

Capitol Corridor

Intercity Passenger Rail Service

BUSINESS PLAN UPDATE FY 2018-19 • FY 2019-20



Auburn • Sacramento • Davis • Suisun-Fairfield • Martinez • Oakland • San Francisco • San Jose

CAPITOL CORRIDOR
INTERCITY PASSENGER RAIL SERVICE
ANNUAL BUSINESS PLAN
FY 2018-19 – FY 2019-20
JUNE 2018

FINAL

PREPARED BY
Capitol Corridor Joint Powers Authority

PREPARED FOR
CALIFORNIA STATE TRANSPORTATION AGENCY



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EXECUTIVE SUMMARY

Introduction. This Business Plan Update presents an overview of the Capitol Corridor Joint Powers Authority’s (CCJPA’s) strategic plan and funding request for the next two fiscal years (FY 2018-19 and FY 2019-20), to be submitted to the Secretary of the California State Transportation Agency (CalSTA) in draft form by April 1, 2018 and in final form by June 15, 2018, providing adequate time for Amtrak to develop its final operating cost estimates. This document also outlines the service and capital improvements that have contributed to the Capitol Corridor’s success, identifies needed improvements to sustain its growth, and incorporates customer input as detailed in Chapter 263 of California State Law.

As administrator of the service, the CCJPA’s primary focus is the continuous improvement of the Capitol Corridor® train service through effective cost management, gaining share in the travel market, and delivering a customer-focused, safe, frequent, reliable, and sustainable transportation alternative to the congested I-80, I-680, and I-880 highway corridors. The CCJPA is governed by a Board of Directors comprised of 16 elected officials from six member agencies along the 170-mile Capitol Corridor® route (see Figure 1-1):

- Placer County Transportation Planning Agency (PCTPA)
- Solano Transportation Authority (STA)
- Yolo County Transportation District (YCTD)
- Sacramento Regional Transit District (Sac RT)
- San Francisco Bay Area Rapid Transit District (BART)
- Santa Clara Valley Transportation Authority (VTA)

IN FY 2018-19 AND FY 2019-20, THE CCJPA WILL BUILD UPON RECORD SERVICE PERFORMANCE IN FY 2017-18 AND FOCUS ON SERVICE EXPANSION OBJECTIVES FOR THE PLACER COUNTY AND SILICON VALLEY MARKETS.

History. The Capitol Corridor service began in December 1991 with six daily trains between San Jose and Sacramento. The CCJPA assumed management responsibility for the service in October 1998. Since then, Capitol Corridor has grown into the third busiest intercity passenger rail service in the nation. In August 2006, the CCJPA expanded service from 24 to 32 weekday trains between Sacramento and Oakland and from 8 to 14 daily trains continuing to San Jose. In August 2012, the CCJPA utilized the reconfigured Sacramento station to optimize operational cost effectiveness and reduced service to 30 daily round trips between Sacramento and Oakland (freeing up the two allotted track capacity slots to the San Joaquin Intercity Passenger Rail service).

Operating Plan. The service levels introduced in 2012 for weekday and weekend service, with slight modifications, have proven a success since they were introduced. In August 2016, CCJPA made the most significant adjustment to the 2012 operating plan by re-prioritizing weekday peak train travel to the Silicon Valley market, consolidating less productive off-peak trains, and reconfiguring the weekend schedule, which resulted in 3% growth in system ridership. In November 2017, Fairfield-Vacaville was added as a new station to the Capitol Corridor schedule, along with some other minor travel time changes. No additional changes in operations are planned for FY 2018-19 or FY 2019-20.

The basic operating costs for the Capitol Corridor conform with Section 209 of the Passenger Rail Improvement and Investment Act of 2008 (PRIIA). This policy is used to develop the costs for the FY 2018-19 and any future CCJPA/Amtrak operating agreements. Based on Amtrak’s forecasts, the FY 2018-19 budget is projected to decrease by \$1,152,000 compared to the current FY 2017-18 budget due to increased revenues due to projected ridership increases and reduced growth in operating costs.

	FY 2018-19	FY 2019-20
•		
Sacramento – Oakland	30 weekday trains (22 weekend)	30 weekday trains (22 weekend)
Oakland – San Jose	14 daily trains	14 daily trains
Sacramento – Roseville	2 daily trains (with plans for up to 20)	2 daily trains (with plans for up to 20)
Roseville – Auburn	2 daily trains	2 daily trains
Total Budget (Operations, Marketing & Administration)	\$34,939,000	\$35,785,000
Change vs. FY 2017-18 Budget	-\$443,000 [-1.2%]	+\$403,000 [+1.1%]

Performance Standards. For this Business Plan Update, the CCJPA will incorporate the most recent version of the Uniform Performance Standards (UPS) as modified by CalSTA. The table below provides an overview of the performance of the Capitol Corridor compared to the UPS as well as the updated forecasted UPS for the next two fiscal years (see Appendix C for additional detail):

Performance Standard	FY 16-17			FY 17-18 (through February 2018)			FY 18-19	FY 19-20
	Actual	Standard	% Change	Actual	Standard	% Change	Standard	Standard
<u>Usage</u>								
Route Ridership	1,607,277	1,520,000	+6%	970,215 (through April 2018)	919,678	+5.5%	1,670,400	1,695,000
Passenger Miles	108,609,358	93,752,600	+16%	45,936,179	45,055,417	+2%	112,050,000	113,701,000
<u>Efficiency</u>								
System Operating Ratio (train and feeder bus)	58%	50%	+16%	59%	52%	+13.5%	54%	54%
Total Operating Cost/Passenger-Mile	\$0.54	\$0.64	-16%	\$0.54	\$0.64	-15.6%	\$0.58	\$0.59
<u>Service Quality</u>								
End-Point On-Time Performance	91%	90%	+1%	89% (through April 2018)	90%	-1.1%	90%	90%
Stations On-Time Performance	94%	90%	+4%	90.3%	90%	+0.3%	90%	90%
Operator Delays/10K Miles	329	>325	+1%	378	>325	+16%	>325	>325

Capital Improvement Program. The CCJPA’s Capital Improvement Program (CIP) is consistent with the CCJPA’s Vision Plan documents, regional and State of California transportation plans (e.g. Regional Transportation Plans [RTPs] and Caltrans’ 2018 Draft State Rail Plan). The CIP includes projects aimed to increase reliability and capacity, renovate stations, add rolling stock, reduce travel times and enhance safety and security.

THE CCJPA IS TESTING RENEWABLE DIESEL ON A CALIFORNIA LOCOMOTIVE. IF SUCCESSFUL, IT WILL HAVE POSITIVE IMPLICATIONS FOR PASSENGER RAIL IN CALIFORNIA TO REDUCE LIFECYCLE GHG. EMISSIONS.

In FY 2017-18, CCJPA completed installation of at-station bicycle access improvements, and in FY 2018-19, onboard bike storage densification efforts are expected to commence and be completed. CCJPA will also continue its Capitalized Maintenance program with Union Pacific Railroad (UPRR) to maintain superior on-time performance. Funded capital improvements that will continue to advance over the next two fiscal years include the Travel Time Savings Project and phase one of the service expansion to/from Roseville for the Capitol Corridor trains. Stations across the system will get new uniform signage/message/alert kiosks. Auburn station will get a wayside power and enhanced station camera system, and the BART train alert signal to facilitate passenger connectivity at Richmond station will begin operations. Consistent with the Vision Implementation Plan (adopted in November 2016), expansion of additional

service to/from San Jose (and potentially beyond to/from Salinas) will require methodical coordination of passenger and freight rail objectives among a wide variety of project and funding partners in the Northern California Megaregion and at the State level.

Marketing Strategies. The CCJPA’s marketing strategies for FY 2018-19 and FY 2019-20 will continue to target specific markets and increase ridership where seating capacity is available by raising awareness of destinations, transit connections, and amenities. Different campaigns are planned to position Capitol Corridor as a distinct regional service brand, and CCJPA will continue to coordinate with local partners and Amtrak on promotions, outreach, and shared marketing collateral.

Action Plan. Working with its service partners, the CCJPA continues to achieve annual record performance results for the Capitol Corridor and, as set forth in this Business Plan Update, will continue to ensure that Capitol Corridor is a safe, reliable, and customer-focused service. Capitol Corridor service will be managed to meet or exceed near-term budget projections with a keen focus on implementing Positive Train Control (PTC) on Capitol Corridor trains in early FY 2018-19 prior to the congressional deadline of December 31, 2018. Promotional programs and campaigns will showcase the Capitol Corridor as the preferred transport alternative in the Northern California Megaregion. CCJPA will conduct the planning analysis and cultivate the partnerships and funding opportunities necessary to make incremental as well as longer term transformational changes to the Capitol Corridor route.

1. INTRODUCTION

This Business Plan Update modifies the CCJPA’s report submitted to the Secretary of the California State Transportation Agency (CalSTA) in draft form by April 1, 2018 and final form by June 15, 2018, providing adequate time for Amtrak to develop its final operating cost estimates for the Capitol Corridor intercity passenger rail service. As part of Chapter 263 of State Law that allowed for the transfer of the Capitol Corridor service to the CCJPA on July 1, 1998 the CCJPA is required to prepare an annual Business Plan that identifies the current fiscal year’s operating and marketing strategies; capital improvement plans for the Capitol Corridor; and the funding request to the Secretary of CalSTA for the CCJPA’s operating, administrative, and marketing costs for inclusion in the State Budget proposal to the Legislature.

For FY 2018-19, CCJPA will continue the operation of the schedule introduced on November 13, 2017, with slight modifications on May 7, 2018, that added the new Fairfield-Vacaville station and that slightly adjusted certain travel and dwell times. Service levels will remain the same as what is provided today: 30 trains during the weekdays between Sacramento and Oakland (22 weekend trains); 14 daily trains between Oakland Jack London Square and San Jose and 2 daily trains between Sacramento and Auburn.

THE CAPITOL CORRIDOR PROVIDES A SUSTAINABLE TRANSPORTATION SERVICE CONNECTING THE THREE ECONOMIC EMPLOYMENT CENTERS IN NORTHERN CALIFORNIA: SACRAMENTO, SAN FRANCISCO/OAKLAND, AND SAN JOSE/SILICON VALLEY.

The CCJPA is governed by a Board of Directors comprised of 16 elected officials from six member agencies (listed below) along the 170-mile Capitol Corridor rail route (see Figure 1-1):

- Placer County Transportation Planning Agency (PCTPA)
- Solano Transportation Authority (STA)
- Yolo County Transportation District (YCTD)
- Sacramento Regional Transit District (Sac RT)
- San Francisco Bay Area Rapid Transit District (BART)
- Santa Clara Valley Transportation Authority (VTA)

As administrator for the Capitol Corridor service, the CCJPA’s responsibilities include overseeing day-to-day train and motorcoach scheduling and operations; reinvesting operating efficiencies into service enhancements; overseeing Amtrak’s deployment and maintenance of rolling stock for the Capitol Corridor and San Joaquin trains; and interfacing with Amtrak and the Union Pacific Railroad (UPRR) on dispatching, engineering, and other railroad-related issues.

The Capitol Corridor serves 18 train stations along the 170-mile rail corridor connecting the counties of Placer, Sacramento, Yolo, Solano, Contra Costa, Alameda, San Francisco (via motorcoach), and Santa Clara. The train service parallels the I-80/I-680 highway corridor between Sacramento and Oakland, and I-880 between Oakland and San Jose. In addition, the Capitol Corridor connects outlying communities to the train service via a dedicated motorcoach bus network as well as partnerships with local transit agencies that assist passengers traveling to destinations beyond the train station.

Capitol Corridor train and connecting motorcoach services are developed with input from riders, private sector stakeholders (such as Chambers of Commerce), and public sector interests (such as local transportation agencies), along with the entities that help deliver the Capitol Corridor service – Amtrak, UPRR, Caltrans, and the various transportation agencies and communities that are along the Capitol Corridor.

**Figure 1-1
Map of Capitol Corridor Service Area**



2. HISTORICAL PERFORMANCE OF THE SERVICE

On December 12, 1991, the State of California Department of Transportation (Caltrans) and Amtrak initiated the Capitol Corridor intercity train service with six daily trains between San Jose and Sacramento. In 1996, legislation was enacted to establish the CCJPA, a partnership among six local transportation agencies sharing in the administration and management of the Capitol Corridor intercity train service.

The CCJPA now operates and manages the Capitol Corridor service through an operating agreement with Amtrak. In July 1998, an Interagency Transfer Agreement (ITA) transferred the operation of the Capitol Corridor service to the CCJPA for an initial three-year term. In July 2001, the ITA was extended for another three-year term through June 2004. In September 2003, legislation was enacted that eliminated the sunset date in the ITA and established the current, permanent governance structure for the CCJPA.

Under management of the CCJPA, collection and use of train operations and revenue data has been a consistent tool to expand and fine tune service plans to optimize ridership, increase revenue, achieve cost efficiency, and improve safety. Appendix A presents an overview of the financial performance and ridership growth of the Capitol Corridor service since its inception in December 1991.

3. OPERATING PLAN AND STRATEGIES

The CCJPA aims to meet the travel and transportation needs of Northern Californians by providing safe, frequent, reliable, and environmentally-friendly Capitol Corridor intercity train service.

Train Service and Expansions

In response to growing demand, the CCJPA expanded service in October 2002, January 2003, and April 2003 to achieve a schedule of 24 weekday trains between Sacramento and Oakland using the same State budget initially allocated for 18 daily trains. In August 2006, with another flat budget allocation, the CCJPA increased service to 32 weekday (22 weekend day) trains between Sacramento and Oakland and increased from 8 to 14 daily trains between Oakland and San Jose. These service expansions were made possible with the completion of phase one of the Oakland to San Jose track improvements (completed in 2006) and the construction of the Yolo Causeway second main track (completed in 2004). Together, these projects contributed to a 10-minute reduction in travel time between Sacramento and Oakland, in addition to more frequent service. The August 2006 service expansion remains the largest core service adjustment in Capitol Corridor's service history. This core service plan has only been enhanced by slight service adjustments in August 2012 and August 2016. On November 13, 2017, a new service schedule was implemented, with the most significant change being the addition of a new station (Fairfield-Vacaville) and minor travel time changes resulting from phase one of the Travel Time Savings Project. Slight modifications were implemented on May 7, 2018.

