

BCAG TIRCP/ZETCP Allocation Package - Narrative

The Butte County Association of Governments (BCAG) is submitting this TIRCP/ZETCP Allocation Package for the following projects:

1. Developmental components of North Valley Rail (NVR)
2. Butte Regional Transit Zero-Emission Deployment

The table below details the funding request for BCAG's TIRCP/ZETCP allocations:

Fund	Amount Requested	Project
TIRCP (FY 23/24)	\$10,488,545	North Valley Rail
TIRCP (FY 24/25)	\$4,511,455	North Valley Rail
TIRCP (FY 24/25)	\$6,002,814	Zero-Emission Deployment
ZETCP (Years 1-4)	\$2,986,518	Zero-Emission Deployment

The total request for the North Valley Rail project is \$15,000,000 in FY 2023/24 and 2024/25 TIRCP funds. The total request for the Zero-Emission Deployment project is \$8,989,332 in FY 2024/25 TIRCP and ZETCP (Years 1-4). BCAG will utilize the maximum administrative share of \$239,893.

i. Funding and Service Actions in the region:

BCAG is the Metropolitan Planning Organization, Regional Transportation Planning Agency, and owner and operator of Butte Regional Transit. As the RTPA, BCAG is requesting TIRCP and ZETCP allocations for the projects listed above.

Butte Regional Transit (B-Line) utilizes funds appropriated in the Transportation Development Act (TDA) and various FTA operational funding, i.e., 5311, 5311(f), 5307. B-Line is currently not operating in deficit and has available TDA for continuing fixed route and dial a ride services, as well as contemplated Non-Emergency Medical Transportation and implementation of microtransit. Additional resources are being developed with the expansion of advertising throughout the system. Operational expenses as defined do not and are not expected to impact existing and future capital needs affiliated with the operation of B-Line. As such, there are no SB-125 operating funds requested by any STA-eligible transit operator in Butte County.

The operational expenses and revenue needs associated with the NVR project are being developed and are not yet fully understood. Better estimates are expected as project development moves forward and will be addressed with updated allocation packages as requested or as required. Rough estimates at this early stage indicates an approximate 40-50% farebox revenue.

ii. **Justification of regional strategy to utilize SB 125 for capital and operational expenses for improved outcomes:**

Project 1: North Valley Rail

This question is difficult to answer at this time as the operational expenses affiliated with the development of NVR are not yet fully understood. It is the intent of the region to seek out and obtain operational revenue streams in partnership with regional, state and federal partners, such that the operational stability of BRT fixed route, dial a ride, NEMT and Micro-transit services are not adversely impacted. The implementation of a regional rail service connecting to a larger system is complicated. The NVR must operate uniquely and not diminish the existing regional public transit services operated by BRT. Information on NVR can be found at <https://northvalleyrail.org/>.

As BCAG participates in the development of NVR, consideration of integration with existing regional public transit services operated by BRT is an essential task and is currently analyzing and planning to implement the results of a recently completed route optimization study. In addition to optimizing routing, BCAG has approved 5307 funding and will solicit proposals for a mobile and cashless ticketing system with affiliated hardware and platform capable of integrating all contemplated transit services operated by BRT. BCAG recognizes the need to invest in how public transit in Butte County is utilized and is updating all elements of our system to establish a more user focused experience and accommodate additional public transit investments. It is our expectation NVR will provide an incentive to use available forms of public transit in the region to get to and use this contemplated service connecting other regions.

Project 2: Butte Regional Transit Zero Emission Deployment

As the owner and operator of B-Line, BCAG is requesting TIRCP and ZETCP funds to convert its fleet to zero-emission per the CARB ICT regulation. BCAG has prepared the Zero Emission Bus Fleet Transition Study¹ to demonstrate how B-Line will achieve a zero - emission fleet by 2040.

The requested project development and capital funds will be used for zero-emission vehicle deployment at the Butte Regional Operations Center in Chico (see Attachment 1), such as purchase of zero-emission vehicles, hydrogen mobile refueling station, infrastructure upgrades, and design/planning to deploy these advanced technologies at B-Line's facility in Chico. This project is instrumental to implementing the Zero Emission Bus transition Study and BCAG's greenhouse gas reduction goals set forth in the RTP/SCS. Additionally, the zero-emission buses purchased through this program will provide direct and meaningful access to priority populations in Butte County.

