



California State University
Transportation Consortium

**SB 1 Research Activities Summary /
Research Plan for 2026-2027**

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1. Overview

The California State University Transportation Consortium (CSUTC) unifies and focuses the efforts of four outstanding CSU campuses that represent and support the geographical, cultural, racial, and socioeconomic diversity that makes California, and the CSU system, strong: (1) CSU Chico – California Pavement Preservation Center; (2) CSU Fresno – Fresno State Transportation Institute; (3) CSU Long Beach – Center for International Trade and Transportation/College of Engineering; and (4) San José State University – Mineta Transportation Institute. CSUTC is led by the Mineta Transportation Institute (MTI) at San José State University, a federally-funded University Transportation Center since 1991.

CSUTC researches safe, reliable solutions that increase the mobility of people and goods and strengthen California's economy. CSUTC research focuses on high priority areas as identified by SB1. These high priority areas include: congestion relief (including traffic management systems), trade corridor enhancements, improved transit and rail, pedestrian and cyclist safety projects, as well as maintenance and rehabilitation for California's road and bridge infrastructure. More information about SB 1 can be found at: <http://rebuildingca.ca.gov/>.

2. Summary of Research Activities

The table below summarizes research publications and research in progress across the Consortium since 2018.

Table 1. Summary of Research Activities Across the California State University Transportation Consortium, by Year

Description	Number
<i>Published Reports and White Papers</i>	
Year 1	32 ^a
Year 2	37 ^b
Year 3	35 ^c
Year 4	31 ^{d,e}
Year 5	32
Year 6	41 ^h
Year 7	27 ^{g,h,i}
Year 8	16 ^h
Year 9	2 ^h
<i>Subtotal</i>	<i>253</i>
<i>Submitted Drafts—In Publication Process</i>	
Year 7	3
Year 8	13
Year 9	2
<i>Subtotal</i>	<i>18</i>
<i>Research in Progress</i>	
Year 8	3
Year 9	24 ^{h,j}

^a One project was jointly funded between Years 1 and 2 to allow for a more extensive research design. Recorded here with Year 1 publications.

^b One project was jointly funded between the Year 2 competitive RFP with supplemental funding from CSULB TRANSPORT Year 3. Recorded here with Year 2 publications.

^c Two projects were jointly funded between SB1 and MTI's USDOT grant to allow for a more extensive research design. One CSULB TRANSPORT project was jointly funded between Years 3 and 4 to allow for a more extensive research design and recorded here with Year 3 publications.

^d One CSU Fresno FSTI project is jointly funded between Years 4 and 5 to allow for more robust data collection. Recorded here with Year 4 projects.

^e One MTI project is a multiyear collaboration between UC Davis' City & County Pavement Improvement Center, which funds projects at three CSU campuses (Chico, Long Beach, and San Luis Obispo).

^f One MTI project is jointly funded between Years 6 and 7 to allow for more robust data collection. Recorded here with Year 7 projects.

^h Several MTI projects are jointly funded between SB1 and external funding obtained by MTI to allow for a more extensive research product.

ⁱ One project is jointly funded between Year 6 and Year 7 to allow for a more robust data collection. This was directly from legislation (SB 381) introduced by Senator Min in October 2023. That legislation directed MTI, in consultation with relevant stakeholders, to "conduct a study on electric bicycles to inform efforts to improve the safety of users of the transportation system, and to submit a report of the findings from the study to the Legislature." Recorded here with Year 7 projects.

^j One CSU Fresno FSTI project is jointly funded between Years 7 and 8 to allow for more extensive research and recorded here with Year 8.

To date, **253 white papers and research reports have been [published to the CSUTC website](#)**. This work demonstrates the breadth of research funded and undertaken system-wide through the Consortium. Research reports are peer-reviewed, professionally edited, and formatted with a consistent style to represent CSUTC. ***A total of 18 unique CSU campuses have received project funding.***

3. Consortium Highlights

CSUTC's impact extends well beyond the publication of individual research reports. Across the CSU system, Consortium-supported faculty and students work directly with transportation agencies, policymakers, industry partners, and communities to put research into practice; disseminate findings to professional audiences; develop the next generation of transportation professionals; and leverage state investment to attract additional resources for transportation research and workforce development.

Technology Transfer

CSUTC advances transportation practice not only through publication of research findings, but also by convening leaders, creating opportunities for knowledge exchange, and connecting researchers directly with policymakers and practitioners. One of the Consortium's most significant technology-transfer activities in 2026 was the [Mineta Forum on Transportation Policy & Leadership](#), held in Washington, D.C. in September to commemorate the 25th anniversary of the September 11 attacks and honor the life and legacy of Secretary Norman Y. Mineta.