The success of the August 2006 service expansion has highlighted the need to increase service frequencies to San Jose/Silicon Valley and Placer County. Expanding hourly train service to and from San Jose and Placer County will require additional rolling stock and track capacity (see Chapter 4 for more details). Without these service expansions, the sole means to increase ridership is through 1) further optimizations of the train schedule and 2) securing additional rolling stock that will increase seating capacity on the existing scheduled trains. The August 2016 service plan that enhanced weekday peak-hour service and revamped weekend service and the November 2017 service plan that made minor changes resulting from phase 1 of the Travel Time Savings Project (which will provide up to an additional 10 minutes in corridor-wide travel time reduction after phase 2 is complete in FY2018-19) typify the type of ridership optimization options short of service expansion.

SERVICE EXPANSIONS, CORRESPONDING TRACK CAPACITY IMPROVEMENTS AND TRAIN EQUIPMENT ACQUISITIONS HAVE ENABLED THE CAPITOL CORRIDOR TO INCREASE MARKET SHARE AND SUSTAIN SIGNIFICANT GROWTH IN RIDERSHIP (+196%) AND REVENUES (+364%) DURING THE PAST 19 YEARS.

The benefits of these past service expansions, service optimization adjustments, corresponding track capacity improvements and train equipment acquisitions have enabled the Capitol Corridor to increase market share and sustain significant growth in ridership (+196%) and revenues (+364%) during the past 19 years.

Near-term service expansions to/from Roseville and medium-term expansions to/from San Jose, with possible service extensions to/from Salinas, are the clearest service expansion options for Capitol Corridor on the horizon.

Motorcoach Service and Transit Connections

To supplement train service, the Capitol Corridor provides dedicated motorcoach bus connections to San Francisco and communities along the Central Coast region south of San Jose (Salinas and San Luis Obispo) and east of Sacramento (South Lake Tahoe, CA and Reno, NV). In addition, the CCJPA partners with local transit agencies to offer expanded options for transit connections throughout the corridor. Currently, the train service connects with the BART system at the Richmond and Oakland Coliseum stations; with Caltrain service (Gilroy – San Jose – San Francisco) at the San Jose/Diridon and Santa Clara/University stations; with the Altamont Commuter Express service (Stockton – Livermore – San Jose) at the Fremont/Centerville, Santa Clara/Great America, and San Jose/Diridon stations; with San Joaquin intercity trains at the Oakland Jack London, Emeryville, Richmond, Martinez and Sacramento stations; with VTA light rail at Santa Clara/Great America and San Jose/Diridon stations; and with Sacramento RT light rail at Sacramento station. Together with these local transit systems, the Capitol Corridor serves the second-largest urban service area in Western United States and the most productive megaregion (in terms of per capita GDP) in the nation.

The CCJPA offers several programs to enhance transit connectivity. The CCJPA reimburses the transit agencies for each transfer collected as part of our operating expenses. BART and SF Muni tickets are

conveniently sold in the Café Car. The Transit Transfer Program allows Capitol Corridor passengers to transfer free of charge to participating local transit services, including AC Transit, Sacramento RT, Rio Vista Delta Breeze, E-Tran (Elk Grove), Yolobus, Unitrans, County Connection (Martinez), Santa Clara VTA, Fairfield and Suisun Transit, and WestCAT. There is also a Napa Vine Route 21 connection at the Suisun-Fairfield station with connections to the Napa Airport. There is also a joint ticketing arrangement with Placer Commuter Express and Roseville Transit. CCJPA also partners with Santa Cruz Metro and Monterey-Salinas Transit to share operating costs for the benefit of both agencies and their riders.

As of January 1, 2018, the Capitol Corridor no longer sells BART's blue magnetic-strip tickets at a discount (\$10 value for \$8) due to BART's recent fare changes that added a 50-cent surcharge for each ride using the magnetic-strip tickets. Instead, Capitol Corridor is now selling Clipper cards pre-loaded with \$11 of cash value onboard the trains, and the \$3 one-time fee normally charged for Clipper cards is waived. The stored value on Clipper cards can be used to pay fares on BART as well as on multiple transit systems in the San Francisco Bay Area.

FY 2017-18 Operating Plan

The CCJPA's operating plan for FY 2017-18 was initially based on the August 22, 2016 timetable schedule, adjusted further for the November 13, 2017 timetable schedule, with minor modifications implemented on May 7, 2018. The Fairfield-Vacaville station was added to the Capitol Corridor service and additional minor adjustments were made to the schedule resulting from partial completion of the Travel Time Savings Project. The current Operating Plan for FY 2017-18 is as follows:

- Sacramento – Oakland: 30 weekday trains (22 weekend day trains)
- Oakland – San Jose: 14 daily trains
- Sacramento – Roseville – Auburn: two daily trains

FY 2018-19 and FY 2019-20 Operating Plans and Strategies

CCJPA will maintain the same operating plan into FY 2018-19 and FY 2019-20 as follows:

- Sacramento – Oakland: 30 weekday trains (22 weekend day trains)
- Oakland – San Jose: 14 daily trains
- Sacramento – Roseville – Auburn: two daily trains

The CCJPA is readily cognizant that the safe and reliable operation of the Capitol Corridor trains is necessary for the continued success of the service. Working with UPRR, Amtrak, Caltrans, and Caltrain, the CCJPA is steadfastly committed to completing the necessary tasks to implement PTC on Capitol Corridor trains, a game-changing technology to improve their safe operation. The current schedule has the launch of PTC on Capitol Corridor trains in the first quarter of FY 2019 (July – August 2018).

The CCJPA has begun to implement actions to address declining service reliability and on-time-performance (see Section 5) that will be included in the FY 2018-19 and future year operating strategies. Two actions currently underway include:

- The addition of two transportation supervisors that will be located in the Oakland to San Jose section of the route to address unauthorized trespassing as well as service incidents (trespasser and grade crossing incidents) that will alleviate or minimize service delays.
- The introduction of an abatement crew financed by the CCJPA and subcontracted through UPRR that will address overgrowth of vegetation along the ROW, repairs and addition of security barriers/fences, and removal of illegal homeless encampments.

A key strategy for the CCJPA has been the use of aggregated databases of daily (information ridership, delays, safety incidents, customer comments) to drive efficiencies and improvement projects to enhance the safe operation of the trains. Applying business intelligence and analytics to these databases will ensure that the CCJPA uses sound business principles in developing operating strategies for the Capitol Corridor trains.

The basis for this operating plan is built on the efficiencies gained in developing the August 22, 2016, November 13, 2017, and May 7, 2018 service operation schedules. A careful analysis of ridership and revenue data, as well as travel time reductions from the first phase of completed elements of the Travel Time Savings Project, was used to fine tune the schedule in FY 2018-19. CCJPA is also working with local

communities that own the train stations served by the Capitol Corridor trains to address station access limitations (e.g., lack of available car parking after certain hours, minimal connecting transit access, lack of secure bicycle parking facilities) that will help to maximize ridership growth.

CCJPA understands that there may be opportunities for improved overall transit/rail mobility within the Northern California megaregion through strategic schedule modifications. These opportunities will be explored through the Capitol Corridor Service Optimization study that was initiated at the end of 2017. As has been common practice, CCJPA will continue to closely coordinate any schedule adjustments with connecting local transit or intercity/commuter rail services. The CCJPA will work with the Statewide Working Group (SWG) for data analysis and coordination of any beneficial adjustments, should they be identified through analysis, over the course of FY 2018-19 and FY 2019-20.

4. CAPITAL IMPROVEMENT PROGRAM

The CCJPA maintains a Capital Improvement Program (CIP) used to continuously improve the Capitol Corridor's reliability, travel times, on-time performance, safety/security, and to expand service frequency with a multitude of capital funding sources both at the regional, state and federal level. There are essentially two levels of capital improvement programming (CIP) for the Capitol Corridor service: lower-cost and higher-cost projects.

Lower-cost projects are generally aimed at amenities at the stations, minor improvements along the track route, or service enhancements on the trains, and they are usually incremental and progressive in nature. These projects do not usually change the ridership market or service radically, but instead build on the service or schedule as it exists today. They make safe systems safer, they bring technology improvements to the customer or to the operator, and they are generally strategic in nature to keep the service timely, safe, and relevant to customers and the surrounding communities. Examples of lower-cost projects include onboard Wi-Fi, Travel Time Savings Projects, crossovers, right-of-way fencing, and Positive Train Control and can also include studies and analysis necessary to determine the proper course of action to comply with established protocols of environmental documentation and project engineering design. CCJPA has a strong and consistent history of developing and delivering these projects and we expect that the need for constant lower cost improvements will continue well into the future.

THE CCJPA'S USE OF 480-VOLT POWER CABINETS DURING EQUIPMENT LAYOVER AT THE SACRAMENTO VALLEY AND SAN JOSE/DIRIDON STATIONS HAS RESULTED IN A 2% REDUCTION DIESEL FUEL CONSUMPTION, REDUCING EXPENSES AND POLLUTANT EMISSIONS. THESE SAVINGS WILL BE FURTHER ENHANCED WITH THE ADDITION OF A CABINET AT THE AUBURN STATION IN MARCH 2018.

In contrast, the higher-cost capital improvement projects, which are for new rolling stock or service expansion, make far more than incremental service improvements. The last time a higher cost project was implemented was in 2006, and it resulted in four additional round trips between Oakland and San Jose. This project transformed the Capitol Corridor and has paid off over the years, setting the stage for the growth in ridership. Transformational projects usually require an extensive partnership effort and a large funding source or suite of funding sources to make the project viable. As revealed by the Vision Plan Update process, the Capitol Corridor is transitioning to the implementation of capital projects that are of greater cost but more significant magnitude in terms of service expansion and potential ridership impact. Capitol Corridor has reached a point of maturity where lower-cost capital improvement projects will no longer yield significant ridership gains; to see the magnitude of ridership growth as demonstrated in the past 19 years of service, the Capitol Corridor service will need significant political and public support for additional higher-cost capital improvement projects.

Capital Improvement Program Funding

Since the inception of the Capitol Corridor service in 1991, roughly \$1.23 billion from a mixture of funding sources has been invested or programmed to purchase rolling stock, build or renovate stations, upgrade track and signal systems for increased capacity, and construct train maintenance and layover/storage facilities. Most of these investments (approximately \$1.02 billion) occurred between 1991 and 2006, a period of more certain capital funding sources from the State. Between 2007 and 2017, the pace of capital investment slowed significantly due to a shift from more stable, longer-term funding sources (e.g. State Transportation Improvement Program, or STIP) to funding sources that are ad-hoc in nature (bonding programs, legislatively-capped programs) and that often require extensive preparation of competitive grant applications and review by state authorities for award. During those 10 years, the CCJPA has only received \$71 million

in capital funding to invest in the route. Proposition 1A (California High Speed Rail planning coordination) and Prop 1B (Safety and Security grants) are examples of the ad-hoc capital funding that have funded CCJPA projects including Sacramento to Roseville Third Track Phase 1. In April 2018, CCJPA was awarded \$80.34M to support the Oakland to San Jose Service Expansion Phase 2A Project, the Integrated Travel Program and network integration opportunities.

On April 28, 2017, Governor Jerry Brown enacted and signed into law Senate Bill 1 (Beall/Frazier). This landmark transportation bill provides over \$5 billion per year to various state transportation accounts for the purpose of improving the state's transportation infrastructure. For the Capitol Corridor intercity rail service, SB1 provides approximately \$5 million per year in dedicated funds (for operating and/or capital projects) from a portion of the 0.5% increase in state diesel sales tax. SB1 also presents various grant opportunities that CCJPA can apply for, including approximately \$245M/year in the Transit Intercity Rail Capital Program (TIRCP), approximately \$250M/year in the Congested Corridors Program, and approximately \$5M/year in STIP Interregional funds. The infusion of dedicated and competitive grant funding from SB1 enables CCJPA to advance various capital projects, small and large, that have been in the planning stage, including Sacramento to Roseville Third Track service expansion. While CCJPA is not an eligible applicant for other SB1 competitive grants such as Solutions for Congested Corridors and Trade Corridor Enhancement Program, CCJPA can partner with agencies that are eligible, such as county transportation agencies like the Alameda County Transportation Commission (ACTC). The intent would be to partner on corridor-wide projects that benefit multiple modes (highway, rail, goods movement, and passengers/people).

Another developing longer-term funding source for major capital projects is MTC's Regional Measure 3 (RM3). If approved by a majority of voters in the nine SF Bay Area counties, revenues from a bridge toll increase of up to \$3 would be used to finance \$4.45 billion worth of transportation improvements in the Bay toll bridge corridors and their approach routes. For CCJPA, the Oakland to San Jose Phase 2 service expansion project would be in the expenditure plan for the RM3 project list since it has a nexus with the Dumbarton Bridge crossing.

On a smaller capital scale than service expansions or track modifications, CCJPA will continue expending the last rounds of grant funds that have supported a variety of projects at stations. These include a set of small state allocations and successful regional grant awards used to support at-station bicycle facilities such as eLockers and folding bicycle rental kiosks at select stations. A ten-year program of Proposition 1B Safety and Security grants (which are set to expire in 2018 for expenditure) has supported a wide variety of station and track safety improvements (respective examples include cameras and right-of-way fencing) as well as the development and installation of an on-board ADA compliant information system (on-board information system, or OBIS). Other minor CCJPA-led capital programs include provision for wayside power at Auburn station, Richmond BART train arrival alerting system for Capitol Corridor service to facilitate people transferring between services, and station signage programs across Capitol Corridor stations.

THE CCJPA WAS ACTIVE IN THE DEVELOPMENT OF THE INAUGURAL RAIL TITLE IN THE 5-YEAR SURFACE TRANSPORTATION AUTHORIZATION, FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT OF 2015, BUT THE US CONGRESS NEVER FUNDED THE PASSENGER RAIL-RELATED ACCOUNTS AND THUS NO FEDERAL FUNDS HAVE BEEN MADE AVAILABLE.