The deployment of zero emission technology will modernize B-Line's operations, significantly reduce GHGs, and enhance transit safety. As seen in the attached Benefits Calculator Tool, the

¹ The Study is available here: <http://www.bcag.org/documents/BCAG-ICT-Rollout-Plan-2023.pdf>

project will reduce 558 total MTCO_{2e}, over 111,000 gallons of fossil fuel use, and save \$752,014 in energy and fuel costs.

iii. **Justification of use of funding for requested projects:**

Project 1: North Valley Rail

The NVR project accomplishes the State of California's initiatives to reduce greenhouse gas emissions, including SB 125, Executive Order N-19-19, and the CAPTI, by transforming regional and intercity transportation in the northern Sacramento Valley. The project will provide a convenient and environmentally sustainable mode of transportation and reduce nearly 40.9 million vehicle miles traveled annually along the 75-mile corridor. Justification for the project can be defined in nine categories:

1) **Safety:**

The proposed North Valley Rail Line from Sacramento, CA to Chico, CA aims to decrease vehicular related injuries and fatalities on roadways and protecting both motorized and non-motorized travelers and communities from safety risks. The current Project envisions providing an alternative mode of transportation to vehicular transportation through increased rail ridership which will remove cars from the roads, reducing the likelihood of accidents. Preliminary ridership studies estimate at least 592,000 new riders annually for the North Valley Rail. According to the National Safety Council Injury Facts report, passenger deaths from passenger vehicles are 17 times higher than deaths from passenger trains. This Project anticipates avoiding at least 40,900,000 in vehicle miles traveled (VMT) annually from the area highways, which should significantly reduce the likelihood of deaths.

2) **Greenhouse Gas Reduction**

The Project will reduce GHGs by approximately 336,000 MTCO_{2e} over an assumed 30-year lifetime. As seen in the attached Benefits Calculator Tool, the quantified co-benefits significantly reduce GHGs in the North State region:

- 1.4 billion VMT reduced over the 30-year lifetime;
- 37 million fossil fuel use reduction;
- \$115,709,957 energy and fuel cost savings and \$818,797,194 in passenger travel cost savings.

3) **Environmental Sustainability:**

The Project will significantly reduce VMT by providing daily intercity and commuter passenger rail service to northern California, and other rail connections in other parts of the state, giving residents traveling to work, school, medical or recreational travel providing an affordable, safety alternative to vehicular travel. The introduction of passenger rail service from Sacramento to Chico has the potential to provide significant environmental benefits. By reducing the number of cars on the road, the project will help to lower transportation-related pollution. As stated, the Project will avoid at least 40,900,000 VMT annually, resulting in improved air quality in the region.

In addition, the new rail service will provide an alternative mode of transportation for people in the region, particularly those in historically disadvantaged communities along the Rail, of which 80% of census tracts on or adjacent to the rail are HDC. It also provides a critical transportation lifeline and improved access to employment and educational opportunities for these disadvantaged populations, including the many low-income and minority communities along the project corridor. This will achieve the programmatic goal of providing at least 25 percent of TIRCP funds that provide a meaningful, direct, and assured benefit to disadvantaged communities, per SB 535 and Section 75221(c) of the PRC.

The new passenger rail line will also incorporate energy-efficient investments at the four new stations. This includes electrification and charging infrastructure for zero-emission vehicles at the four new stations. The new stations will prioritize public transit and active transportation access over automobiles, and will incorporate bike lanes and storage to encourage commuting by bicycle. NVR will also support the development of local bike and pedestrian facilities, which will encourage active transportation.

The new rail stations will incorporate features that promote sustainable transportation and land use, such as compact and walkable development patterns and accessible green spaces. The planning of this rail passenger service will be in full compliance with the California Air Resources Board and the BCAG Sustainable Communities Strategy. The North Valley Rail project fits in well with these two regional strategies which both require greater access to public transportation services, which includes rail.

4) Quality of Life and Smart Growth Opportunities:

The proposed passenger rail service from Natomas to Chico has the potential to significantly improve the quality of life for residents in the Region. By increasing affordable transportation choices, the NVR will reduce transportation cost burdens and provide residents with more travel options. The integration of mixed-use development and a diversity of housing types, including affordable and infill housing, transit oriented developments, and multimodal communities, will combine with multimodal transportation infrastructure to further reduce transportation and housing costs and increase access to opportunity.

Additionally, by reducing vehicle dependence, the NVR will help to mitigate the urban heat island effect and improve air quality, which will be beneficial for the health of at-risk residents, outdoor workers, and others. By adding new facilities that promote walking and biking, the NVR will also increase access to daily destinations such as jobs, healthcare, grocery stores, schools, places of worship, recreation, and parks.

5) Smart Mobility and Community Connectivity:

The proposed passenger rail service from Sacramento to Chico will significantly modernize mobility and community connectivity in the region. NVR will extend ACE and San Joaquin passenger trains north from Sacramento to Chico. This will provide commuter service into Sacramento and intercity connections to the San Francisco Bay Area, the rest of the Central

Valley, and Southern California. Three of the four initial roundtrips will have convenient connections with high-speed rail in Merced for ongoing journeys to Fresno and Bakersfield, and two of the four roundtrips will have convenient connections to and from the Bay Area, including Oakland, the Tri-Valley area, and Union City. Supplemental Thruway buses will also fill out the train timetable to a total of 10 initial roundtrips per day and provide additional connections to other destinations throughout southern California and the northern California megaregion. This will provide residents with access to direct and affordable transportation options, which will help to remove physical barriers and improve. The addition of an integrated bus service, which will be tied into the rail service, will further increase connectivity, and provide residents with more transportation options.