This bipartisan national forum, endorsed by all former living Secretaries of Transportation, brought together former presidential cabinet members, Deputy Secretaries of Transportation, transportation agency and industry leaders, members of Secretary Mineta's family, and individuals who served alongside him during the federal response to September 11. Discussions explored leadership in moments of national crisis, the evolution of transportation security across aviation, transit, and maritime systems, and the importance of collaboration across agencies and political perspectives. The Forum also highlighted the Mineta Legacy Initiative,

which seeks to carry Secretary Mineta's values and example forward through a new generation of transportation leaders. Former U.S. Secretary of Transportation James H. Burnley IV, who served on the Forum's Host Committee, later described the event as "outstanding" and Secretary Mineta as "one of the most outstanding statesmen of the 20th and 21st centuries."



Former U.S. Secretaries of Transportation Rodney Slater and James H. Burnley IV (left) and national transportation leaders discussing the future of transportation security (right) at the 2026 Mineta Forum on Transportation Policy & Leadership.

The Forum represents one example of the Consortium's broader commitment to ensuring that transportation research and expertise reach audiences beyond academia. Since inception in 2018, there have been **more than 375 presentations by CSUTC researchers at conferences and professional meetings and 111 journal articles or published conference proceedings**. In addition, MTI hosts webinars featuring CSUTC researchers and provides professional development hours (PDH) needed by many professionals to maintain their certification.

CSU Chico's California Pavement Preservation Center (CP2C) provides a particularly strong example of research moving directly into professional practice. During the reporting period, CP2C researchers worked with subject-matter experts from Caltrans and industry to complete the third edition of the [Flexible Pavement Preservation Technical Advisory Guide](#), published for Caltrans in June 2026. CP2C also conducted its 2026 Pavement Preservation Academy for transportation professionals, continuing a long-running effort to strengthen pavement preservation knowledge and practice across California.

Fresno State Transportation Institute (FSTI) researchers and students shared CSUTC-supported work through major professional and academic venues. At the 2026 Transportation Research Board Annual Meeting, Dr. Aly Tawfik and students Kiran Nair and Alexis Perez presented research on the use of generative AI to optimize transit routes in Fresno and on fatal-crash rates on California roadways. FSTI also collaborated with Caltrans on a Research Connection webinar focused on roundabouts in California. *The webinar attracted more than 900 registrants.*



CSU Fresno professor, Dr. Aly Tawfik, along with students Kiran Nair and Alexis Perez, attended the 2026 Transportation Research Board conference in Washington, D.C. and presented their CSUTC research.

In October 2025, FSTI partnered with Tesla to host the AIM (Autonomy in Motion) Test-Drive Showcase at CSU Fresno. The purpose of the collaboration was to educate students and the public on the future of transportation, focused on autonomous vehicle technologies. Through vehicle displays, supervised demonstrations, and interactive engagement, the showcase provided hands-on learning opportunities and increased student and public exposure to real-world transportation innovation.



At FSTI's AIM Test-Drive Showcase, students and community members explored emerging autonomous vehicle technologies through exhibits, demonstrations, and hands-on interaction.

At CSU Long Beach, Dr. Hamid Rahai and Ryan Moffit filed a June 2026 *provisional patent application for Reducing Aerodynamic Drag with Half-Stepped Cylinder Sheets*, providing another example of the innovation and intellectual property emerging from transportation-related research within the Consortium.

MTI hosted a wide range of events and programs designed to ensure that CSUTC research is broadly disseminated and accessible to transportation professionals across the state. This reporting period, MTI hosted 40 events reaching more than 11,418 participants. The webinar [Conversation with the Authors: New Tricks for Old Bureaucracies](#) featured the authors of a book

developed with funding support from MTI. Drawing on their experience within the Office of Extraordinary Innovation at Los Angeles County Metropolitan Transportation Authority, the authors shared lessons on navigating institutional challenges and implementing innovative approaches to drive change within public agencies.

MTI's newest webinar series, [Everyday GenAI](#), provided transportation professionals with practical strategies for integrating generative AI into their everyday work. The series explored practical applications of generative AI, while also addressing limitations, risks, organizational policies, and strategies for maintaining accuracy and professional expertise. The second webinar, [Your AI Writing Assistant](#), generated enough interest that presenters Lisa Rose and Ramses Madou were invited to lead a related workshop at the ITS California Annual Meeting.

MTI also continued its popular [Trailblazer Tuesday](#) series, which brings transportation leaders to share their career journeys, leadership experiences, and perspectives on the industry. This reporting period featured Caltrain Executive Director Michelle Bouchard, COMTO (Conference of Minority Transportation Officials) President & CEO April Rai, former DART (Dallas Area Rapid Transit) President & CEO Nadine S. Lee, and national transportation and infrastructure policy leader Lynda Tran.



MTI's 2025–26 Trailblazer Tuesday series featured transportation leaders Michelle Bouchard, April Rai, Nadine S. Lee, and Lynda Tran.

MTI hosted *Research Snaps* webinars, a 30-minute bite-sized virtual lunch-and-learn, featuring CSUTC research projects such as [From TikTok to Transit: Storytelling for Emerging Mobility](#), [Intelligent Speed Assistance: Can Technology Help California Stop Speeding?](#), [Moving Goods](#), [Managing Impacts: Planning for Sustainable Freight](#), and [Beneath the Surface: Predicting Underground Corrosion](#).