There are also federal sources of funds for intercity rail. The Fixing America's Surface Transportation (FAST) Act was adopted in December of 2015. The FAST Act provides up to \$305B over five years for the nation's highway network, transit and commuter rail services, Amtrak, and – for the first time ever – state-supported intercity passenger rail services. IPR services are now part of a multi-modal federal surface transportation program and can pursue federal funds with matching state/regional/local funds to help continue the success and the growth of these passenger train services.

Of the \$305B, the Rail Title authorizes approximately \$10.4B is authorized for Amtrak, state-supported IPR services, and freight and other rail related programs. Key passenger rail-related accounts in the FAST Act are:

- Consolidated Rail Infrastructure and Safety Improvements (CRISI): The US DOT will seek projects from eligible applicants for competitive grants to improve passenger and freight rail services in terms of safety, efficiency, or reliability. PTC and other technology items and rail line relocation are also eligible for funding. Authorized at \$1.103B over five years; a 50% match is required. A total of \$68 million was appropriated in the FY2017 budget with an additional \$593 million appropriated in FY 2018, an amount well above authorization levels.

- **State of Good Repair (SOGR):** A US DOT program to provide grants to eligible applicants, on a competitive basis, to finance capital projects that reduce the state of good repair backlog with respect to qualified railroad assets. Authorized at \$0.997B over 5 years; 20% match is required. A total of \$25M was appropriated in the FY 2017 budget with an additional \$250M appropriated in FY 2018.

State Supported Route Commission (SSRC): The SSRC is authorized at \$10M (\$2M per year for five years), as established by the US DOT Secretary of Transportation, to coordinate planning of trains operated by Amtrak on state-supported routes to further implement Section 209 of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). Members include US DOT (likely FRA), Amtrak, and state intercity passenger rail agencies. (Note: The current State-Amtrak Intercity Passenger Rail Committee (SAIPRC) has been organized to represent the SSRC as described in the FAST Act.)

The Capitol Corridor service described in this Business Plan Update and in all business plans since FY 2005-06 is a direct by-product of the state's prior capital investment. The ridership and revenue results year after year from these investments are well documented. CCJPA's August 2006 service expansion to San Jose (Oakland-San Jose Phase 1 Project) was made possible by state capital investments from the 1998 to 2002 capital funding era. This was the last period when sufficient capital funding was consistently provided to build new service frequency increase (the increase in service between Oakland and San Jose from eight to fourteen daily trains). With the new SB1 and the potential RM3 funding sources becoming available for larger, longer-term capital projects, based on the anticipated project delivery schedules in place at this time, CCJPA is poised to make significant service improvements again in FY2020-21 and FY2024-25. A list of CIP projects that have been completed since inception of the Capitol Corridor service or are currently underway is included in Appendix B.

No federal funds currently support the operating or capital expenses of the Capitol Corridor train service, neither do any regional funds that go to the metropolitan transportation planning organizations (MPOs). Thus, the CIP is only philosophically consistent with the use of federal and state programming of funds in Regional Transportation Plans (RTPs) adopted by MTC, SACOG, and PCTPA to reduce VMT, reduce congestion, improve air quality, and improve the environment. In a similar manner, the CCJPA's CIP and operating plan objectives are consistent with the FRA's National Rail Plan.

The Draft California State Rail Plan, which is adopted every ten years, is expected to be released in June 2018. The Draft 2018 State Rail Plan update lays out a transformative long-term vision of the state-wide railroad network. The State, led by California State Transportation Agency (CalSTA), takes on a more proactive leadership role in transforming California's passenger and freight railroad system. The Draft 2018 State Rail Plan envisions capital investments along a strategic trajectory toward a layered, multi-tiered freight and passenger rail operating environment that better serves travel markets and delivers better cost efficiency metrics than the bifurcated services do today. While ambitious, this plan, built on the lessons of international rail services, would transform state rail operations and service in the years to come and have some implications for future Capitol Corridor Business Plan Updates in the years ahead. The CCJPA's Northern California Megaregional Rail planning efforts, which evolved from the Vision Plan process, will be coordinated within the larger context of the Draft 2018 State Rail Plan. With the Capitol Corridor CIP in a state of transition, future CCJPA Business Plan Updates will have an obligation to be developed in accordance to the 2018 State Rail Plan objectives.

Programmed and Current Capital Improvements

Improvements planned for FY 2018-19 and FY 2019-20 include the installation of two wayside power units in the Oakland Maintenance Facility, the Service Optimization Plan (in collaboration with SJJPA, ACE, and Caltrans/CalSTA), Phase 2 of the Travel Time Savings project, final design and construction commencement of Phase 1 of the Sacramento to Roseville 3rd Track project, implementation of Positive Train Control, and on-train testing and installation of OBIS, in addition to safety and security improvements (see Table 4-1 for all projects underway, programmed, or planned). Phase 2 of the Travel Time Savings project is expected to be completed by fall of 2018. The Service Optimization Plan may be expanded and integrated into other ongoing service planning efforts with other passenger rail partners and will be managed and coordinated at that level with CalSTA staff.

CCJPA was previously successful at using a relatively small stream of capital funding since 2009 to maintain a track and maintenance program. In November 2016, CCJPA provided CalSTA a report supporting the benefits gained from ongoing capitalized maintenance investment. The report demonstrates that this is the leading factor in delivering exceptional on-time performance since 2009, which illustrated the benefits of reduced host railroad delay minutes and improved on-time performance to the Capitol Corridor service from these invested capitalized maintenance funds. Now, through the success of the program, annual capitalized maintenance funds have been put in to the annual operating funding from the State. In addition, the CCJPA plans to utilize a portion of the SRA funds in combination with the annual maintenance funding to achieve additional track and station infrastructure reliability improvements, such as a dedicated right-of-way crew to remove trespassers, clean-up debris and perform vegetation removal.

Other current capital programs include safety/security projects implemented with Proposition 1B funding provided by the California Office of Emergency Services (CalOES) that expired in FY 2015-16 (but are eligible for expenditure over the next three additional years). Proposition 1B funding supports safety and security projects, and CalOES obligates \$1.9 million per year for the Capitol Corridor, which is used with specially identified Transit Safety and Security funds. Projects funded in this area include station security cameras, right-of-way security fences, and the fore-mentioned OBIS system.

Out-Year Capital Improvement Program

The out-year CIP is bolstered with new stable, long-term funding sources from the passage of SB1. A combination of dedicated (State Rail Assistance) and competitive grant (TIRCP) funds, for which CCJPA has been historically successful, enables CCJPA to confidently plan for significant, long-term capital projects such as Sacramento to Roseville 3rd Track, Oakland to San Jose Phase 2, take a variety of measures to optimize service, including working with CalSTA on a Statewide Integrated Travel Program. See Table 4-1 for a list of capital projects and funding status.

Specific Capital Improvement Program Discussion

There are a variety of CIP programs described in greater detail below. CCJPA pursues these projects on its own but typically will include one or more key partners that are either involved in project development, funding, or both. The partnerships will be highlighted where applicable.

Bicycle Access Program:

The station electronic bicycle locker project part of the CCJPA Bicycle Access Program was completed in December 2017. There are now 184 BikeLink eLockers across all Capitol Corridor stations, including those station shared with BART at Richmond and Oakland Coliseum. BikeLink cards are sold onboard Capitol Corridor trains as well as at select staffed stations (Sacramento, Davis, Martinez, Emeryville, and Oakland Jack London). Some educational and promotional materials have already been produced to encourage passengers to use BikeLink eLockers, and additional marketing efforts will continue in 2018. CCJPA staff continue to work with the selected vendor of the folding bicycle rental service project to further develop and refine the rental service program. After a successful demo period for an angled bike rack modification that increases onboard bike storage capacity, CCJPA will be purchasing additional units of the angled bike rack to be installed on more train cars on the Capitol Corridor in 2018. CCJPA is also currently working with a consultant and Amtrak to develop and refine a bike storage solution for the two Superliner baggage cars that are in Capitol Corridor service rotations; a prototype is being fabricated tested to finalized the design.

Additional New Cars and Locomotives:

The rail vehicles assigned to the Capitol Corridor and San Joaquin train services – the Northern California Intercity Passenger Rail (IPR) Fleet – comprises of 129 units, a mix of 26 locomotives and 103 passenger rail cars. Caltrans owns 115 units and Amtrak leases 14 units to Caltrans. The CCJPA and San Joaquin JPA jointly manage the assignment of the NorCal IPR fleet for each of their respective services. In 2017, the fleet expanded to its 129 units with the addition of six (6) Charger (Tier IV) locomotives. These six new locomotives are in operation on both routes providing cleaner-burning, more powerful locomotives. Funding for these Chargers was provided by Caltrans (through state of California Proposition 1B bond funds) and the federal government (through the American Recovery and Reinvestment Act [ARRA] funds).

During the procurement and production of the Charger locomotives, Caltrans was also managing a multi-state contract for the procurement and production of new bi-level passenger rail cars in late 2012. At least twenty (20) of these bi-level cars would be added to the NorCal IPR Fleet. The funding is comprised of the

federal ARRA program and Prop 1B funds. Unfortunately, the subcontractor for these new passenger rail cars was unable to meet the performance specifications and requirements as stipulated in the design plans, thereby incurring a significant delay to this project. However, recent procurement actions by Caltrans have been able to salvage the project whereby a rail car manufacturing facility has been retained to produce single-level passenger rail cars, rather than bi-level cars. As of this writing, the managers of the three CA IPR routes (including the CCJPA) are meeting with Caltrans to determine the requirements and costs associated with the operation of these single-level passenger rail cars on each of these 3 CA IPR routes, including, but not limited to, maintenance expenses, upgrades station platforms and facilities, onboard bike/luggage storage, and wheelchair access.

The eventual arrival of added rolling stock is currently unknown, yet expansion to/from Roseville associated with a completed phase one Sacramento to Roseville 3rd Track project will require the infusion of new rolling stock. Unfortunately, there is doubt at this time that new rolling stock will arrive by 2020.

Renewable Diesel Testing:

In coordination with the arrival of the Charger locomotives and with state policies toward GHG emissions reduction, CCJPA is actively engaged with rail partners around the state and with the California Air Resources Board (CARB) to test the use of renewable diesel (RD) as a blend or all-out substitute of the current carbon-based diesel fuel as soon as possible so that the “well to wheels” GHG emissions of the fuel used to propel the locomotives is significantly reduced. RD meets the same ATSM D975 fuel standards as regular petrol diesel. Even so, back when CARB and CCJPA were exploring the RD option, the engine manufacturers recommended to CARB and CCJPA that tests using RD be initiated. This test commenced in late 2017 with one of the older F59 locomotives and has thus far shown excellent results. A second test will be performed on one of the new Chargers in 2018, pending agreements between Siemens, Caltrans, and Amtrak. CARB conducted before (petrol diesel) and after (RD) sample-based tests for renewable diesel locomotives to determine emission rates over the course of 2017 and early 2018. Presuming the test results remain satisfactory, renewable diesel is poised to become the normal diesel fuel used in Capitol Corridor and potentially other intercity and commuter rail fleets in California. One key issue will be ensuring a supply of RD is stable and this is where coordination among a variety of state agencies, including CARB, CalSTA, and the Department of General Services, and possibly others, would help with supply stability.

Positive Train Control:

Another crucial short-term capital project is implementation of Positive Train Control (PTC). Federal law requires that a PTC system be in place by 2018 after extending past an original December 31, 2015 deadline. Caltrans Division of Rail and Mass Transportation (as owner of the rail cars and locomotives), working with Amtrak, is 1) completing the installation of the on-board PTC equipment on the cab control cars and locomotives and 2) constructing a remote server that will share the location of various intercity passenger trains operated by Amtrak (including the three California intercity passenger rail routes) with the dispatching centers of the various host railroads to ensure interoperability between the various PTC systems with the on-board PTC systems of the intercity passenger trains. The UPRR and Caltrain (as railroad owners) have begun to install and/or test the wayside PTC equipment along their respective railroad tracks. This system is on schedule to be tested and be in safe working order prior to the 2018 deadline for implementation.

