



IIJA

INFRASTRUCTURE INVESTMENT AND JOBS ACT

TRANSIT AND COMMUTER RAIL AND INTERCITY PASSENGER RAIL SUB-WORKING GROUP ACTION PLAN

DECEMBER 2022

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Kyle Gradinger, Chief and Momoko Tamaoki, Assistant Chief

Aaron Bonfilio, SBCAG

Alex Davis, SCRRA

Alison Army, OCTA

Amanda Ha, Caltrans - CallTP

Amar Cid, Caltrans – CORE

Amber Collins, Calaveras Council of Governments

Amber Crabbe, SFCTA

Amy Thomson, TransForm CA

Andrew Cook, Caltrans – DRMT

Andrew Heidel, SFCTA

Andy Furillo, Caltrans – DRMT

Anna Devers, SLOCOG

Anthony Simmons, SamTrans

Antonio Johnson, DOT

Asaf Nagler, ABB

Ashad Hamideh, LA Metro

Barbara Lloyd, Impacts USA

Barry Remis, COAST + SBBIKE

Bill Elrick, CAFCP

Brian Travis, Caltrans – DRMT

Bruce Abanathie, SCVTA

Carlo Luzzi, POLB

Chad Edison, CalSTA

Chad Riding, Caltrans – DRMT

Charlene Lee Lorenzo, DOT

Chris Flores, SacRT

Christina Watson, TAMC Monterey

Claire Grasty, VCTC

Clarissa Hernlund, STANCOG

Cliff Thorne, OCTA

Craig Bosman, Bay Area Metro

Dan Leavitt, SJRRC

Danny Veeh, SANDAG

Daryl Halls, Solano Transit Authority

David Ripperda, SCTA

David Sforza, Assembly

Dayle Withers, OCTA

Denix Anbiah, Caltrans DRMT

Donna DeMartino, OCTA

doreen Morrissey, Caltrans PMP

Edith Robles, STANCOG

Eli Lipmen, MoveLA

Emily Heard, SFMTA

Emma Goldsmith, STANCOG

Esther Odufuwa, Energy

Ethan Elkind, UC Berkeley Law

Farra Bracht, Assembly

Felipe Fuentes, The Apex Group

Grieg Asher, SCAG

Gwen Litvak, Bay Area Council

Harmony Bulloch, GO-Biz ZEV

Heidi Busslinger, OCTA

Henry Symons, BART

Isael Ojeda, STANCOG

Ivan Garcia, BCAG

Jacklyn Cuddy, CalACT

James Andrew, LA Metro

James Barba, Senate (Toni Atkins Office)