The NVR will provide daily passenger rail service to several areas of persistent poverty and historically disadvantaged communities located between the City of Chico in Butte County and the City of Natomas in Sacramento County. The total percentage of disadvantaged census tracts within the NVR area is 80%. Specific benefits include affordable, safe transportation and community connectivity, improved quality of life and social equity, improved access to low-income housing and jobs.

The NVR will incorporate the Caltrans Complete Streets approach into the station designs and pedestrian railroad crossing, which increases accessibility for non-motorized travelers, and incorporating Americans with Disabilities Act (ADA) or Universal Design improvements will make the transportation system more inclusive and accessible for all residents, including those with disabilities. The NVR will also directly increase intermodal and multimodal freight movement, which will have positive economic impacts for the region.

6) Regional Services:

Oroville is an important city in Butte County, playing a significant role in the region's economy, governance, and cultural heritage. Oroville serves as a commercial and transportation center for the surrounding region, which is mainly agricultural and rural. As the county seat, Oroville is the administrative center of Butte County and is home to many government offices, including the Butte County Superior Court and the Butte County Sheriff's Department. The North Valley Rail Line and associated bus service between Oroville and the proposed train station in the City of Gridley will provide direct access for all residents to the county seat, which will alleviate substantial burdens in accessing the local regional government services. In addition to direct access to the regional services, the North Valley Rail Line southern terminus is the City of Sacramento, which houses the state capitol and California's essential government buildings. This direct access to Sacramento provides the North Valley Region the crucial public infrastructure to all the State's services without the need for a vehicle. National and international access is also available via the direct shuttle from the Natomas train station to Sacramento International Airport.

7) Economic Competitiveness and Opportunity:

The implementation of the passenger rail line from Sacramento to Chico will bring numerous economic opportunities and benefits to the region. The improved connectivity

and mobility offered by the rail service will help to facilitate tourism, promote wealth building and long-term economic growth, and create new job opportunities in both construction and ongoing operations and maintenance. Additionally, the rail service can improve intermodal and multimodal freight mobility, supporting supply chain efficiency and the movement of goods, including those related to terminal, warehouse, or manufacturing industries.

8) State of Good Repair:

The proposed rail line is designed to reduce the burden on existing transportation infrastructure and promote a state of good repair. All station upgrades and additional infrastructure will follow Complete Streets recommendations and ties into the existing bike lanes and public bus services. The Project will utilize an existing track with an established right-of-way and will only require the addition of new stations, reducing the need for new construction and maintenance on the rails. Additionally, the new infrastructure in remote communities will be maintained in a state of good repair, serving the same capacity with fewer trains, and freeing up slots for other trains.

This approach offers significant benefits by serving the same capacity with fewer trains, allowing the rail system to operate more efficiently, and reducing congestion on the rails. By reducing congestion, the project will inherit benefits such as longer sightlines, which will help improve safety for passengers and reduce maintenance costs. The proposed rail service is also estimated to remove 2,000 cars daily from the road, alleviating road maintenance, associated accidents, and congestion.

9) Partnership and Collaboration:

The project is being developed by the Butte County Association of Governments (BCAG) in cooperation with Caltrans, the San Joaquin Joint Powers Agency (SJIPA), and the San Joaquin Regional Rail Commission (SJRRRC). Essential and engaged partners are Union Pacific, North Valley Rail Coalition, Butte County Economic Development Corporation, the Greater Sacramento Economic Council, Sacramento Area Council of Governments (SACOG), the counties of Butte, Yuba, Sutter and Sacramento, the cities of Biggs, Chico, Oroville, Gridley, Live Oak, Yuba City, Marysville, and Sacramento, California State University, Chico, Yuba Sutter Transit and Shasta Regional Transportation Agency.

BCAG applied to the FY 2023 RAISE program to fund the NVR Environmental and Engineering Planning. The project was not awarded. The project did receive a "Project of Merit" rating. This rating is an indication of having received a high rating and BCAG has been encouraged, and expects, to submit the project back for funding with an additional RAISE or similarly purposed federal aid program.

BCAG plans to pursue both federal and state funds for construction funding in the future. NVR is an excellent candidate for TIRCP capital funds in future cycles as it meets the program goals and demonstrates the State's commitment to implementing the California State Rail Plan, reduce greenhouse gas emissions, and invest in disadvantaged and low-income communities.

10) Innovation:

Innovate Financing - In 2013 BCAG established the Butte Regional Transportation Corporation (BRTC), a nonprofit 501 c3 public benefit organization. BRTC was established so that BCAG could participate in the federal New Market Tax Credit Program which is implemented under the US Treasury Department. BCAG/BRTC used New Market Tax Credits to help fund the completion of the Butte Regional Transit and Operations and Maintenance Facility which was completed in 2016. Under the program, Community Development Financial Institutions Fund (CDFI) issues New Markets Tax Credits to Community Development Entities (CDEs) who in turn seek to invest these tax credits into the most impactful projects that benefit low-income communities. To help fund completion of the Transit Operations and Maintenance Facility, BCAG/BRTC leveraged the \$32.4 million that they had in state, federal and local funds with a CDE to obtain \$3.2 million in NMTC funds to complete the facility.