**Table 4-1
Capital Projects by CCJPA and Others (\$ million)**

CCJPA Sponsored Projects	Status	\$ Programmed	Funding Sources	Project Cost	Description/benefits
Sacramento to Roseville Third Main Track Construction Phase 1	Final design underway.	\$85.65	Prop 1A HST, STIP, PCTPA STIP	\$85.65	Phase one of a third main track between Sacramento and Roseville allowing 2 additional round-trips to/from Roseville. Benefits will extend service frequency to/from Roseville and increase ridership and reduce emissions.
Sacramento to Roseville Third Main Track Construction Phase 2	Phase 2 for 7 additional round trips (10 round trips total). This phase is not fully funded.	\$4.00	Applied for various SB1 grants and other misc sources	\$465.40	A third main track between Sacramento and Roseville that will permit a total of 10 round-trips to/from Roseville. Benefits will extend service frequency to/from Roseville and increase ridership and reduce emissions. Third track project is coordinated with Caltrans District 3 for simultaneous construction work on Business 80 (SR51).
Oakland to San Jose Phase 2A	Awarded TIRCP grant funding. Subject to additional funding from Regional Measure 3 if passed.	\$60.00	TIRCP & RM3 (potential)	\$281.70	Realigning the Capitol Corridor service route from its existing Niles Subdivision to the Coast Subdivision will reduce travel time between Oakland to San Jose by 13 minutes. The project also includes a new intermodal transit station in Fremont/Newark connecting rail and bus service, enhancing the connection from Alameda County to the Peninsula across the Dumbarton Corridor.
Wayside Power Units (2) for Oakland Maintenance Facility	Project underway	\$0.76	TIRCP & CCJPA	\$0.76	Will provide wayside electrical power to locomotives and trains in the maintenance yard. The benefits are less fuel use, improved air quality due to reduced diesel emissions
Service Optimization Plan	Project underway	\$0.40	TIRCP & CCJPA	\$0.40	Plan will try to identify solutions to optimize ridership and revenue and coordinate service transfers, if possible, among Capitol Corridor, San Joaquin, and even ACE.
Intergrated Travel Program	Awarded TCRP grant funding for phases 3 and 4.	\$27.34	TIRCP	\$27.34	Develop and implement an intergrated travel pilot program.
Capitalized Maintenance	Programmed/Underway	\$10.00	STIP, PTA (ongoing 10-year dedicated funding)	\$10.00	An ongoing track maintenance upgrade and enhancement program to retain high OTP; funding for additional years in doubt due to STIP capacity issues.
At-Station Bicycle eLockers and Folding Bicycle Rental	All station eLockers installed. Folding Bicycle Rental design underway with consultant.	\$0.78	PTA funding and other sources	\$0.78	Program for adding bicycle storage at stations along the route and introduction of folding bicycle storage at limited station sites
On-Board Passenger Information System (OBIS) Wireless Network component	Design underway	\$5.00	Prop 1B	\$22.70	Funds the development and installation of an on-board video/audio information system based on geo-fencing and real time information. CCJPA funding supporting Caltrans Division of Rail and Mass Transportation lead funding.
Travel Time Savings Project	Project underway	\$15.50	TIRCP, Prop 1A, STIP	\$15.50	Project will improve running times along existing Capitol Corridor route by increasing speed on selected curves. This will take advantage of the enhanced abilities of the California equipment to travel faster on curved track.
Auburn Security Cameras, Lighting and Standby Power	Project underway	\$1.90	CCRP and Prop. 1B	\$1.90	Improve safety and security by improving lighting and security cameras at the Auburn station and equipment layover facility. Construction of a standby power system will allow shutdown of locomotive engines during layover servicing period, saving fuel and reducing emissions.
UPRR clearing and abatement	Project underway.	\$7.50	State Rail Assistance (ongoing 10-year dedicated funding)	\$7.50	A dedicated UPRR ROW clearing and abatement crew will improve safety on the Capitol Corridor route by removing debris and other materials (e.g. trespasser encampments).
CA PIDS replacement/upgrade (CCJPA share)	Project underway	\$1.11	State Rail Assistance (ongoing 10-year dedicated funding)	\$1.11	Upgrade of station information signs and back office systems that support PIDS.
UPRR signal replacement/upgrade	Project underway	\$6.80	State Rail Assistance (ongoing 10-year dedicated funding)	\$6.80	Replace and upgrade signal infrastructure to improve on-time performance.
SUBTOTAL: CCJPA SPONSORED PROJECTS		\$235.72	ESTIMATED TOTAL	\$927.54	
New Rolling Stock	Project underway	\$54.00	Prop 1B ICR, HSIPR (federal funding)	\$54.00	Funds the addition of 10 cars and 2 locomotives for use in CCJPA operations
Station Security Camera System Installation	Design complete and construction to begin	\$1.50	Prop. 1B and CCRP	\$1.50	Install security cameras covering the boarding platforms at four unstaffed stations: Rocklin, Roseville, Suisun and Fremont.
Salinas Service Extension	Planning and environmental documentation steps in various stages of development	\$141.00	Extension of Capitol Corridor service to Salinas with an initial 2 round trips with the potential for up to 6 round trips	TBD	Not yet approved by the CCJPA Board but was planned and coordinated with CCJPA and TAMC. UPRR modeling results required to determine project costs. Oakland to San Jose service frequency improvements are holding the project in a state of uncertainty. Funding availability is uncertain given the OKJ-SJC and UPRR negotiations.
SUBTOTAL: NON- CCJPA SPONSORED PROJECTS		\$196.50	ESTIMATED TOTAL	\$196.50	
TOTAL - ALL PROJECTS		\$432.22	ESTIMATED TOTAL*	\$1,124.04	

*Total costs are preliminary and will be updated as projects advance

Service Optimization Plan:

CCJPA received funding from 2017 TIRCP funding to lead a comprehensive passenger railroad service optimization study for the Northern California passenger rail system, which includes the Capitol Corridor and San Joaquin services as well as commuter train services such as ACE and Caltrain. This portion of the TIRCP grant award was split into four elements. An early element was a study of integrated ticketing (see Integrated Travel Program, below) which has already been delivered to CalSTA/Caltrans. The main element, the Service Optimization Study, will examine strategies to improve the existing train scheduling and equipment utilization so that reliability and the quality of connections between different train services and transit modes are maximized. Consultants have been engaged and are doing initial background research to kick-off the project in 2018. The third element, a mode of access survey, is also expected to be designed and conducted in the fall of 2018 on Capitol Corridor and San Joaquin services to better understand the travel patterns of passengers on both intercity passenger rail systems. And finally, the fourth element is a ridership model reconciliation study between the California Amtrak ridership model and various Metropolitan Transportation Organization (MPO) models, both of which have gaps for resolving nuanced land-use details (the CA Amtrak ridership model) and intercity travel and intercity/commuter hub station performance.

Integrated Travel Program (ITP):

CCJPA completed the first element of the Service Optimization process which has since advanced CCJPA as a leading participant in a CalSTA-led multi-agency initiative to research, develop and implement an Integrated Travel Program (ITP) that will enable California residents and visitors to plan and pay for travel anywhere in the state across multiple modes of transportation, including bus, metro, light and intercity rail, paratransit, bike hire, and ride-hailing services. First phase of research of European integrated travel schemes (completed in September 2017) suggests a solution in the form of a single end-use application for mobile phones supported by a sophisticated back-office platform that coordinates route planning, transit schedules, and real-time data. Phase 2, involve research of California public and private transportation operators travel planning and payments systems, the organization of an ITP Congress to solicit feedback from participating entities that was held in May 2018, and a report back to CalSTA with recommendations for Phase 3. Phase 3 is the development of a pilot scheme with selected public and private transportation operators and is expected to commence late 2018 and last 2 years. The final phase is the implementation of the pilot with the option for inclusion of additional participants for 3 years, and at the end of Phase 4 report back to CalSTA on the pilot outcome with recommendations for wider deployment. Phases 3 and 4 are now funded through the 2018 TIRCP award to CCJPA in April 2018.

Sacramento to Roseville Third Track (SR3T) Project Phase 2 and SR 51 Widening

Pursuant to various policy initiatives in SB1, the CCJPA and Caltrans, District 3, have chosen to pair a rail expansion and a highway widening project to maximize the benefits of both projects. The rail element, SR3T Phase 2, continues the SR3T project that will ultimately construct a new UPRR third main track between Sacramento and Roseville, which will allow CCJPA to expand its daily services from the current one round trip per day to ten round trips per day. The SR 51 Highway Widening element will include a variety of lane additions and modifications to improve a key freeway congestion point in Sacramento. Together, the project elements serve linked multi-modal market corridors as well as physical infrastructure and timing that make the pairing well suited to a variety of SB1 funding categories. This project was submitted for the TIRCP application that was ultimately not selected in 2018 but will continue to be a priority for CCJPA.

The first phase of SR3T as developed by the CCJPA and UPRR includes the modification of the Roseville Station, constructs the rail yard improvements in Roseville and the first eight miles of the new third track. The funding plan was secured through the allocation of 2016 TIRCP and available Proposition 1B and 1A funds. Phase 1 of the project has recently commenced final design and includes programed funds that take this project phase through construction. Completion of phase one will allow CCJPA to increase daily services between Sacramento and Roseville to two (2) round-trips per day.

SR3T Phase 2 will include preparing final design, NEPA clearances and required permits necessary for the construction phase of the project (complete construction of the third track) and allow the full expansion of the CCJPA services to ten (10) round-trips between Sacramento and Roseville per day. Notable in this proposed design effort will be the design and environmental permitting of a new rail bridge crossing the American River.

Caltrans, District 3's SR 51 widening project is in the same phase as CCJPA – working to complete its pre-construction activities. Caltrans, District 3 is currently planning a major improvement program for State Route 51, also known as the Business 80 Corridor or Capital City Freeway in Sacramento. This project will widen the existing freeway to provide carpool lanes, auxiliary, and transition lanes and will widen the existing American River highway bridge. The freeway widening will directly affect two existing railroad bridges that cross over SR51 as well as a required third new railroad bridge which will be constructed to accommodate the new third main track as part of the SR3T Phase 2 project. The length of these three bridges will have to be extended to as part of the Caltrans SR51 project. Another rail bridge that crosses SR 51 closer to the Midtown and East Sacramento neighborhoods will also require modification as the freeway is widened, however there are no direct needs to increase the capacity of that rail bridge with the SR3T Phase 2 project, but coordination with UPRR, Caltrans, District 3, and the CCJPA will be paramount.

The new railroad bridge and SR51 highway bridge structures crossing the American River are in close proximity to each other and will be considered as related projects in the analysis for NEPA clearances and permits for the respective projects. Together, environmental permitting, shared markets serving corridors across modes, the varieties of bridge construction, and timing of the two project elements has resulted in a unique opportunity for Caltrans and CCJPA to partner in funding and jointly undertaking the NEPA and permitting analysis requirements for both projects in the pre-construction phases. When it comes time for construction with future funding applications, this partnership will allow significant time and cost savings for both projects and capitalize on the synergies and economies of scale resulting from intermodal partnerships anticipated in both SB1 and the Draft 2018 State Rail Plan.

Oakland to San Jose Service Expansion Project Phase 2A:

Further south along Capitol Corridor in Alameda County, CCJPA is proposing a project to re-align the service route from its existing Union Pacific Railroad (UPRR) Niles Subdivision line to the UPRR Coast Subdivision with adjustments to stations served with the service realignment. This new routing will create a faster link from Oakland to Fremont/Newark, Santa Clara, and San Jose by reducing travel time for passenger trains by 13 minutes. This project will provide an attractive alternative to driving through the Bay Area's 5th most congested corridor, according to the Metropolitan Transportation Commission (MTC), and the reduction of vehicle miles travelled through this congested corridor will result in increased ridership on CCJPA trains and lower GHG emissions. This project will also be a cornerstone for a new intermodal transit center at Fremont/Newark connecting existing rail and bus service, enhancing the connection from Alameda County to the Peninsula across the Dumbarton Corridor. TIRCP funds were awarded to this project in April 2018 that will serve as a portion of the overall funding for CCJPA and its public partners to complete the design, environmental review, entitlements and construction of the Oak-SJC Phase 2A project.

As identified in the CCJPA Vision Plan, the current routes used by freight and Capitol Corridor trains in the Oakland to Newark territory present capacity conflicts for both freight and passenger rail modes. Currently, UPRR freight trains running between the Port of Oakland and the San Joaquin Valley primarily use the lengthier Coast Subdivision, whereas Capitol Corridor trains use the lengthier Niles Subdivision to later get to the Coast subdivision. These routing conflicts reduce capacity overall and especially impact the Centerville neighborhood of Fremont, California, as both rail services cross over through the City of Fremont to ultimately reach their intended destinations. This project seeks to build the necessary infrastructure for both freight and Capitol Corridor passenger operations to be run far more efficiently, thus better serving their respective markets.

The freight component of this project includes significant improvements that will be made to the UPRR Niles and Oakland Subdivisions to allow UPRR freight trains to use the Niles as their primary route. This will result in fewer miles travelled by freight trains and reduce freight train congestion on the Coast route resulting in lower GHG emissions. On the passenger side, the Capitol Corridor service will now operate exclusively on the Coast Subdivision, which will similarly result in fewer miles travelled by passenger trains, resulting in faster service and a reduction in GHG emissions. Specific Oakland to San Jose Phase 2 railroad improvements include upgrading the Coast Subdivision from Elmhurst Mile Post (MP) 13.6 to Newark Junction MP 31.4. The work will include track and tie replacements, security fencing, signal upgrades and a new passing siding. Required freight railroad mitigation measures will include a new connection between the Niles and Oakland Subdivisions at Industrial Parkway (MP 24.0) and a new connection at Shinn (MP 30.1), all of which conform with an extensive Alameda County Transportation

Commission (Alameda CTC) led planning effort to improve freight and passenger rail service with targeted investments.

With Capitol Corridor service switched to the new Coast Subdivision alignment, CCJPA will eliminate service to two existing stations (Fremont/Centerville and Hayward) and will replace them with an upgraded multi-modal (rail/bus/park & ride) station at the location of an existing park & ride facility on the city borders of Fremont and Newark, CA. Circulation and access between modes of travel will be enhanced and travel times for public and private buses will be significantly reduced. The new single track side rail platform will be constructed at-grade on the Coast Subdivision at SR 84 (Dumbarton Bridge approach) adjacent to the current AC Transit Ardenwood Park and Ride facility. The existing park & ride facility will be expanded to accommodate two stories of parking and will continue to allow for local bus and drop-off connection. However, the public and private transbay bus services currently utilizing local roadway network to the existing Ardenwood Park & Ride facility will instead be relocated to an elevated SR 84 median bus expressway (SR 84 is elevated crossing above the Coast Subdivision tracks) with direct vertical access to the new passenger rail station and upgraded park & ride.

In partnership with Alameda CTC, AC Transit, and other public partners, the significant UPRR freight and Capitol Corridor track improvements along the Niles, Oakland, and Coast subdivisions, coupled with the Ardenwood (Fremont/Newark) park & ride and intermodal station improvements, represent the first required steps in separating Capitol Corridor and UPRR freight service so that both systems can operate more efficiently and expand service in the future.

On-Board Information System (OBIS):

OBIS is a project initially supported by CCJPA in partnership with the Caltrans Division of Rail and Mass Transportation (Caltrans), where Caltrans is now the majority funding leader. CCJPA has used CalOES funds on an annual basis to develop the final design documentation for an on-board audio replacement system that is integrated with a new on-train video display system across all passenger accessible vehicles in the fleet. OBIS fulfills a FRA-led ADA requirement. All parties have contracted with Amtrak to be the lead for OBIS procurement and implementation. The selected vendor replaced the audio-element subcontractor mid-project which has led to final design acceptance delays. The required lab test benches are expected went through final testing in April 2018. A test OBIS system will be installed on a Capitol Corridor train as anticipated in summer of 2018. Full fleet-wide install would proceed following a successful test. Complete implementation is anticipated in late 2019. Caltrans is also exploring a concurrent upgrade of the existing now seven year old WiFi systems, the communication backbone for OBIS but also the system that provides the on-train amenity for passengers.

