional Mobility Dialogues to address mobility concerns in the Inland Empire. These Dialogues aim to bring together community leaders in discussions on how to best address the region's mobility needs. The series has been successful in engaging policymakers, thought leaders from both the public and private sectors, CSUSB faculty experts, students, and members of the public to tackle various transportation challenges and solutions.

The 2024 Dialogues have been hosted in-person at Omnitrans and virtually via Zoom. In 2025, we plan to change the format of the Dialogues, possibly hosting half of them at destination locations and the other half fully online.

## Student Focus Programming

- Student Research Challenge

The goal of the LTC's Student Research Challenge is to find creative solutions to the complex issues surrounding the Inland Empire transportation system. Multi-disciplinary teams of students from the region's three major public universities—CSUSB, Cal Poly Pomona, and UC Riverside—will conduct this research. This project aims to engage undergraduate and graduate students in innovative thinking, equip them with valuable research techniques, and empower them to address the region's most challenging transportation-related questions.

### Specific Research Program Outputs:

Engage multi-disciplinary teams of students to find creative solutions to transportation challenges.

### Research Outputs:

- Mobility improvements
- Climate change adaptation and pollution reduction
- Transportation technology entrepreneurship
- Smart city technologies
- Understanding international and domestic transportation impacts
- Transportation cybersecurity in the public sector

- Student Assistants (Graduate and Undergraduate)

We provide job opportunities for campus students to conduct research, learn about transportation issues, and gain experience working in an office environment. Our goal is to instill a deeper understanding of the Inland Empire, while providing real world experience to help CSUSB students build their resumes and prepare them for job opportunities.

- Sustainable Research and Workforce Symposium

During the Fall of 2024, CSUSB and the Institute for Watershed Resiliency are planning to host the first annual Sustainable Research and Workforce Symposium. This event is to provide CSUSB students, faculty, staff, and alumni a venue to share and learn about sustainability initiatives taking place in the Inland Empire and how they can get involved through volunteering, research, service, and course curriculum. Essential to this purpose will be to showcase career opportunities for students through guest speaker and organization tabling events. Along with a guest speaker panel of experts, there will be posters of student-faculty work as well as a career networking event.