Project 2: Butte Regional Transit Zero-Emission Deployment

As the only public transit agency in Butte County, B-Line requests TIRCP and ZETCP funds for the zero-emission deployment project. By investing in zero-emission technology through these programs, B-Line's Transportation Development Act funds can be used towards maintaining operations and avoiding any service cuts. The requested TIRCP and ZETCP will be a combination of project development and capital funds to modernize its fleet, including purchase of zero-emission vehicles, hydrogen mobile refueling station, infrastructure upgrades, and design/planning to deploy these advanced technologies.

B-Line provides public transit consisting of local intercity fixed routes and demand-response paratransit service. Routes are operated in Chico, Gridley, Biggs, Oroville, Paradise, and portions of unincorporated Butte County. B-Line currently operates 21 fixed routes and five regional routes that serve both as intercity routes and local routes for smaller communities. B-Line currently has 29 fixed route vehicles and 22 paratransit vans.

B-Line's bus service provides transportation opportunities to multiple disadvantaged communities² in Butte County. The requested TIRCP/ZETCP funds will have direct health benefits on disadvantaged and low - income residents through cleaner air, greater independence from fossil fuels, and more environmental sustainability. According to CalEnviroScreen, the DACs in the B-Line service area have a pollution burden of 85-90%. Investing in sustainable technology for these residents accomplishes the goals of SB 125 by better supporting public health outcomes for these communities.

BCAG has one maintenance facility, located at 326 Huss Drive in Chico, as seen in the attached KML file. All B-Line's services operate out of the operations, maintenance, and administrative facility. The facility was constructed in part by State of California funds and designed to

² B-Line serves the following census communities identified as DACs: 6007003700 and 6007001300

accommodate anticipated growth in operations over the next 50 years and currently generates all power for the facility through its solar canopies. The Rollout Study confirmed that to deploy zero-emission technologies, improvements to existing infrastructure at its facility are needed. This includes electrical infrastructure, and for fuel cell vehicles, installation of a fueling station and possibly upgrades to the switchgear or utility service connections. Planning and design work is also requested with TIRCP/ZETCP funds, including development of detailed electrical and construction drawings required for permitting.

The Rollout Plan recommended a mixed electric and hydrogen fleet scenario to achieve a completely zero-emission fleet by 2040. As of September 2023, B-Line has begun its transition to a zero-emission fleet, with five zero-emission buses on order. As B-Line continues purchasing zero-emission vehicles, the following tasks are required for implementation:

- Infrastructure planning and design work to support charging infrastructure
- Purchase of zero-emission buses and chargers
- Electric service upgrades for battery electric buses
- Maintenance bay upgrades to bring facility in compliance with hydrogen safety regulations
- Hydrogen fueling infrastructure including a mobile fueling station

Transitioning to a fully zero-emission fleet is estimated in the Rollout Plan to be roughly \$40,000,000 - \$80,000,000 depending on the chosen technology. This magnitude is a large hurdle for smaller transit agencies; therefore, the requested TIRCP/ZETCP funds will be imperative to B-Line successfully introducing these cleaner technologies.

BCAG has received federal and state funds for zero-emission vehicles and facility improvements to support these advanced technologies and is installing \$250,000 of underground improvements to accommodate charging infrastructure to support 5 electric buses currently on order with Gillig. BCAG will continue to apply for both federal and state funds to implement the goals set forth in the Rollout Plan. BCAG may leverage the requested SB 125 funds as match for future competitive federal grants.

iv. Regionally representative transit operator data

Attached to this application is the requested transit operator data for Butte Regional Transit. The monthly ridership data is also available on B-Line's website here under 'National Transit Database': <http://www.blinetransit.com/Resources/Useful-Transit-Links/index.html>

BCAG TIRCP/ZETCP Allocation Package – Project Description

As the RTPA for Butte County, BCAG is recommending two projects for TIRCP/ZETCP funding:

- North Valley Rail: \$15,000,000 in FY 2023/24 and 2024/25 TIRCP
- Butte Regional Transit Zero-Emission Deployment: \$6,002,814 in FY 2024/25 TIRCP; \$2,986,516 in ZETCP (Years 1-4)

BCAG will utilize the maximum administrative share of \$239,893.

Project 1: North Valley Rail

North Valley Rail is a proposed new passenger rail service that would transform regional and intercity transportation in the northern Sacramento Valley by offering a convenient, environmentally sustainable travel choice for residents, employees, and visitors in Butte, Yuba, Sutter, and northern Sacramento counties. With an initial service of up to 4 roundtrips per day by 2031, covering a wide range of destinations and times of day, passengers will enjoy substantial improvements over the current once-daily Coast Starlight service. The California State Rail Plan anticipates hourly service in this corridor by 2050 and eventual extension to Red Bluff and Redding.