5. PERFORMANCE STANDARDS AND ACTION PLAN

The CCJPA's management program for the Capitol Corridor utilizes a customer-focused business model approach. It emphasizes delivering reliable, frequent, safe, and cost-effective train service designed to sustain growth in ridership and revenue. During the past 19 years, ridership has trended upward as the service provides a viable, transport alternative to the parallel congested I-80/I-680/I-880 highway corridors that is competitive in terms of travel time, reliability, and price.

THE CAPITOL CORRIDOR'S RIDERSHIP GROWTH BENEFITS THE ENVIRONMENT BY REDUCING AIR POLLUTION AND GREENHOUSE GAS EMISSIONS. IN FY 2016-17 THIS WAS ROUGHLY A NET REDUCTION OF OVER 14,446 TONS OF REDUCED CO₂, WHICH IS EQUIVALENT TO PLANTING MORE THAN 2,064 TREES.

In addition to the typical performance metrics, it is worth examining the environmental impact of the Capitol Corridor's success and growth. The Capitol Corridor's ridership growth benefits the environment by reducing air pollution and greenhouse gas emissions. In California, approximately 58% of greenhouse gas emissions come from the transportation sector. Based on profiles of the Capitol Corridor rider from on-board surveys and the 1.61 million riders in FY 2016-17, the Capitol Corridor generated more than 109 million passenger miles, which corresponds to nearly 82 million vehicle miles traveled (VMTs) removed from Northern California roadways. The net reduction of carbon dioxide provided by the Capitol Corridor train service (personal vehicle CO₂ emissions minus locomotive emissions) was over 14,446 tons for FY 2016-17, the rough equivalent of planting more than 2,064 trees. For health pollutant impacts, such as ozone and particulate matter, the net effect for Californians is a reduction in those pollutants over

automobile travel, and as locomotives are replaced with the Charger Tier 4 cleaner burning locomotives, the net reduction of those pollutants begins to increase significantly.

The CCJPA develops performance standards for the Capitol Corridor service in coordination with the Uniform Performance Standards (UPS) developed by the California State Transportation Agency (CalSTA). The use of data analysis to drive cost effective service improvements has been a theme of CCJPA's management of the Capitol Corridor since assuming management of the service, and the role of data is only expanding moving forward. On June 30, 2014, in accordance with the Intercity Passenger Rail Act of 2012, the UPS starting in FY 14-15 and onwards were updated by CalSTA to measure usage (ridership and passenger-miles), cost efficiency (system operating ratio and total operating costs/passenger-mile), and reliability (end-point on-time performance, station on-time performance, and operator delays/10,000 miles). Table 5-1 summarizes the updated standards and results for FY 2015-16 and for FY 2016-17 through December 2016, as well as the standards for the next two fiscal years. Appendix C shows the measures used to develop standards for two additional years through FY 2020-21.

FY 2016-17 Performance Standards and Results

The service plan for FY 2016-17 maintained the service that was initiated August 13, 2012 and later adjusted on August 22, 2016 with a service plan of 30 weekday trains (22 weekend day). Both service plans were initiated at the time to support significant reductions in operating costs. Each service adjustment noted has been successful at balancing safe service quality, ridership, and revenue against gradually increasing costs. CCJPA is currently operating the maximum level of service frequencies along the entire Auburn-San Jose route permitted by the host railroads (UPRR and Caltrain) with the current available train equipment assigned to the Capitol Corridor.

In FY 2016-17, Ridership and Revenue increased by 3% and 6%, respectively, and Capitol Corridor finished the fiscal year with 91% on-time performance (reliability). The primary reasons for the high level of OTP is an effective capitalized maintenance program (resulting in a solid state of good repair) and disciplined dispatching by the host railroads (UPRR and Caltrain) to keep the Capitol Corridor trains operating safely and reliably.

For the busiest trains, Northern California's booming megaregional economy plus high service reliability helped sustain ridership and increase the attractiveness of the Capitol Corridor as a viable, safe, frequent, customer-focused public transport service linking the three metropolitan regions in Northern California. Increases in weekend ridership can be attributed to sporting events served by Capitol Corridor trains by the August 22, 2016 schedule adjustment.

In FY 2016-17:

- Ridership: 1.6 million, an increase of 3% over the prior FY 2015-16.
- Revenue: \$33.9 million, 6% above FY 2015-16.
- System Operating Ratio (farebox ratio): 56%, above the 52% ratio for FY 2014-15, primarily due to increased revenues and lower fuel expenses.
- On-Time Performance (OTP): 91%, keeping the Capitol Corridor as the most reliable IPR service in Amtrak's national system.

FY 2017-18 Performance Standards and Results to Date

The CCJPA, in cooperation with Amtrak and Caltrans, developed the FY 2017-18 standards based on ridership, revenue, and operating expenses identified in the current FY 2017-18 CCJPA/Amtrak operating contract. These standards are presented in Table 5-1.

- Ridership: Year-to-date (through April 2018) ridership is 5.7% above last year and 6.6% above business plan projections due to an improving economy in Northern California (more specifically in Silicon Valley and San Francisco Bay Area employment bases) and strong weekend ridership (due to travel to sporting events [49ers, Raiders, Oakland A's] and weekend promotional offers).
- Revenue: Year-to-date (through December 2017) revenue is 5.5% above last year and 6.3% above business plan projections.
- System Operating Ratio: Year-to-date (through April 2018) system operating ratio (a.k.a. farebox return) is 58%, above the FY 2017-18 standard of 50%.
- On-Time Performance (OTP): Year-to-date (through April 2018) OTP is 89%, which is 1.1% below the 90% standard.

FY 2018-19 and FY 2019-20 Performance Standards

Table 5-1 provides the preliminary performance standards for FY 2018-19 and FY 2019-20. Appendix C shows the measures used to develop the performance standards. The FY 2018-19 and FY 2019-20 future operating costs have been developed to conform with PRIIA Section 209 pricing policy, which stipulates that all state-financed, Amtrak-operated intercity passenger rail (IPR) routes under 750 miles shall be priced by Amtrak in a fair and equitable manner.

FY 2018-19 and FY 2019-20 Action Plans

Table 5-2 summarizes projects, ongoing and planned, over FY 2018-19 and FY 2019-20. The projects listed are new, one-time initiatives and do not reflect recurring or annual CCJPA objectives (e.g. develop annual marketing plan, update business plan, rider appreciation events, etc.). Each project shown in Table 5-2 is dynamic and can change based on circumstances beyond CCJPA's control.

Table 5-1: System Performance Standards and Results

Performance Standard	FY 16-17			FY 17-18 (through February 2018)			FY 18-19	FY 19-20
	Actual	Standard	% Change	Actual	Standard	% Change	Standard	Standard
<u>Usage</u>								
Route Ridership	1,607,277	1,520,000	+6%	970,215 (through April 2018)	919,678	+5.5%	1,670,400	1,695,000
Passenger Miles	108,609,358	93,752,600	+16%	45,936,179	45,055,417	+2%	112,050,000	113,701,000
<u>Efficiency</u>								
System Operating Ratio (train and feeder bus)	58%	50%	+16%	59%	52%	+13.5%	54%	54%
Total Operating Cost/Passenger-Mile	\$0.54	\$0.64	-16%	\$0.54	\$0.64	-15.6%	\$0.58	\$0.59
<u>Service Quality</u>								
End-Point On-Time Performance	91%	90%	+1%	89% (through April 2018)	90%	-1.1%	90%	90%
Stations On-Time Performance	94%	90%	+4%	90.3%	90%	+0.3%	90%	90%
Operator Delays/10K Miles	329	>325	+1%	378	>325	+16%	>325	>325

Table 5-2: FY 2018-19 and FY 2019-20 Action Plan

PROJECT	Past Fiscal Years	FY2018-19												FY2019-20												Future Fiscal Years
		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
On Board Information System (OBIS)																										
Positive Train Control Implementation																										
California PIDS Upgrade																										
Dedicated UPRR ROW Clearing																										
UPRR Signal Replacement/Upgrade Program																										
Service Optimization Planning																										
Integrated Travel Program																										
Sacramento to Roseville 3rd Track Project (Phase 1)																										
Sacramento to Roseville 3rd Track Project (Phase 2) & SR 51 Widening																										
Oakland to San Jose Phase 2A																										
Folding Bicycle Rental Program																										
Wayside Power at Oakland Maintenance Facility																										
Renewable Diesel Testing																										

6. ESTABLISHMENT OF FARES

The CCJPA develops fares in conjunction with Amtrak to ensure the Capitol Corridor service is attractive and competitive with the automobile and other transportation options. Ticket types include standard one-way and roundtrip fares, as well as monthly passes and 10-ride tickets valid for 45 days. These discounted multi-ride fares are competitive with other transportation options and have become increasingly popular due to the high number of repeat riders who use the Capitol Corridor trains as their primary means of travel along the corridor. The monthly and multi-ride tickets can be used year-round for all regularly-scheduled train service. Reservations are not required for any of the trains. eTicketing was introduced in FY 2011-12 for one-way/round trip ticket purchases, and in January 2014 all multi-ride tickets were moved to an eTicketing platform. In 2013, CCJPA worked with Amtrak to create a small group ticketing option to replace the loss of ten-ride ticket transferability. The “Take Five for \$5” buy-one/bring up to five others at \$5 each way is a seasonal discount for small group travel. Due to its popularity, CCJPA developed the “Friends and Family” year-round offer that allows savings for buy-one/bring up to five others at 50% off. The Capitol Corridor also utilizes seasonal discounts, such as Take 5 for \$5 Weekends, Buy-One, Get-One Saturdays, and 50% Off Senior Midweek, to promote ridership during off-peak times and aimed at specific target groups.

In January 2018, Amtrak implemented significant changes to its nationwide Everyday Discounts program, which many Capitol Corridor passengers had used and benefitted from. The following changes were made, effective January 7, 2018:

Passenger Type	Amtrak Everyday Discounts (prior to January 2018)	Amtrak Everyday Discounts (effective 2018)	California Everyday Discounts (effective January 2018, with promo code)
Seniors	Age 62+, 15%	Age 65+, 10%	Age 62+, 15%
Passengers with Disability	15%	10%	15%
Students	15%	Discontinued	15%
Children	Up to two children per paid adult, 50% each	Limited to one child per adult, 50%	Passengers will be encouraged to use Friends & Family 50% discount

Additional changes will be implemented in later phases, including the elimination of the AAA discount in February.

CAPITOL CORRIDOR, TOGETHER WITH THE SAN JOAQUINS AND PACIFIC SURFLINER, HAS IMPLEMENTED ITS OWN CALIFORNIA EVERYDAY DISCOUNTS TO PRESERVE SOME OF THE DISCOUNTS REDUCED OR ELIMINATED BY AMTRAK’S NATIONWIDE TARIFF CHANGE.

In the interest of maintaining value for passengers, the Capitol Corridor, together with the state’s two other intercity passenger rail services – the San Joaquins and the Pacific Surfliner – have implemented its own California Everyday Discounts programs to preserve some of the discounts reduced or eliminated by Amtrak’s nationwide tariff change. The only change to the above discounts is how passengers access them: instead of the discounts being automatically applied based on passenger type selected, Capitol Corridor passengers now must use a promo code to receive the discount. CCJPA elected to go along with Amtrak’s change to the 50% Child Discount but will more aggressively promote the Friends & Family deal as a value option for families. The Capitol Corridor, in coordination with the San Joaquins and the Pacific Surfliner, is also pursuing a special AAA discount to replace Amtrak’s nationwide discount that will cease on February 15, 2018.

FY 2018-19 Fares

Pursuant to last year’s Business Plan Update, multi-ride ticket fares (45-day/10-ride and monthly) will increase by 2% in June 2018 (the last month of FY 17-18). This fare increase represents the third (and last) 2% multi-ride ticket fare increase as part of the CCJPA’s three-year fare increase plan. To that end, the CCJPA does not plan to propose or implement fare increases for FY 2018-19; however, the CCJPA does reserve the right to raise fares to offset any unforeseen cost increases, such as spikes in fuel prices. If this action is required, the CCJPA will work with Amtrak to consider factors such as ridership results, revenue levels, variable operating expenses (e.g., fuel), and overall economic conditions along communities in the corridor.

As part of its Marketing Program (Section 8), the CCJPA will develop outreach initiatives designed to increase customer satisfaction and ridership. Opportunities include:

- Leverage new and existing communication channels to better engage customers with information about promotions, schedules, train status, and service advisories.
- Continue to develop rich, destination-focused content for Capitol Corridor’s digital platforms, as well as strategies for targeted distribution of that content.
- Explore a new discount offer for less-frequent, single-ticket riders and boost ridership during off-peak times (e.g. weekends and midday/midweek).
- Enhance customer loyalty and referral programs to retain existing riders and attract new riders.
- Promote the use of secure, electronically-accessed bicycle facilities at stations.
- Continue to highlight on-board amenities such as Wi-Fi and the Café Car to emphasize the convenience of traveling on the Capitol Corridor.
- Increase utilization of Amtrak’s various eTicketing initiatives, as they enable real-time validation and improve customer convenience. Having real-time information on ridership and revenue data will also lead to better operating cost efficiencies.

Together, these fare and ticketing programs for FY 2018-19 will enhance customer convenience and increase revenue yield as part of the expanding eTicketing program.

FY 2019-20 Fares

The projected fare structure for FY 2019-20 will include the projected 2% increase in multi-ride ticket prices in July 2019. If operating expenses fluctuate significantly (either increases or decreases), this planned fare increase will be revisited and adjusted accordingly. Other fare and ticketing opportunities include:

- Continue to expand and raise visibility of transit connectivity programs such as the Transit Transfer Program, joint ticketing, and transfer of motorcoach bus routes to parallel local transit services.
- Promote the use of new folding bicycle rental service at select stations.