Several examples demonstrate that this dissemination is leading directly to practitioner use of CSUTC expertise. In Santa Clara County, the VTA Board called for collaboration with independent research institutions, specifically identifying MTI, as it developed a data-driven approach to transit transformation. VTA Board's Vice Chair and Mayor of the City of San José, Matt Mahan,

recognized MTI's [contributions](#) to a workshop in April 2026 on the Future of Transportation in the region.

MTI's transit cybersecurity research generated similar practitioner interest at the federal level. After reading [Strengthening Cyber Resilience Across Illinois Transit Agencies](#), a Transportation Security Administration Surface Operations cyber specialist contacted MTI and noted that the research was directly aligned with TSA efforts to strengthen cyber resilience in the transportation sector. The project team subsequently offered a dedicated briefing for TSA staff, extending the work from research publication to direct knowledge exchange with federal practitioners.

Expert Advice and Consultation to Elected Officials and Transportation Decision-makers

CSUTC researchers are frequently called upon to provide independent research and subject-matter expertise to transportation agencies and decision-makers. One significant example continues to be MTI's work on transit passenger harassment. Following earlier legislative direction (SB 1161), MTI developed a survey instrument that was subsequently adapted by major California transit agencies collecting passenger-harassment data. CSUTC researchers are now [analyzing the resulting agency data](#) at the request of the California State Transportation Agency (CalSTA), demonstrating a full research-to-practice cycle in which an initial research product became a tool for statewide data collection and subsequent policy analysis.

MTI's [recent research on e-bike safety](#), *conducted at the request of the California State Legislature under SB 381*, also generated substantial interest from policymakers during the reporting period. Dr. Asha Weinstein Agrawal provided information and consultation to state legislative staff and local officials considering e-bike policy options, including staff from the offices of Assemblymembers Diane Papan and Marc Berman, a Walnut Creek city councilmember, and a subcommittee of the Carlsbad City Council. She also presented MTI's e-bike research to the California Assembly Transportation Committee in March 2026 and participated in a legislative staff briefing organized through the California State Senate in April. Importantly, the state legislature used the results of this study to shape California Assembly Bill 2346, legislation sponsored by the California Medical Association, that was passed to modernize e-bike safety laws.

Leadership

CSUTC faculty continue to provide state and national leadership in transportation research and policy. In July 2026, Dr. Kezban Yagci Sokat, SJSU Associate Professor of Business Analytics and CSUTC-funded researcher, was appointed to the Research and Data Subcommittee of the U.S. Department of Transportation's Advisory Committee on Human Trafficking. In this national advisory role, Dr. Sokat will contribute her research expertise to the Committee's work addressing human trafficking in the transportation sector.

To ensure that research results reach those responsible for managing change and to understand the challenges and opportunities in the industry, CSUTC Executive Director, Dr. Karen Philbrick,

prioritizes industry and association service. To that end, and during this period of performance, she chaired the TRB Transit Cooperative Research Program (TCRP) F-32 panel, "Culture Reform: Psychological Health and Safety at the Workplace – The Missing Elements of Successful Workforce Retention and Recruitment in Transit" and was elected to serve a three-year term on the TCRP Oversight and Project Selection (TOPS) Commission, providing guidance on transit research needs and priorities as well as oversight and evaluation of TCRP funded projects.

With an eye towards seamless and equitable connectivity, Dr. Philbrick was also elected to the Conference of Minority Transportation Officials (COMTO) national board and she continues to hold leadership roles across other key industry organizations, including the board of directors for:

- American Public Transportation Foundation (APTF)
- American Road and Transportation Builders Association (ARTBA)
- Academic Council for the Auto Innovators Alliance (Auto Innovators)
- International Transportation Learning Center (ITLC)

Finally, as a frequently invited speaker, Dr. Philbrick delivered over 50 presentations in this same time period, including multiple keynote addresses at such gatherings as the Alabama Road Safety Conference, the Women in Aviation annual event, the ITS America California annual conference, and more.

Awards

CSUTC faculty and students received numerous honors during the reporting period. Dr. Yongping Zhang of Cal Poly Pomona was named the [2026 WTS Los Angeles Educator of the Year](#), recognizing his contributions to transportation education, planning, modeling, and policy development. Dr. Zhang has also supported CSUTC workforce development by mentoring a Southern California team in the [Garrett Morgan Sustainable Transportation Competition](#).

Fresno State faculty and students also received significant recognition. FSTI Graduate Fellow Alexis Perez received the Outstanding Oral Presentation Award at the [2026 Central California Research Symposium](#). Dr. Hovannes Kulhandjian received Fresno State's 2025–26 Claude C. Laval III Award for Commercialization of Research, Innovation, and Creativity for his [CrossBot smart crossing-guard robot](#). Civil engineering student Alessandro Toledo received the 2026 CSU Trustees' Award for Outstanding Achievement, the Lyles College of Engineering Dean's Medalist award, and the [ASCE Region 9 Outstanding Civil Engineering Student Award](#).