The project strategically builds off the larger Valley Rail program currently underway, which will expand rail service between the northern San Joaquin Valley, Sacramento, and the Bay Area. As a result, North Valley Rail would provide passengers with direct, reliable one-seat rides to Sacramento, Stockton, the Bay Area, Modesto, and Merced. In downtown Merced, timed transfers will ensure seamless connections via high-speed rail to Fresno, Bakersfield, and Southern California. Linking North Valley communities to the Northern California megaregion and the larger statewide rail network will provide major benefits by reducing traffic congestion and greenhouse gas emissions; expanding access to housing, high-quality jobs, and higher education; and promoting economic development and tourism.

North Valley Rail passes through large swaths that have been designated as California Climate Investments Priority Populations (Disadvantaged or Low-Income Communities) by the California Air Resources Board. Three of the four stations, as well as the Oroville bus stop, are directly located in such communities. These residents will benefit from an environmentally - friendly regional and intercity transit solution that takes polluting cars off the road and improves access to Sacramento's lucrative job market. Younger adults both within and outside the North Valley will also benefit from improved access to educational opportunities at Chico State, Butte College, Sacramento State, UC Davis, and other smaller community and vocational colleges.

Planned Stations and Communities:

- Chico - Two options are under consideration for the proposed Chico station: one at the existing Amtrak station in Downtown, and the other in the Barber Yard area south of Downtown. With over 100,000 residents, Chico is the economic and cultural center of Butte County and home to Chico State – with an enrollment of over 13,800 students, the second

largest small-town campus in the California State University (CSU) system after Cal Poly in San Luis Obispo. Chico is a college town, with a bustling downtown area and a strong biking community. North Valley Rail will bring visitors to Chico's many destinations, including Bidwell Park (one of the largest municipal parks in California and the U.S.), Bidwell Mansion State Historic Park, and Sierra Nevada Brewing Company.

- Gridley - Located in the heart of Downtown Gridley just south of Laurel Street, this station would serve southern Butte County, including Gridley and Oroville, the county seat and second largest city of Butte County. The proposed station offers a unique opportunity to re-energize Gridley's historic downtown and bring visitors to enjoy this charming "small town that loves company". Buses would provide convenient connections to / from Oroville, the "City of Gold" and gateway to the rich outdoor recreational resources of Lake Oroville and the Feather River. Like so many cities and towns dotting the Central Valley, Oroville is and has been home to strong ethnic communities, including Chinese and Hmong. Much of Oroville and surrounding areas including Thermalito and South Oroville are Disadvantaged and Low-Income Communities. North Valley Rail would bring unique opportunities for tourism and recreation and improve access to education, employment, housing, and health care and enhance overall social mobility.
- Marysville – Yuba City - Located in Downtown Marysville near the Yuba County Government Center, this station would serve the primary population centers of Yuba and Sutter counties. These twin cities on the Feather River have a rich historical and cultural heritage that includes the last "Gold Rush Chinatown" in California—with its 143-year-old Bok Kai Festival—and one of the largest Sikh communities outside of Punjab, India—itsself known for hosting the annual agar Kirtan festival, one of the largest South Asian festivals outside of the Indian subcontinent. The project would return rail service to this area for the first time in over 25 years after the Coast Starlight began skipping Marysville. Improved opportunities for tourism and economic development will help diversify the economy of the area, which has historically been very dependent on agriculture and related industries. Virtually all of Marysville and the entire eastern half of Yuba City are designated as both Disadvantaged and Low-Income Communities.
- Plumas Lake - Located next to the Plumas Lake Boulevard interchange, this station would serve the 5,200-acre master-planned community of Plumas Lake and the smaller city of Wheatland. Besides being the epicenter of much of Yuba County's projected future growth, Plumas Lake is already a major commuter town for Sacramento (30 miles south), and will eventually include 11,750 dwelling units, a future medical center, and a community shopping center at full build-out. The station would be just a few miles from Toyota Amphitheatre (a state-of-the-art, 18,500-seat outdoor concert venue), the Hard Rock Hotel & Casino, and similar future development in the Yuba County Sports & Entertainment Zone.
- Natomas - Situated along Elkhorn Boulevard, this station is where North Valley Rail

would tie into the already planned Sacramento Extension for ACE and the San Joaquins. Natomas is one of Sacramento's fastest growing communities and is also home to over 2.8 million square feet of local-serving and regional retail. A dedicated bus service will connect the station with the region's nearby air hub, Sacramento International Airport (SMF). North Valley Rail will provide a convenient, environmentally friendly option for ground transportation into and out of SMF and create stronger ties between the North Valley and 42 nonstop destinations across the United States, Canada, and Mexico.