James Tipton, CARB

Jane Brown, HSR

Jasmine Amanin, DOT

Jason Baker, SVLG

Jay Fuhrman, LA Metro

Jean Foletta, Tranova LLC

Jeff Dunn, SCRRA

- Jeff Findley**, *Madera CTC*
- Jennifer Farinas**, *SCRRA*
- Jennifer Pollom**, *Shasta Regional Transportation Agency*
- Jennifer Williamson**, *SANDAG*
- Joanna Capelle**, *OCTA*
- Joseph Vaughn**, *DOT*
- Justin Hwang**, *CARB*
- Kara Vucich**, *Bay Area Metro*
- Kelly Obranowicz**, *Bay Area Council*
- Kenny Kao**, *Bay Area Metro*
- Kim Tucker**, *OCTA*
- Kristen Peterson**, *SVLG*
- Lily Madjus Wu**, *TJPA*
- Linda Hunter**, *Rincon Inc.*
- Liya Rechtman**, *Caltrans Leg Affairs*
- Lorelle Moe-Luna**, *RCTC*
- Louis Vidaure**, *SBCTA*
- Mark Watts**, *Smith, Watts & Company*
- Mary Martella**, *CCC*
- Matt Baker**, *Planning & Conservation League*
- Maya Wallace**, *Caltrans – DRMT*
- Megan Taylor**, *OCTA*
- Melissa White**, *Senate*
- Michael Morris**, *DOT*
- Michael Pimentel**, *CTA*
- Michael Rhodes**, *SFMTA*
- Michael Rosson**, *SACOG*
- Michelle Stewart**, *SCRRA*
- Mike Woodman**, *NCTC*
- Niccolo De Luca**, *TJPA*
- Nick St. Cook**, *StanCOG*
- Nicole Cheng**, *ClimatePlan*
- Otis Greer**, *SBCTA*
- Patrick Pittenger**, *DOT*
- Paul Golaszewski**, *CTC*
- Paul Hernandez**, *East Bay Energy*
- Pete Rodgers**, *SLOCOG*
- Peter Chen**, *Energy*
- Peter Engel**, *Contra Costa Transport Authority*
- Peter Skinner**, *SamTrans*
- Priscilla Freduah-Agyemang**, *SCAG*
- Rich Tree**, *Tulare RT*
- Robert Padgett**, *Capitol Corridor*
- Rosa Park**, *STANCOG*
- Sarah Catz**, *UC Irvine*
- Sarkes Khachek**, *SBCAG*
- Savannah Speerstra**, *DOT*
- Scott Sauer**, *Caltrans – DOTP*
- Shannon Fiala**, *CA Coastal Commission*
- Sharon Greene**, *InfraStrategies*
- Sheldon Peterson**, *RCTC*
- Shichen Fan**, *Fresno COG*
- Stacey Mortensen**, *SJRRC*
- Steve Fox**, *SCAG*
- Steve Smith**, *SBCTA*
- Steven Jones**, *AC Transit*
- Suresh Ratnam**, *Caltrans – District 1*
- Susan Freedman**, *SANDAG*
- Susan Shaheen**, *UC Berkeley*
- Tami Grove**, *CCC*
- Ted Matley**, *DOT*
- Teresa Favila**, *CTC*
- Tilly Chang**, *SFCTA*
- Tom Chamber**, *SCRRA*
- Tracy Harrison**, *Caltrans – DRMT*
- Tyler Munzing**, *American Council of Engineering Companies*
- Tyron Klunke**, *SJRRC*
- Weijian Ni**, *Caltrans – Budgets*
- Wendy King**, *Caltrans – DRMT*
- Will Ridder**, *San Joaquin Valley Regional Rail Authority*
- Yachun Chow**, *CARB*

INTRODUCTION

The Infrastructure Investment and Jobs Act (IIJA, P.L.117-58) is a federal bill that addresses provisions related to Federal-aid highway, transit, highway safety, motor carriers, research, hazardous materials, and rail programs of the U.S. Department of Transportation (U.S. DOT). It also includes federal policy direction and funding in the areas of climate action, zero-emission vehicle deployment, social equity, goods movement, and multi-modal transportation investment sought by the California State Transportation Agency (CalSTA) and many California transportation stakeholders.

CalSTA is leading the statewide IIJA Transportation Implementation Working Group comprised of state and local transportation agencies, the U.S. Department of Transportation and its sub-agencies that administer IIJA programs including the Federal Transit Administration (FTA) and Federal Railroad Administration (FRA), and other transportation stakeholders. Each entity plays a vital role in implementing this new law and should work collectively to develop a common understanding of IIJA and develop action plans for successful implementation.

The California Department of Transportation's (Caltrans) Division of Rail and Mass Transportation (DRMT) convened IIJA implementation sub-working groups for transit, commuter rail, and intercity passenger rail on January 28, 2022. These sub-working groups served as a platform for state/local agencies as well as other stakeholders to come together to exchange their knowledge, expertise, and experiences so they can identify priorities, potential risks, and play a vital role in successfully implementing transit and rail-specific provisions of IIJA.