Dr. Philbrick was awarded the prestigious American Road and Transportation Builders Association (ARTBA) Excellence in Academia Award for outstanding leadership, mentorship, and significant contributions to transportation education and research. Closer to home, "Women We Admire" named her one of the Top 50 Women Leaders of San Jose in 2025.

Workforce Development

Developing the next generation of transportation professionals remains one of CSUTC's core priorities. All full-scale Consortium research projects include students on the research team,

allowing students to work closely with faculty mentors while gaining practical experience in research design, data collection and analysis, technical writing, and professional communication. **More than 510 students have participated as research assistants on CSUTC research projects, learning valuable and transferable skills.**

The longer-term effect of these investments can be seen in student outcomes beyond the original funded project. At CSU Fullerton, two students presented research at the [2026 California Passenger Rail Summit](#) that grew directly from CSUTC-supported work. A CSUTC-funded student from SJSU also presented at that same conference.

MTI held the Mineta Summer Transportation Academy (MiSTA) in July 2026 at San Jose State University. Thirty-one high school students had the opportunity to learn about transportation careers and network with transportation professionals through hands-on activities, field trips, and lectures. [Experiences](#) included operating drones and flight simulators, exploring freight operations at the Union Pacific Intermodal Facility and SSA Marine Terminal at the Port of Oakland, learning about airport and transit operations, and touring active construction sites for VTA's BART Silicon Valley extension and California High-Speed Rail.



MiSTA students explore freight operations at Union Pacific's Oakland Intermodal Facility (left) and SSA Marine Terminal at the Port of Oakland (right).

Since 2006, MiSTA has introduced hundreds of high school students to the breadth of careers available in transportation, with its impact extending well beyond the two-week academy. MiSTA alum Lawrence Vigo, who participated four years ago, now studies planning, data, and GIS at UC Berkeley and recently began a Transportation Demand Management internship. Reflecting on the program's impact, Vigo shared, "MiSTA sparked my passion early for transportation. As someone who attended a primarily low-income public school and relied on public transit by default, MiSTA provided me with an opportunity to explore transportation careers and higher education." Fellow alum Noah Larson completed internships with BART and,

at age 18, was hired as a contractor with BART's Station Access department as he prepared to study urban planning at UC Davis. The experiences of MiSTA alumni like Vigo and Larson demonstrate how early exposure, hands-on learning, and connections with transportation professionals can help students turn an interest in mobility into education and career opportunities.

Through support from MTI, the Sonoma County Bicycle Coalition advanced bicycle safety and active transportation through several Safe Routes to School initiatives. At the 2026 Pedal Fest, the Coalition provided free bicycle helmets and professional fittings, *distributing 72 helmets to children, teens, and adults from across Sonoma County*. MTI also supported the Coalition's 2025 Green Transportation Challenge, which encouraged students to walk, bike, roll, carpool, or use transit. Forty-eight schools participated in April Walk & Roll to School Day activities, and 27 schools—with more than 11,000 enrolled students—distributed the Green Transportation Challenge to their school communities. For Ruby Bridges Walk to School Day in November 2025, 57 schools representing more than 17,500 students registered to participate. Schools also received a letter-writing challenge encouraging students to learn about Ruby Bridges and reflect on her legacy, resulting in 120 student letters that were forwarded to the Ruby Bridges Foundation.



MTI-supported Sonoma County Bicycle Coalition programs promote bicycle safety and active transportation in local communities.

MTI partnered with local and community-based organizations to build the future transportation workforce pipeline by supporting learning, development, and advancement opportunities. To celebrate Engineers Week 2026, MTI provided support to the ASCE San Jose Younger Members Forum, helping engage 405 elementary, middle, and high school students through hands-on engineering activities, guest lectures, and field trips. As part of the program, 150 high school girls visited the SJSU campus, where they gained exposure to college life, interacted with university students, and learned about educational opportunities within the CSU system. Similarly, MTI also supported 21 students visiting from Pescadero Middle High School, a small,

rural Title I school. The students, many of whom would be first-generation college students, had the opportunity to participate in an educational event hosted by SJSU's School of Planning, Policy and Environmental Studies. By helping overcome barriers to participation, MTI provided students with exposure to college opportunities, the CSU system, and experiences beyond their local community.

CSUTC partners also provide professional development and training opportunities for transportation professionals. At CSU Long Beach, the Joint Training and Certification Program ([JTCP](#)), a partnership with Caltrans and led by CSUTC-funded researcher Dr. Shadi Saadeh, continued to deliver statewide professional development and certification training to Caltrans personnel, local agencies, consultants, contractors, and other transportation professionals. The program provides instruction in areas including pavement and transportation engineering, construction, materials, asset management, leadership, and project delivery while providing a direct mechanism for transferring current research findings and industry best practices into the transportation workforce. At Fresno State, a professional development workshop for industry professionals was held in February focused on Practical GenAI Technology for Transportation.