Project Benefits:

Expands Rail Connectivity - The project will create a new passenger rail service tailored to the North Valley's unique needs, with commuter service into Sacramento and intercity connections to the San Francisco Bay Area, the rest of the Central Valley, and Southern California. Three of the four roundtrips will have convenient connections with high-speed rail in Merced, and two of the four roundtrips will have convenient connections to and from the Bay Area. A potential first phase with two daily roundtrips and supplemental Thruway buses can also be fast-tracked prior to 2030 to get trains up and running as quickly as possible and build the ridership markets for later service expansion.

Supports Housing and Climate Goals - Proposed stations will become new transit hubs, creating opportunities for transit-oriented development and downtown revitalization to bolster the state's supply of transit-accessible housing. At the same time, the project will promote independence from automobiles and fossil fuels, taking traffic off of roads and reducing vehicle miles traveled and greenhouse gas emissions. Building off ACE's pioneering milestone in becoming the first commuter rail service in Northern California to fully switch to renewable diesel operations, North Valley Rail will be operated with a 100-percent zero-emissions fleet, in alignment with state goals to decarbonize rail and other transportation by 2035.

In establishing project GHG reductions for the NVR, the TIRCP Benefit Calculator Tool has been utilized to identify an estimated 335,698 Metric Tons of Carbon Dioxide Equivalent (MTCO_{2e})* over an assumed 30 - year lifetime. Some key parameters used to identify this result are as follows:

- Year 1 ridership 592,100
- Year F ridership assumed at 1% per year growth.
- Length of average trip: approximately 69.1 miles
- Adjustment factor for transit-dependent riders at 1.00. (represents avoided VMT),
- Fuel type is hydrogen fuel cell and assumes State-funded zero-emissions fleet is in place.
- Annual VMT to operate the service: 76 miles (one-way route distance between Natomas and Chico) × 4 roundtrips/day × 2 trains/roundtrip × 365 days/year = 221,920 miles/year

Improves Equity and Social Mobility - The project will provide a critical transportation lifeline and improve access to employment and educational opportunities for disadvantaged populations, including the many low-income and minority communities along the project corridor. Prospective students across the Central Valley and state will benefit from better

access to Chico State University. Supported by over 900 faculty and over 1,000 staff, Chico State's enrollment of over 13,800 students comes from all over California:

- 26.5% from Chico State's service area
- 10.3% from the Sacramento area
- 22.3% from the San Francisco Bay Area
- 20.9% from the Los Angeles area
- 17% from the rest of California
- 3% from out-of-state or international

Requested TIRCP Funding:

BCAG is requesting \$15,000,000 in FY 2023/24 and 2024/25 TIRCP funds the following project development activities as reflected in the Fund Request Excel file:

- \$6,600,000 in Project Approval and Environmental Documentation (PA&ED)
- \$8,300,000 in Plans, Specifications, and Estimates (PS&E)

BCAG plans to pursue other federal and state grants for remaining design phases and competitive TIRCP funds for construction.

Project 2: Butte Regional Transit Zero-Emission Deployment

Butte Regional Transit is the only fixed route transit operator in Butte County and the only provider eligible for TIRCP/ZETCP funding. B-Line provides regional and local public transit services in Butte County and covers roughly 700 square miles. The current bus fleet consists of 29 fixed-route buses: 29 diesel buses (11 35-foot diesel and 18 40-foot diesel buses). B-Line operates 21 fixed routes, which includes 5 regional routes, 15 local routes, and service to Chico Airport. Regional routes connect the towns and cities of Chico, Oroville, Paradise, Magalia, Gridley, and Biggs. Local routes serve the Chico urban area and the city of Oroville. B-Line also operates 2 types of paratransit services—ADA Paratransit and Dial-A-Ride. There are 22 gasoline-powered cutaway vehicles (25-feet) that make up the paratransit fleet. BCAG also plans to implement microtransit and non-emergency medical transportation services to Butte County residents in 2025.

BCAG recently completed its Zero-Emission Bus Rollout Plan that provides the framework to transition to a 100 percent zero-emission fleet by 2040. BCAG plans to deploy a mix of zero-emission technologies including a battery electric and hydrogen fleet. BCAG currently has five battery electric buses on order and will utilize the requested TIRCP/ZETCP funds to purchase additional rolling stock.

The requested TIRCP/ZETCP funds for the Butte Regional Transit Zero-Emission Deployment project will be used to implement the strategies identified in Rollout Plan. As the owner and operator of B-Line, BCAG is requesting project development and capital funds to deploy a zero-emission fleet at its facility located in Chico (see attached KMZ file). Funds will be used for purchase of zero-emission fleet, technologies that support them, project development work to

appropriately deploy these advanced technologies, and transit facility and network improvement projects.