The DRMT-administered sub-working groups have representatives from California State government, intercity passenger rail Joint Power Authorities (JPAs), commuter rail agencies, transit agencies, other partner agencies, and community stakeholders. The focus of the Sub-Working Groups is coordinating to find

opportunities to maximize the benefit from IIJA to California's transit, commuter rail, and intercity passenger rail systems. The Sub-Working Groups have met regularly to discuss important items for implementation, potential projects, and priorities. The Group has also coordinated to investigate financial aspects of IIJA so that agencies are prepared for the funding and project management aspects of IIJA.

PRIORITY CHALLENGES, GROWTH AREAS, AND OPPORTUNITIES FOR IIJA INVESTMENTS

Driver shortage and operational constraints

Problem statement: The Pandemic's broader economic disruptions exacerbated a shortage of transit and rail operators. In short, many bus drivers retired or left for positions in other sectors that offer higher pay and/or lower-stress work. Filling those positions has proven difficult, and wage increases – the most common tool transit agencies have deployed to address this challenge, according to a Caltrans-administered survey of transit agencies on their experiences with employee shortages – have put additional pressure on already-constrained operating budgets. Coupled with a lack of training resources and barriers to using the resources that are available, commercial license test appointments, and other factors, transit and commuter rail agencies across the state are struggling to find enough workers to keep their services running. This has led to reduced service levels that suppress transit ridership and make transit services a less convenient option for the public. Accordingly, it is imperative for people's access and mobility that the shortage be addressed expediently and effectively.

Opportunities to leverage IIJA programs: Several slices of IIJA funding are reserved for transportation workforce development initiatives. For example, the Low and No Emissions Grant Program includes a 5 percent cutout for employee training pertaining to transit fleet emissions reduction, the Public Transportation Technical Assistance and Workforce Development Program supports general transit workforce development and transition, and rural transit agencies' workforces can benefit from the Rural Transportation Assistance Program and National Rural Transit Assistance Program. Caltrans may also consider coordinating with FHWA on strategies for using funding from workforce development programs they administer, such as the On-the-Job Training Program and Disadvantaged Business Enterprises program, for transit-focused workforce development programs. Beyond employee training programs, there are several other steps Caltrans can take to reduce constraints on operation of transit service and accordingly help alleviate the shortage. These steps include partnering with colleges and universities on transit workforce development, coordinating with the California Air Resource Board (CARB) on workforce development opportunities associated with investments in cleaner transportation, coordinating with DMV to prioritize and expand capacity for bus driver commercial license testing (the majority of transit agencies that responded to the aforementioned survey cited difficulty scheduling license test appointments as a contributing cause of their driver shortages), and convening a working group on strategies for reforming the Transportation Development Act to better acknowledge and address transit agencies' operational needs.

Capital project costs

Problem statement: Studies show that it is more expensive to deliver transit capital projects in the U.S. than in other countries. For example, an [Eno Center for Transportation report](#) found that tunneled transit projects are more than twice as expensive per mile in the U.S. than in the

next-most-expensive country (Japan). Experts have not pinpointed a single cause of this, but possible contributing factors include increasing costs of supplies and materials, inflation, trade regulations, labor practices, the structure of federal and state transportation funding programs, prolonged environmental review processes, and the unique politics and culture surrounding U.S. transportation. IIJA programs still have some of the structural issues that may affect U.S. transit projects' costs and return on investments, such as differing funding cycles and requirements for non-Federal matching funds. Regardless of the specific cause, however, the project delays, cost overruns, and resulting modifications to transit projects stemming from their expensive nature reduce transit ridership and can prevent needed improvements to transit and rail infrastructure from happening at all.