Leveraging Funding

A key objective of the Consortium is to use SB1 investment as a foundation for attracting additional resources for transportation research, workforce development, professional training, and technology transfer. During the reporting period, CSUTC partners leveraged state support to secure more than \$5.1 million in additional funding from federal, state, local, and private-sector sources for research, workforce development, professional training, and technology transfer.

At San José State University, the Mineta Transportation Institute secured several new awards that expand programs initially supported through CSUTC and strengthen transportation research and workforce development across the CSU system, including:

- Union Pacific provided \$25,000 to expand the 2026 Mineta Summer Transportation Academy (MiSTA), allowing MTI to enhance the two-week high school program and provide students with additional exposure to transportation careers and the rail industry.
- MTI secured approximately \$309,000 to expand transportation leadership training and professional development for transportation agency staff through awards from the New Mexico Department of Transportation, BART, and the Metropolitan Transportation Commission (MTC).
- MTI was awarded more than \$1.1 million as part of a three-year Federal Railroad Administration CRISI project led by UC San Diego. Working with multiple California commuter railroads, the research will examine factors contributing to railroad trespassing, including built-environment characteristics and the experiences of unhoused populations near rail corridors. The project will also assess existing trespass-prevention practices and develop a toolbox to help railroads across the country replicate the research approach and implement resulting findings and recommendations.

- MTI secured \$2 million from Caltrans to support transportation research and related activities. Importantly, this funding extends beyond SJSU: portions of the award are supporting researchers at other CSU campuses, including Dr. Shams Tanvir at CSU Long Beach. This provides a strong example of how investments in the Consortium's administrative and research infrastructure can help create additional opportunities for faculty throughout the CSU system.

Other Consortium partners also attracted substantial external investment:

- The Fresno State Transportation Institute received \$375,000 from Fresno County Measure C to support continued institute operations.
- At CSU Chico, the California Pavement Preservation Center secured a \$940,000 Caltrans Pavement Preservation contract for 2026–2029, extending its longstanding research, training, and technology-transfer partnership with the state.
- CSU Long Beach researchers likewise secured significant additional funding. Caltrans awarded approximately \$1.48 million for Phase V of the Joint Training and Certification Program, while other awards included a \$200,000 National Science Foundation grant led by Dr. Ehsan Madadi and \$75,000 from the National Center for Sustainable Transportation for research led by Dr. Shadi Saadeh on life-cycle assessment and reclaimed asphalt pavement.

Taken together, these awards illustrate the broader value of SB1 investment in the CSU transportation research enterprise. Consortium funding helps establish the faculty expertise, research partnerships, workforce programs, and institutional capacity that allow CSU campuses to compete successfully for additional resources—and, in some cases, enables funding secured by one Consortium partner to create opportunities for researchers elsewhere in the CSU system.

4. Year 9 Detailed Research Activities

Consortium activities for Year 9 followed a similar pattern as the previous years. First, each partner received a modest amount of funding to complete high-priority research projects aligned with SB1. CSU Fresno and Long Beach both ran internal competitions, while CSU Chico focused on high-priority pavement research and workforce development activities through the California Pavement Preservation Center. SJSU/MTI focused on high priority projects that were identified by key stakeholders. Second, a CSU-wide competitive RFP process was led by MTI/SJSU. Selected projects are summarized below. It is also worth noting how valuable this program has become for faculty researchers across the CSU system. ***Dr. Masoud Ghodrat Abadi, CSU Sacramento Associate Professor, highlighted the impact of CSUTC support on both student research and professional development. He shared that one of his MTI-supported graduate students successfully defended his master's thesis and had a paper accepted for presentation at the Transportation Research Board Annual Meeting, while two additional students are gaining research experience through another CSUTC-funded project. Reflecting on these opportunities, Dr. Ghodrat Abadi wrote, "None of this would have been possible without [MTI's] support."***

A. CSUTC Partner Research

1. CSU Chico

CSU Chico, through the California Pavement Preservation Center (CPPC), is focusing its Year 9 research efforts on an expansion of its Year 8 work to improve pavement condition assessment using computer vision and machine learning. Building on earlier research using two-dimensional images and video, the expanded project will develop automated methods to identify and quantify distresses in asphalt and concrete pavement and explore the use of three-dimensional imaging, LiDAR, and GIS-based tools to assess conditions such as cracking, potholes, rutting, pavement depression, and concrete slab faulting. These tools are intended to reduce the time and subjectivity associated with traditional pavement inspections while improving pavement preservation and maintenance decision-making.

In addition, CSU Chico will continue the successful [Pavement Preservation Academy](#) updating its five existing pavement preservation training manuals with current knowledge and specifications and conducting a sixth Academy for pavement professionals. Key personnel include DingXin Cheng, R. Gary Hicks, and Lerosé Lane. To date, more than 284 pavement professionals from across California have received training through the Academy.