Project Benefits:

B-Line provides public transportation to the two SB 535 disadvantaged communities in Butte County. Both DACs in Butte County¹ fall under CalEnviroScreen's 4.0 Top 25% category and the community in Chico is in the 90-100 percentile for pollution burden. Sources of diesel particulate matter (PM) in the Chico Census Tract emit 0.264 tons per year, which is higher than 72% of the census tracts in California. Investing in zero-emission technology is very important for these households to reduce their pollution burdens and exposure to unhealthy particulates. The DAC in Chico has a traffic density of 1,091.91, which is higher than 64% of the census tracts in California. Investing in public transportation in Chico is likely to improve this traffic impact result which brings air pollutants, noise, and health impacts to children and at-risk populations. The requested funds will be instrumental in helping SB 535 communities in Butte County recover from decades of exposure to pollution burdens. As seen in the CCI Benefit Criteria Table in Attachment 3, the project provides direct, meaningful, and assured benefits to priority populations and should be counted toward statutory investment minimums.

The proposed project will accomplish key components of the SB 125 program by investing zero-emission transit equipment, reducing greenhouse gas emissions, and providing support to rural and priority populations in the North State. The project is expected to reduce 558 total MTCO_{2e}, over 111,000 gallons of fossil fuel use, and save \$752,014 in energy and fuel costs. These cleaner technologies are not only expected to provide direct health benefits to these vulnerable households in Butte County, but also sets the groundwork for other rural transit agencies in the North State to implement hydrogen fueling to benefit millions of transit dependent California residents.

Requested TIRCP/ZETCP Funding:

BCAG is requesting \$3,200,000 for zero-emission buses and chargers and \$2,802,814 for infrastructure upgrades/hydrogen refueler, including design costs, with FY 2024/25 TIRCP (Year 2) funding. The vehicles purchased with TIRCP/ZETCP funds will replace aging rolling stock to maintain state of good repair. BCAG also requests \$2,986,518 in ZETCP (Years 1-4) for infrastructure upgrades/hydrogen refueler to appropriately plan for the implementation of zero-emission technologies at BCAG's facility. This is reflected in the SB 125 Fund Request Excel file.

¹ Census Tracts 6007003700 and 6007001300

BCAG TIRCP/ZETCP Allocation Package - Fact Sheet

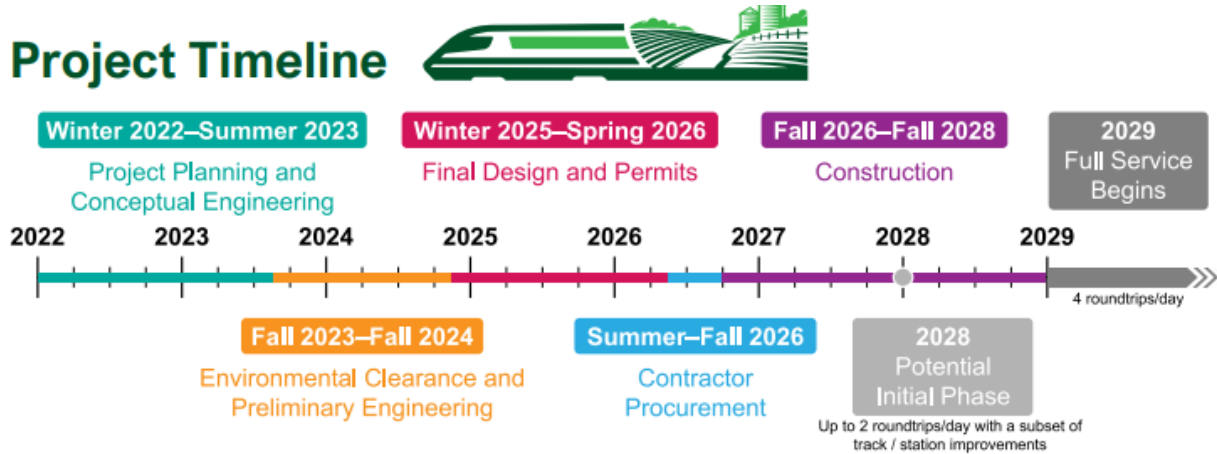
Project 1: North Valley Rail

Implementing Agency: Butte County Association of Governments (BCAG)/ San Joaquin Joint Powers Agency (SJJPA).

Project Title: North Valley Rail – Developmental Components

Milestone Dates/Project Schedule:
 Project Planning: Complete in February 2024
 Final Design/Permitting/ROW: February 2024 – June 2026
 Construction: September 2026 – December 2029

Until a consulting engineering firm is secured for development of project components, the milestone schedule will remain preliminary. BCAG seeks to solicit a procurement for A/E Engineering beginning January 2024.



Summary of Project Scope:

Development of North Valley Rail Project bringing passenger rail service northward from the Natomas area in Sacramento to the City of Chico in Butte County, with stops in Plumas Lake, Marysville-Yuba City, and Gridley.