7. SERVICE AMENITIES, FOOD SERVICES, AND EQUIPMENT

The CCJPA is responsible for the administration and maintenance supervision of the State-owned fleet of rail cars and locomotives assigned to Northern California. The CCJPA works to ensure equity in the operation and maintenance of equipment assigned to the Capitol Corridor and the San Joaquins services. In accordance with the Interagency Transfer Agreement (ITA), the CCJPA is entrusted with ensuring the rail fleet is operated and maintained to the highest standards of reliability, cleanliness, and safety. In addition, the ITA ensures that the unique features and amenities of the State-owned train equipment are well utilized and maintained to standards established by Amtrak, the State, and the CCJPA.

Service Amenities

Accessibility:

The Capitol Corridor and the San Joaquins provide complete accessibility to passengers. Accessibility features include on-board wheelchair lifts, two designated spaces per train car for passengers in wheelchairs and one wheelchair-accessible lavatory on the lower level of each train car. Mobility-impaired persons not in wheelchairs can utilize grip bars at each door, work with conductors to utilize on-train step stools, or even utilize the wheelchair lifts, if needed, to board from the platform. Passengers who require assistance may contact the conductors for assistance in boarding or detraining. The future OBIS system will include support for inductive hearing devices and compliant video and audio messaging.

Passenger Information Displays:

Each California rail car is equipped with passenger information displays that provide the train number and destination. These displays will gradually be upgraded through the implementation of the OBIS system that will involve modern video and audio messaging and announcements. See more details on OBIS in Section 4, Capital Improvement Program.

At the stations, there are electronic passenger information display signs (PIDS) that provide train arrival times, delay information, and other notifications. CCJPA is currently leading an effort to redesign the PIDS system so that train arrival and delay information are able to be updated at a faster frequency than the existing system.

Lavatories:

Lavatories in California cars feature electric hand dryers, soap dispensers, and infant diaper-changing tables.

Telecommunications/Wi-Fi:

All cars in the fleet have Wi-Fi service that originates from the “brain” car (Café car). This service is free to the customer and permits basic email and web-browsing. Amtrak’s Wi-Fi Connect prohibits streaming services, which would use up excessive amounts of bandwidth for a limited number of users. Free Wi-Fi service launched November 28, 2011, was upgraded in March 2013, and is poised for another upgrade within the next few years, possibly in coordination with the implementation of OBIS. Power outlet access at each seat has been available for years and can power and charge passengers’ various electronic devices. The Wi-Fi system is also a basis for operational applications, such as OBIS, which will be added over time as described in Section 4.

NEW ELECTRONIC BICYCLE LOCKERS WERE INSTALLED AT THE MAJORITY OF CAPITOL CORRIDOR STATIONS IN FY16-17, PROVIDING SECURE BICYCLE PARKING FOR PASSENGERS WHO WISH TO LEAVE THEIR BIKES AT THEIR ORIGIN OR DESTINATION STATIONS.

Bicycle Access:

All Northern California Coach Cars have bicycle storage units that hold three bicycles on the lower level of the car. In addition, the 14 first generation California Cab Cars (8300-series) were retrofitted in FY 2013-14 to hold 13 bicycles as opposed to 7 bicycles. The five Surfliner Cab Cars (6000-series) have storage space for up to 13 bicycles in the lower level baggage area. Former California baggage cars (8200 series) have been added to the Capitol Corridor fleet as second bike cars on select Capitol Corridor trains to accommodate increasing demand for on-board bike storage.

Bicycle storage demand on the Capitol Corridor trains has quickly outpaced the capacity to safely meet that demand in recent years. In FY 2012-13, the CCJPA adopted the Bicycle Access Plan, which presents key actions to improve and increase on-train and secure station bicycle capacity. Secure station bicycle parking has been installed at most Capitol Corridor station, and testing of an onboard bike storage design that increases storage capacity has been promising. In addition, CCJPA is working with Amtrak to design an onboard bicycle storage solution for the Superliner cars, which are leased from Amtrak for operations in the Capitol Corridor system.

Food and Beverage Services:

Menu changes and promotional efforts that CCJPA implemented in the past fiscal year are now manifesting in improved customer satisfaction and increased sales of select menu items. CCJPA and Amtrak are in the process of upgrading the current point-of sale registers to increase reliability and provide more flexibility of on-board promotions. CCJPA is also working with Amtrak to obtain enhanced sales reports to facilitate menu changes that are more responsive to customer tastes. As a future phase of OBIS, CCJPA and Amtrak will evaluate the viability of providing food service promotions and advertisements via on-board flat screen monitors.

In conjunction with the next schedule change anticipated in May 2018, CCJPA will initiate cart service on select trains, due to a shortage in equipment anticipated as a result of an upcoming San Joaquin schedule change. CCJPA and Amtrak have secured the carts and are in the process of developing a limited menu and service procedures for the cart service.

CCJPA will continue to work with San Joaquin Joint Powers Authority and Amtrak to ensure the food and beverage service on the Capitol Corridor and the San Joaquins exceeds customer expectations.

Equipment Acquisition, Renovation, and Upgrades

The CCJPA continues to work closely with Caltrans and Amtrak to refine the maintenance and operations programs to improve the reliability, safety, and cost-effectiveness of the rail fleet. The Northern California fleet supports both the Capitol Corridor and San Joaquin services. The fleet is a mix of California-owned equipment and leased Amtrak equipment as demonstrated in Table 7-1. New fleet acquisitions under development will dramatically increase service capacity. During FY 2012-13, Caltrans secured funding for 40 new coaches and six cleaner-burning locomotives for the Northern California Intercity Passenger Rail (IPR) fleet, the statuses of the coaches and locomotives are explained in Section 4 of this Business Plan Update draft.

In January 2014, the state of Illinois, as lead agency for the Midwest states, California, Oregon, and Washington, announced the award of a federally-funded locomotive procurement for the cleanest diesel-electric locomotives in the world, meeting EPA Tier IV emissions requirements. Six of these cleaner-burning Tier IV locomotives, named "Chargers", were assigned to Northern California for use on the Capitol Corridor and San Joaquin services. After six months of extensive testing and software upgrades, all six of the Chargers have been formally accepted by Caltrans (owner), Amtrak (contract operator of the units), and the CCJPA (oversight of maintenance and service performance) on October 23, 2017. These six Chargers are now officially in operation on the Capitol Corridor in the lead position.

Rehabilitation and Modification Programs

Using previously allocated State funds, the CCJPA, Caltrans, and Amtrak have created a multi-year program of periodic overhauls to the existing train fleet that will improve the fleet performance and maintain the valued assets of the State's rolling stock investment.

Rail Equipment Projects Completed in FY 2017-18

- The 15 F-59 locomotives owned by the State went through a multi-year State-funded renovation program. The head-end power (HEP) units in the locomotives that provide power for lighting, electrical outlets, etc., were updated to EPA Tier 4 standards.
- The installation of Positive Train Control (PTC) equipment was installed in all the State's 17 locomotives and 19 cab cars.
- The CCJPA contracted with Caterpillar to assist Amtrak with the maintenance and training for the Head End Power (HEP) units in the locomotives.
- As part of the safety and security program, all cab cars and locomotives are now equipped with a "forward facing" digital security camera system. This provides the Amtrak with a valuable tool to assist with post-incident investigations.
- The 14 Comet 1B Coaches, three Horizon Diners and three non-powered control-unit (NPCU) cab cars are in use primarily on the San Joaquin service.
- Destination sign software was updated to match current schedules.
- Communication systems had flash memory chips replaced/reprogrammed.
- The 66 first generation California IPR cars are going through a multi-year project to have their HVAC systems upgraded to a more environmentally friendly refrigerant (R-410A) and their ducting redesigned and new computer controlled thermostats for more comfortable and even inside temperature. During this modification, they will also have their aging floors replaced with new linoleum and enhanced bracing at high traffic areas
- The six original baggage cars have been converted for increased capacity for bicycle only storage and contracted to be run on the Capitol Corridor route to meet the increasing demands for bicyclists.
- The Northern California IPR fleet will be upgraded with the installation of on-board PTC equipment (including software operating systems). A total of 47 vehicles (locomotives and cab control cars) are going through the testing and commissioning in the fourth quarter of FY 2018 to meet the PTC Congressional deadline of December 31, 2018.

Rail Equipment Projects Upcoming in FY 2018-19

- Continuation of the HVAC, ducting, and thermostatic controller upgrades.
- The original diner built back in 1995/96 will undergo a rehab of the upper level galley to update the equipment with current technology standards, including new chillers, drainage, counter tops, lighting, internet connections and food storage. The new design will also make the working area more ergonomic for the food service employees.

- New digital video recorders with enhanced picture quality and recording time.
- Inward facing cameras in cab cars and locomotives for added security.
- Upgraded event recorders (black boxes) for better compatibility with PTC and better monitoring of the operation of the trainsets for added safety and security.
- Possible revenue seating added to the upper level of the 8800 series diner cars.
- Preview of new seating proposed for the 6000 series Surfliner cars for passenger feedback to replace the existing seats.
- Rebuilt door operators for the 6000 series Surfliner cars.
- New side door panels for the 6000 series Surfliner cars.
- Rerouting of venting on the waste system on the 8000 series cars to help mitigate foul odors.
- Ongoing replacement and upgrading of the floor panels on the 8000 series cars.
- Destination sign LED displays will have old faded tiles replaced with new tiles.
- Testing of the new OBIS digital destination signs and PA systems to replace the outdated analog systems.
- Wi-Fi system will be upgraded to allow more streaming content.
- Suspension and truck overhaul starting on the (12) 6000 series Surfliner cars and finishing with the 66 original first generation Northern California IPR cars.
- Overhaul of the hydraulic ADA boarding lifts on all cars.
- Cleaning and rerouting of the venting system on the waste tanks on the cars to help mitigate foul smells.

**Table 7-1
Northern California Equipment Fleet
Capitol Corridor and San Joaquin**

California owned rail equipment	NOTES
15 F59 Locomotives	Assigned to San Joaquin and Capitol Corridor service
2 Dash-8 Locomotives	Assigned to San Joaquin and Capitol Corridor service
6 Charger Locomotives	Assigned to San Joaquin and Capitol Corridor service
78 Bi-Level California Coach and Café Cars	Assigned to San Joaquin and Capitol Corridor service
14 Single Level Comet Cars	Assigned to San Joaquin service

Amtrak Supplemental Equipment	NOTES
3 P42 Locomotives	Assigned to San Joaquin and Capitol Corridor service
1 Bi-Level Superliner Coach Cars	Assigned to Capitol Corridor service
1 Bi-Level Superliner Baggage Car	Assigned to Capitol Corridor service
3 Bi-Level Superliner Café Cars	Assigned to Capitol Corridor service
3 Single Level Café Cars	Assigned to San Joaquin service
3 NPCU Single Level Baggage Cars	Assigned to San Joaquin service

8. MARKETING STRATEGIES

To raise brand awareness of the Capitol Corridor service and increase ridership, the CCJPA employs a strategy of combining targeted advertising campaigns, multi-channeled cross-promotions with strategic partners, paid social media, and media outreach efforts. A primary objective is promoting the service in key markets and attracting riders to trains with available capacity. Staff will focus on rider acquisition and retention through targeted advertising and brand engagement, primarily in the digital media space. Marketing dollars and impact are maximized through joint promotions and social media sharing with key partners along the Capitol Corridor route.

Advertising Campaigns and Brand Awareness:

Advertising campaigns inform leisure and business travel audiences about the advantages of train travel, including amenities, promotions/pricing, and destinations. Campaigns typically employ a mix between traditional and digital media, although increasingly more marketing dollars are now going towards paid search and digital platforms, including social media, because of the ability for sophisticated targeting, messaging flexibility, and tracking capabilities. CCJPA’s advertising efforts emphasize the Capitol Corridor image and brand, in accordance with the CCJPA Board’s edict to create a distinct, regional brand for the Capitol Corridor and strengthen brand awareness throughout the service area.

Promotions:

The CCJPA will also continue successful programs that target specific markets designed to build ridership during off-peak hours such as midday/mid-week and weekend travel. Destination-focused promotions highlight riding the train to events at venues along the route, such as Oakland Coliseum and Levi's® Stadium, creating awareness of the train as a convenient and fun way to reach leisure destinations throughout Northern California.

Online Presence and Customer Engagement:

The CCJPA places great importance on delivering timely and accurate passenger communications via multiple channels. Efforts include:

- Maintaining a website that is mobile optimized and easy to navigate, with booking and trip planning tools that are easy to use, as well as timely and engaging content.
- Boosting participation in online social networking platforms, such as Facebook, Twitter, Instagram, and LinkedIn and exploring new opportunities within these rapidly evolving platforms.
- Continuing Rider Appreciation programs such as “Cappy Hour” discounted drink hours, and other on-board, rider-focused events.
- Coordination with Amtrak to enhance customer loyalty via Amtrak Guest Rewards.
- Enabling consistent and timely passenger communications via multiple channels, including SMS/text and email service alerts, as well as information exchanged between the Customer Contact center and Marketing and Operations staff to ensure customers receive clear and up-to-date information about the Capitol Corridor service and promotions.
- Integration of our passenger service advisory system, including SMS text and e-mail service alerts, with the Capitol Corridor website and social media channels.

Partnership Brand Marketing:

The Capitol Corridor's Strategic Marketing Partnership program has established a catalog of marketing assets and associated metrics to enhance the CCJPA's trade promotion negotiations. These assets enable selected partners to market their products via Capitol Corridor's diverse marketing channels, such as interior, exterior, and station signage, social media, email, electronic station signs, and most recently, the on board wi-fi landing page. The partnership program is designed to increase value, ridership and revenues by leveraging partnerships with well-known organizations that are close to Capitol Corridor stations and/or share similar target audiences to heighten visibility of the Capitol Corridor brand.