2. CSU Fresno

CSU Fresno, through the Fresno State Transportation Institute (FSTI), conducted an internal competitive RFP, which funded six research projects. The table below lists project titles and principal investigators.

Project Title	PI
Intra-Vehicular Network Testbed Research (expansion of prior Year 7 funding to develop more robust project)	Shahab Tayeb
Characterization of Ethernet Voltage Profiles for Network Health Monitoring	Alaeddin Bani Milhim
Digital Twin Based Automated Battery Research	Woonki Na
GEAR UP (Growing E-bike Access and Research for University Populations)	Nkenna Onwuzuruoha
Mitigating Cracking in Concrete Infrastructure: A Material-Based Approach for Pavement and Bridge Durability	Fariborz Tehrani
SMART-TWIN Phase II: Implementation Roadmap - Intelligent Digital Twin Ecosystem for Adaptive Transportation Systems	Hovannes Kulhandjian

3. CSU Long Beach

CSU Long Beach ran an internal competitive RFP through TRANSPORT, Transportation Research & Training, a collaboration between the College of Engineering and the Center for International Trade & Transportation. Eight projects were selected for funding. The table below lists project titles and principal investigators.

Project Title	PI
Development of an Innovative Multi-Objective Optimization Framework for Sustainable Roadway Asset Management	Vahid Balali
Evaluation of Climate-driven Near-surface Soil Moisture Fluctuation in Earthen Transportation Infrastructure	Amr Morsy
Intelligent Transportation Systems (ITS) Training Course for Rural and Tribal Communities	Shams Tanvir
Investigation of a Retractable Wing for an Unmanned Aerial Fire Tanker	Hamid Rahai
Microphysics of Ultrafine Particles from Regenerative Braking in Heavy-Duty Trucks	Ehsan Maddadi
Passive Cooling Technology for Safer, Longer-Lasting EV Batteries	Paul Ayegba
Smarter Construction: Using AI and Digital Models to Build Greener, Compliant Infrastructure	Joseph Kim
Strengthening America's Roadways with Durable Climate Smart Materials	Shadi Saadeh

4. San José State University (Research and Workforce Development Activities)

SJSU, through the Mineta Transportation Institute, has undertaken 5 projects as shown in the table below.

Project Title	PI
An Evaluation of the 2026 Viva CalleSJ Event	Richard Kos
Learning at 200 mph: Lessons for Better Passenger Rail from France and Spain	Eric Eidlin
The Future of Transit Policy Analysis	Adam Cohen
Strengthening Cyber Resilience Across Illinois Transit Agencies	Scott Belcher
What Do Americans Think About Federal Tax Options to Support Transportation? Results from Year Seventeen of a National Survey	Asha Weinstein Agrawal

MTI was also asked by the California Senate Transportation Committee to prepare a briefing paper on transportation finance for committee members. The paper, titled

Protecting California's State-Generated Transportation Revenue in a World of Electric Vehicles, was delivered to the Committee in late January 2026. In addition, MTI prepared a briefing memo on *Artificial Intelligence for Transit Asset Management* at the request of the CSUTC Board of Trustees. MTI continues to provide California stakeholders and elected officials with rapid-response research on trending transportation topics and high-priority research needs.



California State Transportation Agency Secretary Toks Omishakin recognizes the winning Dana Middle School team at the 2026 Garrett Morgan Sustainable Transportation Competition.

In addition to these research projects, MTI once again hosted the annual Garrett Morgan Sustainable Transportation Competition. The 2026 competition focused on e-bike safety with the theme **“Ride On, Ride Safe—E-Bike Style!”** Students were challenged to create a peer-to-peer video campaign teaching their classmates how to practice and advocate for safe e-bike riding. Projects addressed topics beyond helmet use and encouraged students to consider how schools, community organizations, and local leaders can provide safety education and resources for young riders. Sixteen teams from across the country entered the 2026 competition, with the winning team coming from [Dana Middle School](#) in Arcadia, California. The winning team was honored at MTI’s 34th Annual Awards Banquet and Convocation Celebration, where California State Transportation Agency (CalSTA) Secretary Toks Omishakin presented the students with their award. MTI compiled a [video with highlights](#) from the 2026 competition.