Opportunities to leverage IIJA programs: Despite the challenges described above, IIJA programs' increased size and stability relative to previous transportation packages presents California with unprecedented opportunities to deliver a coordinated series of mutually beneficial projects that facilitate high-quality, heavily used transit services. To this end, Caltrans has leveraged IIJA funding to create ten new transit-focused positions in District offices, enhancing our ability to coordinate with local transit agencies on project evaluation and delivery, as well as nine new positions at DRMT that will expand our broader capacity to plan for and administer state and federal transportation funds. Leveraging these new resources, Caltrans should cooperate closely with federal officials to help transit agencies fulfill matching fund requirements using creative methods such as toll credits and in-kind support; help agencies build support for, obtain full funding for, complete environmental review of, and deliver transit projects that receive IIJA grants; collaborate with FTA through regular meetings (building on the in-person session at the 2022 CalACT Autumn Conference) on stronger federal regulations to ensure transit agencies don't face sudden cost increases or order cancellations when procuring equipment and infrastructure; and coordinate with Districts and

transit agencies to update the Statewide Transit Strategic Plan to outline today's statewide transit needs. The Strategic Plan should include funding plans for capital projects – including construction of new transit infrastructure and enhanced maintenance of existing transit facilities – that help meet these vital statewide needs.

Zero-emission fleet conversion

Priority Growth Area: CARB's Innovative Clean Transit (ICT) Regulation mandates that all California transit agencies convert their bus fleets to zero-emission by 2040, with the goal of reducing transit vehicles' contribution to air pollution and greenhouse gas emissions. There is also momentum towards converting fleets for intercity and commuter rail services in the state to zero-emission vehicles, including chargeable zero-emission rail equipment that can operate on non-electrified tracks. Several zero-emission technologies for such buses and trains are available, including battery electric and hydrogen fuel cell buses and locomotives, but these technologies are still in early generations relative to the natural gas and diesel vehicles that comprise the backbone of transit fleets today. As a result, zero-emission vehicles are expensive to procure (battery-electric buses cost approximately twice as much per vehicle as a natural gas bus, for example), are produced by a limited number of suppliers, can face performance limitations that restrict the types of transit routes on and environments in which they can operate, require charging, fueling, and maintenance facilities that differ significantly from what transit agencies currently utilize, and in some cases do not yet have regulatory approval to operate. As a result, there is a risk that without significant assistance the ICT regulation will force transit agencies to cut service and redirect constrained operational resources to comply with the mandate, not only compromising the availability of environmentally friendly transit options but reducing overall access and mobility for the public, particularly people who reside in historically disadvantaged communities.

Opportunities to leverage IIJA programs: IIJA expanded funding for the Federal Transit Administration's Low or No Emission Vehicle (Low/No) Program, 75 percent of which is eligible for projects to procure, install charging and fueling infrastructure for, or provide other support for zero-emission battery-electric and hydrogen fuel cell buses. To minimize the need for transit agencies to conduct repetitive, administratively burdensome work, Caltrans should facilitate coordination between ARB and FTA to ensure ICT-required Zero-Emission Bus Rollout Plans align with the Zero-Emission Fleet Transition Plans required of Low/No recipients. Caltrans also should examine opportunities for and facilitate programs that enable transit agencies to transition to zero-emission services and meet the ICT requirement more affordably. Such programs may allow agencies to share or lease buses rather than purchasing them independently, for example. For intercity and commuter rail fleet conversion, additional coordination with ARB and FRA will be required. Further, the sub working group identified a need to develop a new, dedicated state funding source for zero-emission fleet conversions to avoid service impacts and minimize the financial burden ICT places on transit agencies, along with a need for additional research on optimal zero-emission transit vehicle technologies for specific operating environments such as hilly terrain and long-haul routes.

California State Rail Plan & FRA Corridor Identification and Development Program

Priority Growth Area: The California State Rail Plan envisions a coordinated statewide network of regional rail, conventional intercity rail, high-speed rail, and intercity bus services including those that connect to rail stations. This network plan calls for making service more frequent and reliable on the state's three existing intercity rail corridors, establishing several new corridors for intercity and regional services, and providing seamless transfers between train, transit, and bus services offered by a variety of operators. Federal funding will be needed to implement

the Plan's vision, and FRA's Corridor Identification and Development Program (CIDP) will create a pipeline of projects to help guide IIJA rail funds. While the CIDP is specifically for intercity passenger rail corridors, regional rail services that utilize or complement intercity corridors also stand to benefit from projects in the CIDP pipeline.