Estimated Total Project Cost:

PA&ED	\$11,600,000
PS&E	\$26,400,000
Permitting, ROW	\$30,000,000
<u>Construction</u>	<u>\$462,000,000</u>
Total Estimated Cost:	\$530,000,000

Greenhouse Gas Reduction Benefits:

The Project will reduce GHGs by approximately 336,000 MTCO₂e over an assumed 30-year lifetime. As seen in the attached Benefits Calculator Tool, the quantified co-benefits significantly reduce GHGs in the North State region:

- 1.4 billion VMT reduced over the 30-year lifetime;
- 37 million fossil fuel use reduction;
- \$115,709,957 energy and fuel cost savings and \$818,797,194 in passenger travel cost savings.

In addition, the project will significantly reduce VMT by providing daily intercity and commuter passenger rail service to northern California, and other rail connections in other parts of the state, giving residents traveling to work, school, medical or recreational travel providing an affordable, safety alternative to vehicular travel. The introduction of passenger rail service from Sacramento to Chico has the potential to provide significant environmental benefits. By reducing the number of cars on the road, the project will help to lower transportation-related pollution. As stated, the Project will avoid at least 40,900,000 VMT annually, resulting in improved air quality in the region.

The new passenger rail line will also incorporate energy-efficient investments at the four new stations. This includes electrification and charging infrastructure for zero-emission vehicles at the four new stations. The new stations will prioritize public transit and active modes of transportation and will incorporate bike lanes and storage to encourage commuting by bicycle. NVR will support the development of local bike and pedestrian facilities, which will encourage active transportation.

The new rail stations will incorporate features that promote sustainable transportation and land use, such as compact and walkable development patterns, transit oriented developments, multi-modal communities, and accessible green spaces. The planning of this rail passenger service will be in full compliance with the California Air Resources Board and the BCAG Sustainable Communities Strategy. The North Valley Rail project fits in well with these two regional strategies which both require greater access to public transportation services, which includes rail.

Ridership Estimates:

Preliminary ridership studies estimate at least 592,000 new riders annually for the North Valley Rail. According to the National Safety Council Injury Facts report, passenger deaths from passenger vehicles are 17 times higher than deaths from passenger trains. This Project anticipates avoiding at least 40,900,000 in vehicle miles traveled (VMT) annually from the area highways, which should significantly reduce the likelihood of deaths.

Benefits to Disadvantaged Communities:

The new rail service will provide an alternative mode of transportation for people in the region, particularly those in historically disadvantaged communities along the Rail, of which 80% of census tracts on or adjacent to the rail are HDC. It also provides a critical transportation lifeline

and improved access to employment and educational opportunities for these disadvantaged populations, including the many low-income and minority communities along the project corridor. This will achieve the programmatic goal of providing at least 25 percent of TIRCP funds that provide a meaningful, direct, and assured benefit to disadvantaged communities, per SB 535 and Section 75221(c) of the PRC.

Project location maps can be found in Attachment 1.

Project 2: Butte Regional Transit Zero-Emission Deployment

Implementing Agency: Butte County Association of Governments

Project Title: Butte Regional Transit Zero-Emission Deployment

Milestone Dates/Project Schedule:

Project Development Phase Spring 2025

Construction Spring 2026

Summary of Project Scope:

The requested project development and capital funds will be used for zero-emission vehicle deployment at the Butte Regional Operations Center in Chico, such as purchase of zero-emission vehicles, hydrogen mobile refueling station, infrastructure upgrades, and design/planning to deploy these advanced technologies at B-Line’s facility in Chico.

Total Project Costs:

Zero Emission Buses and Chargers	\$3,200,000
Design	\$200,000
Infrastructure Upgrades/Hydrogen Refueler	\$5,389,332
<u>Annual Hydrogen Refueler Costs</u>	<u>\$200,000</u>
Total TIRCP/ZETCP:	\$8,989,332

Greenhouse Gas Reduction Benefits:

The deployment of zero emission technology will modernize B-Line’s operations, significantly reduce GHGs, and enhance transit safety. As seen in the attached Benefits Calculator Tool, the project will reduce 558 total MTCO_{2e}, over 111,000 gallons of fossil fuel use, and save \$752,014 in energy and fuel costs.

Benefits to Disadvantaged Communities:

B-Line’s bus service provides transportation opportunities to multiple disadvantaged communities¹ in Butte County. The requested TIRCP/ZETCP funds will have direct health benefits on disadvantaged and low income residents through cleaner air, greater independence from fossil fuels, and more environmental sustainability. According to CalEnviroScreen, the DACs in the B-Line service area have a pollution burden of 85-90%. Investing in sustainable technology for these residents accomplishes the goals of SB 125 by better supporting public health outcomes for SB 535 and AB 1550 communities. It is estimated that almost 40% of requested TIRCP/ZETCP funds for this project will benefit disadvantaged and low income populations in Butte County.

¹ B-Line serves the following census communities identified as DACs: 6007003700 and 6007001300

Ridership Increases:

Due to the novelty of the cleaner technology, it is estimated that B-Line ridership would increase by around 1-5% with the deployment of zero-emission buses.

Project location maps can be found in Attachment 1.