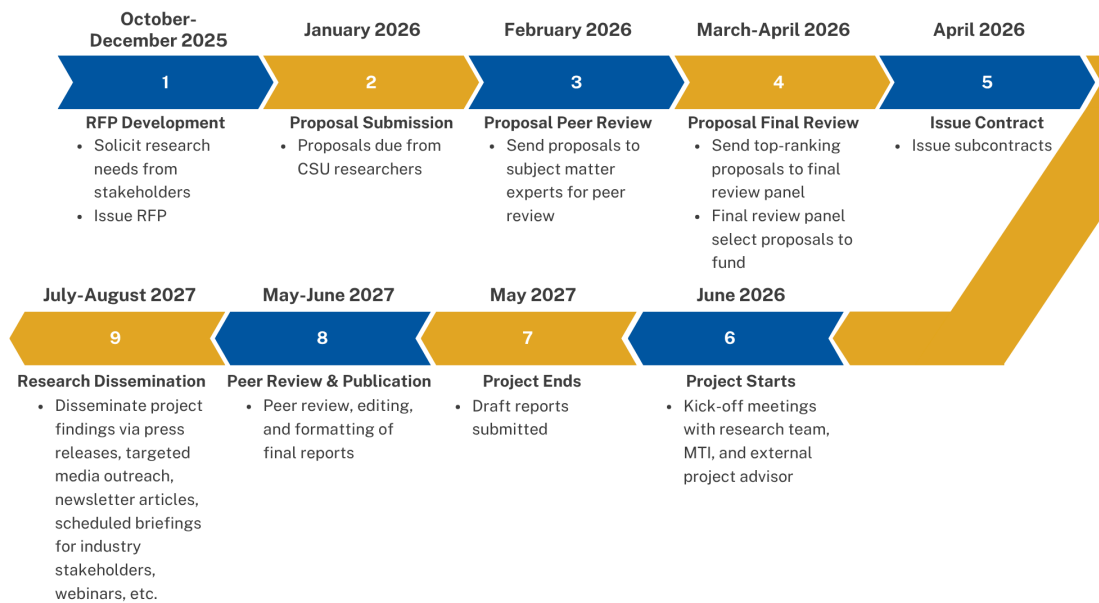
The competition also inspired additional student engagement beyond participating teams. Three graduating seniors from Cardozo Education Campus’s TransSTEM Academy in Washington, D.C., drew on the Garrett Morgan e-bike safety initiative for a capstone project completed through a virtual work-study experience with Introducing Youth to American Infrastructure (iyai+). The students developed an e-bike safety video, met with

District officials, and submitted comments and recommendations to a D.C. public document addressing ways to improve e-bike safety in the region.

As lead institution for CSUTC, MTI also works to engage, connect, and promote research and researchers across the Consortium. MTI continues to expand a [section of the Consortium website](#) to highlight the wide range of expertise and CSU campus involvement. This information helps direct media representatives to CSU researchers for interviews, and also serves as a means to develop research collaborations across institutions.

B. CSU-wide Competitive RFP Process

MTI/SJSU, in collaboration with the CSU Chancellor's Office, implemented the Year 9 CSU-wide RFP process using the following approach outlined in the figure below.



Overview of the Year 9 Competitive RFP Process

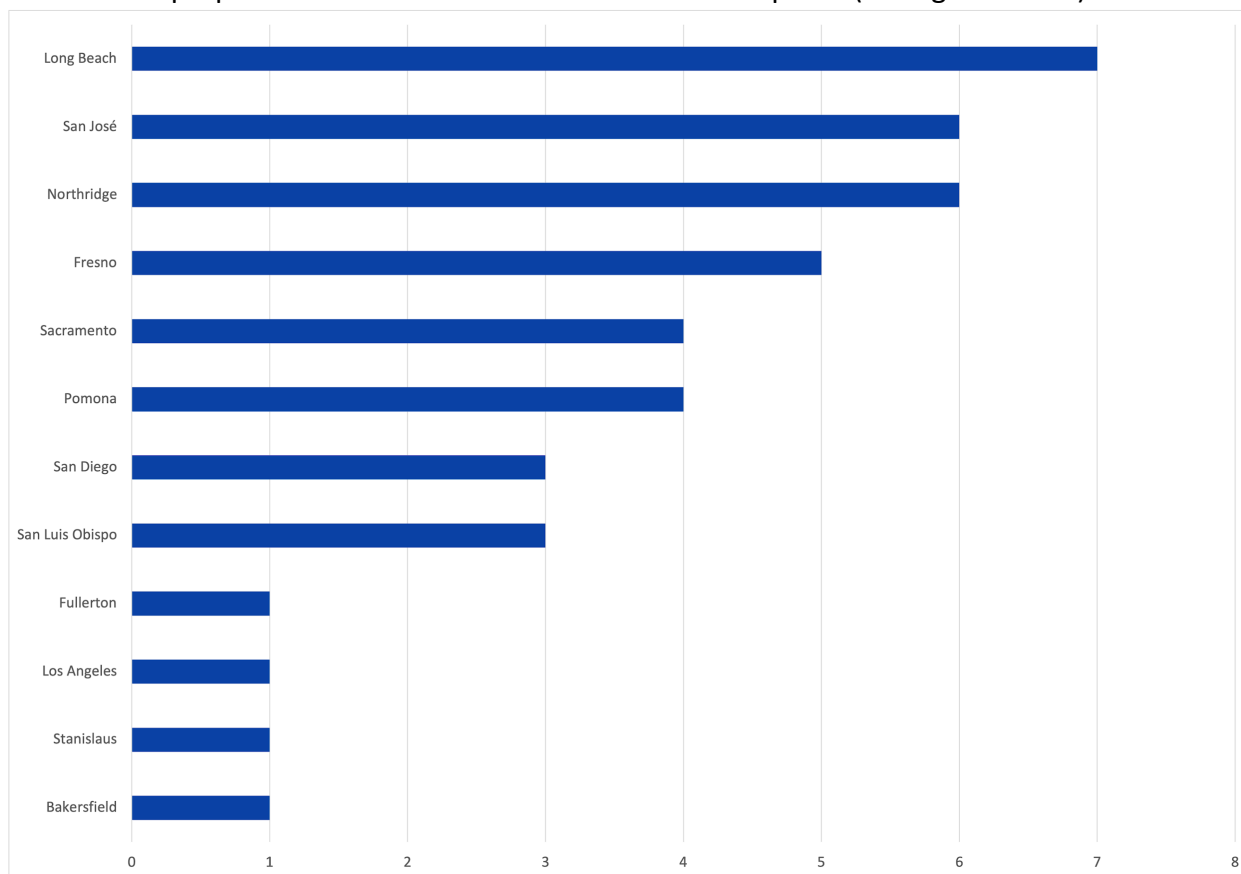
As part of the first stage of RFP development, MTI solicited research needs from a wide range of stakeholders including the California State Legislature, CalSTA, California Transportation Commission, California Association of Councils of Government, California Department of Housing and Community Development, Caltrans, California Air Resources Board, and many others. A total of 5 research needs were received and incorporated into the RFP. The RFP was posted to the Chancellor's Office InfoReady site in November 2025 and an announcement was broadly distributed to all CSU campuses and the Chancellor's Office for dissemination.