Joint Marketing and Outreach:

The CCJPA achieves cost efficiencies by working with local community partners, such as CCJPA member agencies and local destinations, to develop creative programs that promote both destination and rail travel. CCJPA also partners with Amtrak and other agencies on select promotions and events to better leverage shared marketing dollars and assets.

Customer Relations:

The CCJPA views communication with passengers as the cornerstone of our customer-focused service delivery. We encourage passengers to provide input on our service performance through comment cards on the trains, phone calls, letters, email, and social media. We use this feedback to identify and prioritize service modifications, capital improvements, and desired amenities in the service. Use of an online customer comment tracking portal has allowed the CCJPA to improve its communication with the public, as well as coordinating internally to ensure that passengers receive an appropriate and timely response to their request or issue.

Public Relations, Outreach, and Advocacy:

The CCJPA's public information efforts uses traditional and digital media to build awareness about its service, promotional offers, transit connections including the Transit Transfer Program, rail safety, and customer amenities.

- Advocacy and public relations efforts that aim to increase the Capitol Corridor’s visibility and recognition as a unique interagency partnership.
- Helping communities along the Capitol Corridor route build awareness of the service in their respective cities through local outreach campaigns, including transit connections via the Transit Transfer Program.
- Leveraging CCJPA riders who use and benefit from the service as advocates in their communities.
- Reciprocal marketing with the tourism and hospitality industry (i.e., hotels, airports, and convention/visitor bureaus).
- An Annual Performance Report that informs the public and elected officials of the service’s successes, benefits, and challenges.
- Collaboration with Operation Lifesaver, a voluntary effort by railroads, safety experts, law enforcement, public agencies, and the general public. The CCJPA coordinates with Operation Lifesaver to support regional rail safety campaigns through education, engineering, and enforcement

FY 2018-19 Marketing Program

CCJPA’s FY 2018-19 Marketing Program will continue to focus on increasing ridership on trains with available capacity by emphasizing the convenience of modern train travel and targeting service periods with the highest growth potential.

CCJPA will continue its own independent campaigns that position Capitol Corridor as a distinct regional service brand. CCJPA will also coordinate with local partners and Amtrak on the most beneficial promotions, outreach, and shared marketing collateral. Marketing initiatives will also aim to enhance customer communications and engagement with passengers. Key elements will include:

- Develop more digital content (videos, photography, infographics, etc.) for distribution via website, blog, social media channels, and wireless website, to reduce dependency on printed media and enhance engagement with customers and potential customers.
- Conduct deeper analysis of ridership data to identify opportunities for micro-markets (single day/train offers, short-distance city pairs, etc.) and more sophisticated market segmentation.
- Explore opportunities for shared programs and marketing efforts with the San Joaquin and Pacific Surfliner JPAs to strengthen visibility of intercity passenger rail services in California
- Joint media promotions with marketing partners and continued coordination with Amtrak on selected promotions intended to maximize media dollars and expand market reach.
- Coordinate with Amtrak to receive more detailed promotional performance data reports.

FY 2019-20 Marketing Program

The CCJPA will place continued emphasis on the Capitol Corridor brand to increase regional awareness and maximize use of the marketing budget. Longer-term plans include additional rider acquisition through highly-targeted digital channels, as well as reinvigorated retention efforts via targeted loyalty offers for customers and deployment of technologies to enhance customer communications. Marketing and communication efforts will emphasize CCJPA’s commitment to high quality, customer-focused passenger rail service, with a focus on enhanced personalization, targeting, and data analysis. Priorities include:

- Coordination with Amtrak on receiving more detailed promotional performance data reports
- Identify and find solutions for Contact Center communication gaps (night/weekend hours, customer service, voice response/Instant Messenger/chat solutions), research cost-saving options, evaluate service hours, etc.
- Create programs to encourage year-round travel for school/youth groups, and increase outreach to adult and senior citizens’ groups.
- Evaluate additional areas for service efficiency regarding group travel program, Café Car service/marketing.

9. ANNUAL FUNDING REQUIREMENT: COSTS AND RIDERSHIP PROJECTIONS

The primary purpose of this Business Plan Update, as identified in the ITA, is to request the annual funds required by the CCJPA to operate, administer, and market the Capitol Corridor service for agreed-upon

service levels. Previous sections in this document describe the proposed operating plan, planned service improvements, and capital improvements for FY 2018-19 and FY 2019-20.

FY 2018-19 and FY 2019-20 Operating Costs

Based on the Operating Plan and Strategies (Section 3), the CCJPA has prepared an initial forecast for the FY 2018-19 and FY 2019-20 operating expenses, ridership, and revenues. The FY 2018-19 operating costs conform with Section 209 of the Passenger Rail Improvement and Investment Act of 2008 (PRIIA), which was implemented in FY 2013-14 as part of a national launch of a pricing policy for all Amtrak-operated IPR services under 750 miles. The CCJPA will submit any updated operating cost forecasts by June 15, 2018 based on final estimates provided by Amtrak.

Projected operating costs are shown in Table 9-1 and include the basic train service and associated throughway bus services provided by Amtrak, plus the CCJPA's costs for the Information and Customer Support Services provided at the BART/CCJPA Contact Center and the CCJPA's share of costs relating to the local transit service partnerships. Compared to the existing FY 2017-18 budget, the FY 2018-19 the total net operating expenses for Amtrak are expected to decrease by \$3.020 million due to projected increase in ridership which in turn increases revenues by \$2.141 million plus the decrease of \$879,000 in operating (labor) expenses. The CCJPA's net operating budget request for FY 2019-20 is expected to increase by \$509,000 [+1.4%] compared to the current FY 2017-18 net operating budget. The CCJPA forecasts that Amtrak operating expenses will continue to stabilize with have assumed conservative growth [+2.0%] in revenues.

FY 2018-19 and FY 2019-20 Marketing Expenses

The CCJPA's marketing budget for FY 2018-19 and FY 2019-20 will fund the respective fiscal year's Marketing Programs presented in Section 8. The CCJPA will develop the various campaigns and programs. The budget estimates shown in Table 9-1 represent only direct expenditures of the CCJPA and do not include any costs for marketing programs provided solely by Amtrak or the State.

FY 2018-19 and FY 2019-20 Administrative Expenses

Table 9-1 identifies the estimate for the FY 2018-19 and FY 2019-20 budgets that support the administrative activities of the CCJPA for the Capitol Corridor service. For the first time in nearly 10 years, the CCJPA is seeking an increase in its projected FY 2018-19 Administrative expenses. The FY 2018-19 expenses to support the CCJPA's administrative and management activities are planned to increase by \$500,000 to \$2,634,000 in order to provide additional management staff to (1) assume customer service duties that were previously performed by Amtrak in the region (but have since been eliminated by Amtrak in January 2018), (2) increased oversight of an expanded business intelligence database (resulting in improved financial and service performance reports) and (3) manage grants and projects based on awards from current (and expected future) grants.

Under recent actions, Amtrak will be transferring its provision of 3rd party onboard WiFi and its associated management expenses for the three California-sponsored intercity passenger rail services [Capitol Corridor, Pacific Surfliner and San Joaquins] to the CCJPA. The transfer is projected to be consistent with the start of the FY 18-19 operating contracts for the 3 CA IPR services (October 1, 2018). The total transfer of these onboard WiFi services is expected to be \$1.368 million for FY 2018-19.

FY 2018-19 and FY 2019-20 Total Budget

Compared to the current period (FY 2017-18), the FY 2018-19 and FY 2019-20 total budgets for the CCJPA's operating, marketing, and administrative expenses (including the increased staffing costs) are expected to decrease by 1.2% in FY 2018-19 and increase by 1.1% in FY 2019-20. The operating budget FY 2019-20 should be considered draft as Amtrak will not provide final forecast until March 2019.

The Capitol Corridor service will remain a part of the state's IPR system, and, pursuant to the ITA, the service will continue to receive annual funding appropriations from the State. To that end, the CCJPA will provide the level of service consistent with funding appropriated by the Legislature and allocated by the State. Any cost savings realized by the CCJPA or revenues exceeding business plan projections during the term of the ITA will be used by the CCJPA for service improvements.

Table 9-1
CCJPA FY 2018-19 - FY 2019-20 Funding Requirement
Capitol Corridor Service

Service Level	Current	Proposed	
	FY 2017-18 Contract	FY 2018-19 Budget	FY 2019-20 Budget
Sacramento-Oakland			
Weekday	30	30	30
Weekend	22	22	22
Oakland-San Jose			
Weekday	14	14	14
Weekend	14	14	14
Sacramento-Roseville	2	2	2
Roseville-Auburn	2	2	2
Ridership	1,612,000	1,670,400	1,695,000
Third Party Expenses (a)	\$ 12,577,000	\$ 11,864,000	\$ 12,152,900
Amtrak Expenses (b)	\$ 51,582,000	\$ 52,125,000	\$ 53,958,107
Information/Customer Support Services (c)	\$ 1,074,000	\$ 1,074,000	\$ 1,074,000
TOTAL Expenses	\$ 65,233,000	\$ 65,063,000	\$ 67,185,000
Ticket Revenue	\$ 30,981,000	\$ 32,935,000	\$ 34,119,000
Food & Beverage Revenue	\$ 1,638,000	\$ 1,800,000	\$ 1,877,000
Other Revenue (d)	\$ 540,000	\$ 565,000	\$ 580,000
TOTAL Revenue	\$ 33,159,000	\$ 35,300,000	\$ 36,576,000
CCJPA Funding Requirement			
CCJPA Operating Budget	\$ 32,074,000	\$ 29,763,000	\$ 30,609,000
<i>Net Amtrak Operating Costs [Expenses less Revenues]</i>	\$ 31,000,000	\$ 28,689,000	\$ 29,535,007
CCJPA Operating Costs			
Information/Customer Support Services	\$ 1,074,000	\$ 1,074,000	\$ 1,074,000
Onboard Technology [Wi-Fi] (e)	\$ -	\$ 1,368,000	\$ 1,368,000
Marketing Budget (f)	\$ 1,174,000	\$ 1,174,000	\$ 1,174,000
Administrative Budget (g)	\$ 2,134,000	\$ 2,634,000	\$ 2,634,000
TOTAL CCJPA Funding Request (h)	\$ 35,382,000	\$ 34,939,000	\$ 35,785,000
Difference from FY17-18 Budget		\$ (443,000)	\$ 403,000
Percent Change from FY17-18 Budget		-1.2%	1.1%
SUPPLEMENTAL ALLOCATIONS			
Minor Capital Projects (i)	\$ 500,000	\$ 500,000	\$ 500,000
Capitalized Maintenance (j)	\$ 1,000,000		

(a) Includes Fuel, Host Railroad Maintenance of Way and Host Railroad On-Time Performance Incentive payments.

(b) Expenses for services provided by Amtrak (i.e. On Board Staffing, Station Services, Ticketing and Maintenance of Equipment) and overhead support fees.

(c) Operating expenses for call center/phone information and customer services provided by CCJPA/BART.

(d) Miscellaneous revenue as allocated by Amtrak's Performance Tracking system.

(e) CCJPA to assume (from Amtrak) the provision and management of Wi-Fi onboard service for the three California intercity passenger rail services [Capitol Corridor, San Joaquins, and Pacific Surfliner].

(f) The FY 2017-18 and FY 2018-19 marketing expenses will be capped at the same levels as the 12 prior fiscal years (\$1,174,000). Does not include contributions by Amtrak or additional resources provided by the State (i.e. market research program).

(g) Expenses for administrative support of the CCJPA Board and for management of the Capitol Corridor service.

(h) Sum of CCJPA Operating Budget plus Onboard Technology, Marketing and Administrative Budgets.

(i) Expenses to be allocated for small or minor capital projects.

(j) Allocation for FY17-18 previously allocated.

10. SEPARATION OF FUNDING

As identified in the Joint Exercise of Powers Agreement (JEPA) for the CCJPA, the Controller-Treasurer of the Managing Agency of the CCJPA will perform the functions of Treasurer, Auditor, and Controller of the CCJPA. San Francisco Bay Area Rapid Transit District's (BART's) prior agreement with the CCJPA to serve as the CCJPA's Managing Agency was first renewed in February 2005 for a five-year term through February 2010 and subsequently renewed for another five years for the period of February 2010 through February 2015. These five-year terms are consistent with the enactment of AB 1717 in September 2003 that allows the CCJPA Board five years, instead of three, to monitor BART's performance as the Managing Agency. Most recently at the November 2014 Board meeting, the CCJPA Board approved a five-year term with BART for the period of February 2015 through February 2020, and this was supported by BART's Board in 2015.

As identified in the ITA, the State performs audits and reviews of CCJPA's Capitol Corridor service-related financial statements. In addition, the CCJPA requires that the Controller-Treasurer provide for an annual independent audit of the accounts of the CCJPA within six months of the close of the State fiscal year. BART has established the appropriate accounting and financial procedures to ensure that the funds secured by the CCJPA during FY 2018-19 and FY 2019-20 to support the Capitol Corridor service are solely expended to operate, administer, and market the service.

11. CONSIDERATION OF OTHER SERVICE EXPANSIONS AND ENHANCEMENTS

This section presents service expansion and enhancement opportunities beyond the CCJPA's FY 2018-19 and FY 2019-20 service plans and funding requirements. Planning for potential new services will require securing capital improvements, additional operating funds, and institutional agreements.

Megaregional Rail Planning & Vision Plan Update:

In 2013, the CCJPA Board established an CCJPA Board Ad Hoc Vision Plan Subcommittee ("subcommittee") with the objective to describe a Capitol Corridor service which would look ahead an entire generation. The larger question asked was what would need to be done to meet the transportation needs of northern California in 2030 and beyond, and how CCJPA would achieve the vision. This subcommittee continues to guide longer-term vision for Capitol Corridor service as CCJPA works its way through the three stages of development of the overall Vision Plan process. To date, the CCJPA Board has adopted the Vision Plan Update in November 2014, adopted the Vision Implementation Plan in November 2016 and directed the CCJPA to plan the future of Capitol Corridor service in a larger Northern California megaregional context, which includes exploring cross-bay connections in San Francisco Bay Area and connections with passenger rail services in the San Joaquin Valley.