Opportunities to leverage IIJA programs: Caltrans should coordinate with the JPAs, Amtrak, California High-Speed Rail Authority, commuter rail agencies, other prospective providers of passenger rail services, and host freight railroads to include these stakeholders in State Rail Plan development and enter all intercity train services envisioned in that plan into the CIDP. Given the number of corridors involved and constraints on how many of them can enter the pipeline at any given time, this may involve multiple applications over several years, requiring continuous leadership by Caltrans staff overseeing this effort. This leadership team, applying its deep understanding of California's railroad network, can clearly outline in applications how a variety of infrastructure projects – including some that may not be physically on the corridor at hand – are pivotal to providing sufficient passenger train service on each given corridor.

Cal-ITP

Priority Growth Area: The California Integrated Travel Project (Cal-ITP) is performing a critical function in modernizing and streamlining rail and transit travel throughout California. While transit riders in California today often must use an array of fare media to get around their communities, Cal-ITP is working with rail and transit agencies to enable the technological and policy framework for seamless, single-payment-method travel using one contactless credit or debit card on all bus, ferry, and train services statewide. Several demonstration projects of Cal-ITP's fare collection technology are ongoing, with transit agencies including Sacramento Regional Transit and Monterey-Salinas Transit participating. When fully rolled out, this fare collection technology

will further facilitate verification of discount fare eligibility statewide and enable fare capping more broadly than is possible today, making transit a more affordable and convenient option for everyone, especially aging adults and low-income riders. (The technology does not preclude transit agencies from accepting cash fares.) Also, Cal-ITP is collecting and analyzing extensive data on the performance of buses that utilize the State Highway System. This data can help Caltrans identify chokepoints affecting transit reliability on state highways and deliver projects that prioritize transit at these chokepoints while also helping transit agencies more accurately provide arrival time predictions to customers. This vital program relies on one-time funds and would benefit from sustainable funding to institutionalize and expand across the state.

Opportunities to leverage IIJA programs: Several of the smaller IIJA funding programs are strong fits for the initiatives related to transit data and technology that Cal-ITP leads. DRMT, Cal-ITP, and Districts should work together to coordinate with transit agencies to, based on the unique aspects of different transit systems, develop a statewide funding plan that mixes innovative, IIJA-eligible improvements to payments and bus-tracking technology and other, more grassroots measures such as effectively targeted, LCTOP-funded fare subsidies that together make transit a more reliable, equitable, and user-friendly product.

Emergency funding for passenger rail

Priority Growth Area: The State Highway Operations and Protection Program has a fix-it-first policy and leverages dedicated federal and state funding sources for emergency highway projects, but there is no equivalent funding mechanism for emergency projects to restore passenger rail services even though these are similarly vital, publicly funded assets. As a result, when emergencies occur rail must seek out novel sources of funding or try to compete for discretionary funding programs. This makes repairs to restore passenger rail services much more expensive and uncertain. In some cases,

tracks have remained closed for months after sustaining damage from wildfires and/or other disasters, leading to extended service disruptions that deter people from utilizing the rail system. For example, Pacific Surfliner and Metrolink services through San Clemente on the LOSSAN corridor shut down for months in Fall 2022 after a storm surge damaged the tracks, and the repair project needed to restore service has required discretionary State Transportation Improvement Program funds. Further, projects needed to maintain safe and reliable service – even those with strong political support – can be difficult to fully fund. For example, the Del Mar Bluffs project was recently allocated \$300 million in funds through the state budget, but this vital climate change adaptation project will still require billions of dollars more to successfully complete.

Opportunities to leverage IIJA programs: FEMA programs expanded under IIJA with potential to be used on emergency rail transportation projects include the Intercity Passenger Rail, Emergency Support Function 1, and Public Assistance Programs. Caltrans should also leverage IIJA's rail-eligible programs and coordinate with partner agencies to plan and deliver preventative maintenance projects that improve the resiliency of rail infrastructure and services and/or facilitate more expedient, safe restoration of rail service should an emergency occur.