Proposals were received January 23, 2026. MTI coordinated with 28 subject matter experts to conduct initial proposal reviews. After this first stage of review, the final review panel which includes representation from Caltrans, California Transportation Commission, and California-based academic institutions (non-CSU) select the final proposals to fund. Subcontracts were then issued to campuses with a start date of June 1, 2026.

Each project starts with a kick-off meeting with MTI, external advisors, and the research team. Projects typically take 12 months to complete. Once draft reports are submitted to MTI, each one is peer reviewed, and edited and formatted prior to publication. Finally, MTI engages in a comprehensive technology transfer program to disseminate findings. This program includes a press release, newsletter article, targeted outreach to key stakeholders, and a social media campaign.

Summary of Proposals Received

A total of 42 proposals were received from twelve CSU campuses (see figure below).



Summary of Proposal Submissions, by Campus

Summary of Proposals Awarded

The table below identifies all projects selected through the competitive RFP process. For the Year 9 CSU-wide program, five different campuses are represented as project leads. External advisors represent a number of key California stakeholders including Caltrans, California Air Resources Board, California Transportation Commission, among others. Subcontracts have all been issued between the SJSU Research Foundation and the respective campus Offices of Sponsored Programs. MTI held a kick-off meeting with each PI and the project's external advisor with detailed information regarding managing their project and submitting regular progress reports.

Research Projects Funded through the CSU Competitive RFP Process (Year 9)

Title	PI	CSU Affiliation	External Advisor Organization
Accelerating Project Front-End Delivery of SB1 Projects: Rethinking A&E Contracting	Ghada Gad	Cal Poly Pomona	CSUTC Advisory Board
Application of Video Analytics and Surrogate Safety Measures to Evaluate Design Features of Multilane Roundabouts	Arash Jahangiri	SDSU	Caltrans
Improving Methods for Assessing Walkability Using AI-Based Street Level Audits	Bruce Appleyard	SDSU	California Air Resources Board
Innovating TOD Operationalization: A New Technology-Based Framework Leveraging Street-Level Imagery and Computer Vision	Ayda Kianmehr	SJSU	Caltrans
Optimizing Multimodal Freight and Passenger Corridors in California: A Framework for Integrated Investment Decisions	Costanza Rampini	SJSU	California Transportation Commission
Regional Transportation Impact Fees: Institutional Mechanisms, Equity Impacts, and Revenue Yield	Shishir Mathur	SJSU	Association of Monterey Bay Area Governments
Seismic Vulnerability and Sustainability Assessment of Transportation-Adjacent Buildings	Tadeh Zirakian	CSU Northridge	Caltrans
Static and Seismic Performance of Culverts with Lightweight Backfills	Amr Morsy	CSU Long Beach	Caltrans

C. Final Publication Process

All research projects undertaken as part of the CSUTC result in a final report. Research teams submit a draft version of the report to MTI and MTI manages a technical peer review, professional editing and formatting, and publication of the final report on the CSUTC website. Finally, to move research results into practice, a robust technology transfer program is used, including promotion via press releases, social media, and newsletters.

CSUTC remains dedicated to addressing the complex nature of today's mobility challenges to advance the body of usable transportation knowledge and identify implementable solutions for California.