The long-term vision for Capitol Corridor fundamentally involves developing Capitol Corridor service as one where frequency (capped at 15 round-trips) is not limited by existing host railroad agreements. Instead, the vision is for a service with 15-minute frequencies in the peak hour, and one where higher-speed service (up to potentially 150 mph – electrified service) is permitted. This vision was first examined at a high-level in the Vision Plan Update (VPU) where core concepts were explored and several viable alignment alternatives were moved forward to the next step. The next step, the Vision Implementation Plan (VIP), eliminated alternatives to one alignment via a phased and detailed engineering and operations level analysis. By identifying a path to a railroad corridor in public control, the implications for layering intercity, commuter, and even high-speed rail, are all viable potential outcomes consistent with the objectives of the Draft 2018 State Rail Plan.

The VIP identified specific and phased capital improvements that will help achieve the vision laid out in the VPU, but to fully provide the fast, seamless passenger rail service envisioned in the Capitol Corridor Vision Plan, planning can't be just limited to the Capitol Corridor but should include rail connections to areas outside of the direct service area as well. A rail service of the future should not only be fast but should also provide more people a way to get to their destinations in a train – quality of connections is key. When studying possible Bay rail crossing connections was recommended as an addition to the Vision Plan process by the Ad Hoc Vision Plan Committee, the scope of the Vision Plan expanded beyond the Capitol Corridor service area to the entire Northern California Megaregion. The need for coordinated passenger rail service planning at a megaregional level emerged very clearly as well through the Draft 2018 State Rail Plan

drafting process, because the focus is no longer on corridor-by-corridor improvements but on network-scale improvements.

On June 21, 2017, the CCJPA Board hosted a Northern California Megaregional Passenger Rail Planning workshop which included participation from Northern California passenger rail operators, California High Speed Rail Authority (CHSRA), MPOs, state representatives, and external think tank/advocacy organizations. Caltrain held a similar workshop in September 2017. The momentum from these two events have led to greater awareness of Northern California as a Megaregion and to the formation of a Northern California Megaregional Rail Planning Working Group, comprised of the planning staff of the various Northern California passenger rail operators, including CHSRA. This group now has formal leadership organized under the partnership and coordination with Caltrans, who has more formal leadership authority for Megaregional planning through the State Rail Plan and close coordination with the California State Transportation Agency. The intentions of this Working Group are to become a voice for megaregional advocacy for coordinated policy, to coordinate megaregional project development, and to develop funding packages to support megaregional rail related projects. This Working Group will continue to work with MPOs, think tanks, and advocacy organizations for megaregional initiatives.

State Rail Plan and Northern California HST Blended Service

The Draft 2018 State Rail Plan update was released for public review in October 2017. The Plan was developed in compliance with the FRA's requirements established in the 2008 PRIIA legislation. The FRA awarded Caltrans Division of Rail and Mass Transportation funding to develop and release a coordinated State Rail Plan that will be done to conform to meeting Federal planning requirements. The Plan incorporates not only the IPR services, but also the planning efforts for the California High Speed Rail system. Capitol Corridor's direct links with the High Speed Rail system will be in San Jose, and, when eventually built as planned, Sacramento, whereas the existing Capitol Corridor route as a whole is an important feeder/distributor to the High Speed Rail system. During much of FY 2013-14 and FY 2014-15, the CCJPA participated with a host of statewide rail partners in planning for a blended and coordinated California passenger rail system. Subsequently in 2016, with the CHSRA's release of their business plan and a shift toward establishing service at the San Jose Diridon station, the focus has been on how to mesh all the existing and planned expansion of all services in the San Jose area. The leadership by CalSTA, as expressed through the Draft 2018 State Rail Plan, is advancing the concepts of state rail planning. CCJPA's CIP is developed around becoming a feeder/distributor in the overall state passenger rail system. Integration of rail services (high speed rail, intercity and regional rail, and integrated express buses) is a key concept of the Draft 2018 State Rail Plan, along with multimodal connection points across the state that allows for convenient and timed transfers between different transit services and modes.

Rail Service Expansion Planning

The CCJPA has set forth and adopted a Train Service Policy supporting future extensions to new markets beyond the Capitol Corridor. This policy encourages partnerships between several passenger rail services and local/regional transportation agencies. For example, there are ongoing discussions with the Transportation Agency of Monterey (TAMC), Caltrain, and VTA regarding expanding Capitol Corridor service to Salinas. Pursuant to CCJPA Board direction, CCJPA staff are actively engaged in this discussion in a manner that protects the existing core service but fairly lays out the requirements of extending service to Salinas (e.g., an integrated train schedule, additional rolling stock, complete and compliant stations, operating funding support, and CCJPA governing/legislative modifications). Plans for this expansion have advanced slowly but steadily and will continue to evolve as funding, operational, and governance matters are addressed. This potential expansion is reflected in the State Rail Plan as appropriate.

APPENDICES

APPENDIX A

Historical Service Statistics

Fiscal Year	Daily Trains	Total Ridership	% Change Prior Year	Riders Per Day	Revenue*	% Change Prior Year	Operating Expenses*	% Change Prior Year	Farebox Ratio*	State Costs*
SFY 91/92 (a)	6	173,672	--	864	\$1,973,255	--	\$4,848,967	--	40.7%	\$1,592,907
SFY 92/93	6	238,785	--	650	\$2,970,103	--	\$8,333,093	--	35.6%	\$6,712,017
SFY 93/94	6	364,070	52.5%	1,000	\$3,598,978	21.2%	\$9,911,735	18.9%	36.3%	\$6,714,761
SFY 94/95	6	349,056	-4.1%	960	\$3,757,146	4.4%	\$9,679,401	-2.3%	38.8%	\$6,012,315
SFY 95/96 (b)	8	403,050	15.5%	1,100	\$4,805,072	27.9%	\$11,077,485	14.4%	43.4%	\$6,434,940
SFY 96/97	8	496,586	23.2%	1,360	\$5,938,072	23.6%	\$20,510,936	85.2%	29.0%	\$9,701,519
FFY 97/98 (c)	8	462,480	-6.9%	1,270	\$6,245,105	5.2%	\$20,527,997	0.1%	30.4%	\$11,404,143
FFY 98/99 (d)	10/12	543,323	17.5%	1,490	\$7,314,165	17.1%	\$23,453,325	14.3%	31.2%	\$16,022,024
FFY 99/00 (e)	12/14	767,749	41.3%	2,100	\$9,115,611	24.6%	\$25,672,749	9.5%	35.7%	\$16,440,540
FFY 00/01 (f)	14/18	1,073,419	39.8%	2,941	\$11,675,117	28.1%	\$28,696,741	11.8%	40.7%	\$17,680,477
FFY 01/02	18	1,079,779	0.6%	2,960	\$12,201,602	4.5%	\$32,842,038	14.4%	37.2%	\$20,590,919
FFY 02/03 (g)	18/20/22/24	1,142,958	5.9%	3,130	\$12,800,469	4.9%	\$36,469,383	11.0%	38.1%	\$21,540,910
FFY 03/04	24	1,165,334	2.0%	3,190	\$13,168,373	2.9%	\$35,579,266	-2.4%	37.2%	\$22,708,181
FFY 04/05	24	1,260,249	8.1%	3,450	\$15,148,333	15.0%	\$35,110,571	-1.3%	43.2%	\$19,962,238
FFY 05/06 (h)	24/32	1,273,088	1.0%	3,490	\$16,014,636	5.7%	\$35,147,033	0.1%	45.8%	\$19,132,397
FFY 06/07	32	1,450,069	13.9%	3,970	\$19,480,992	21.6%	\$40,533,332	15.3%	48.1%	\$21,052,340
FFY 07/08	32	1,693,580	16.8%	4,640	\$23,822,862	22.3%	\$43,119,290	6.4%	55.2%	\$22,265,039
FFY 08/09	32	1,599,625	-5.5%	4,383	\$23,505,602	-1.3%	\$50,159,032	16.3%	47.0%	\$25,113,642
FFY 09/10	32	1,580,619	-1.2%	4,330	\$24,372,185	3.7%	\$52,843,973	5.4%	46.0%	\$27,499,149
FFY 10/11	32	1,708,618	8.1%	4,681	\$27,176,573	11.5%	\$56,699,385	7.3%	48.0%	\$29,158,222
FFY 11/12 (i)	32/30	1,746,397	6.7%	4,785	\$29,200,000	7.4%	\$59,035,857	4.1%	50.2%	\$29,606,390
FFY 12/13	30	1,701,185	-2.6%	4,661	\$29,186,617	-0.05%	\$60,472,128	2.4%	51.0%	\$29,110,318
FFY 13/14 (j)	30	1,419,084	1.1%	3,888	\$29,177,880	-0.03%	\$58,063,314	-4.0%	50.9%	\$28,421,000
FFY 14/15	30	1,474,873	3.9%	4,041	\$30,092,694	3.14%	\$57,586,946	-0.8%	52.0%	\$32,595,784
FFY 15/16	30	1,560,814	5.8%	4,264	\$32,187,647	7.0%	\$57,135,316	-0.8%	55.0%	\$31,745,660
FFY 16/17	30	1,607,277	3.0%	4,403	\$33,968,835	5.5%	\$58,010,359	1.5%	57.0%	\$31,729,519
FFY 17/18 (k)	30	970,215	5.8%	4,576	\$20,558,949	5.7%	\$24,916,270	3.8%	59.0%	\$12,835,823

SFY = State Fiscal Year (July 1- June 30)

FFY = Federal Fiscal Year (October 1 -September 30)

a. Statistics available for partial year only because service began in December 1991.

b. Increase to 8 trains began in April 1996.

c. Statistics presented for FFY 97/98 and each subsequent FFY to conform with Performance Standards developed by BT&H.

d. 10 trains began on October 25, 1998 and 12 trains began on February 21, 1999.

e. 14 trains began on February 28, 2000 .

f. 18 trains began on April 29, 2001.

g. 20 trains began on October 27, 2002; increase to 22 trains began on January 6, 2003; increase to 24 trains began on April 28, 2003.

h. 32 trains began on August 26, 2006 (with increase to 14 daily trains to/from San Jose).

i. 30 trains began on August 13, 2012 (service optimization with re-opening of the Sacramento Valley Station platform).

j. Starting in FY 2014 Amtrak adjusted ridership reports to account for the actual tickets lifted via the scanning of tickets by the conductors, which results in ridership forecasts and reports that are 15%-20% below previous forecasts and reports. Previously, multiride tickets were not directly logged into the system but the passenger counts for multiride tickets were estimated based on assumed inflated usage. Prior year % change is made using adjusted FY 12/13 ridership.

k. Year-to-date data through April 2018 for Ridership and Revenue, all other categories through February 2018

APPENDIX B

Programmed or Completed Capitol Corridor Projects

Programmed or Completed Projects (Preliminary and Tentative - Subject to Revision)	Costs
Station Projects	
Colfax	\$2,508,165
Auburn	\$5,031,656
Rocklin	\$2,114,173
Roseville	\$1,619,104
Sacramento*	\$81,749,526
Davis	\$5,576,643
Fairfield-Vacaville	\$93,960,000
Suisun/Fairfield	\$3,834,049
Martinez*	\$38,145,628
Richmond*	\$22,384,408
Berkeley	\$4,745,500
Emeryville*	\$13,502,136
San Francisco – Ferry Building*	\$584,842
Oakland Jack London Square*	\$20,469,077
Oakland Coliseum	\$6,132,000
Hayward	\$1,782,500
Fremont/Centerville	\$3,544,050
Santa Clara-Great America	\$3,082,627
Santa Clara-University	\$71,000
San Jose Diridon	\$79,638,542
Platform Signs	\$791,472
Real-time message signs	\$2,344,842
Other	\$28,780,575
SUBTOTAL – Station Projects	\$422,392,515
*shared stations with the San Joaquin route	
Track and Signal Projects	
Placer County	\$500,000
Sacramento – Roseville (3 rd Track) Improvements	\$85,650,000
Travel Time Savings	\$15,500,000
Yolo Causeway 2 nd Track	\$14,555,533
Yolo West Crossover	\$5,000,000
Sacramento – Emeryville	\$60,219,132
Oakland – Santa Clara (Hayward Line) [1991]	\$14,900,000
Niles Junction – Newark (Centerville Line)	\$10,667,740
Sacramento – San Jose C-Plates	\$14,156
Oakland – San Jose	\$113,755,333
San Jose 4 th Track	\$41,850,000
Bahia-Benicia Crossover Project	\$4,190,000
Safety Fencing along ROW	\$1,600,000
Harder Road (Hayward) Undercrossing [2001]	\$8,898,000
Positive Train Control (estimated CCJPA share \$12M)	\$35,000,000
SUBTOTAL – Track and Signal Projects	\$412,299,894
Maintenance and Layover Facility Projects	
San Jose (Pullman Way) Maintenance Facility	\$5,789,862
Oakland Maintenance Facility (new – owned by the State)	\$64,885,956
Oakland Maintenance Base (former site)	\$464,884
Colfax/Auburn Layover Facility	\$691,956
Roseville Layover Facility	\$157,702
Sacramento Layover Facility	\$941,316
Capitalized Maintenance ¹	\$10,505,000
SUBTOTAL – Maintenance and Layover Facility Projects	\$83,436,676
Rolling Stock (California Cars and Locomotives – owned by the State)	
Base Rolling Stock	\$238,982,226
2012 Ordered Rolling Stock added to Northern CA pool	\$57,435,192
On-Train Amenities	\$11,404,000
SUBTOTAL – Rolling Stock	\$307,821,418
TOTAL – PROGRAMMED¹ OR COMPLETED PROJECTS	\$1,225,950,503

APPENDIX C

CAPITOL CORRIDOR PERFORMANCE STANDARDS FY 2016-17 TO FY 2020-21

PERFORMANCE STANDARD	FY 2016-17				FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
	ACTUAL	STANDARD	VARIANCE ACTUAL TO STANDARD	PERCENT CHANGE	STANDARD	PRELIMINARY STANDARD	PRELIMINARY STANDARD	PRELIMINARY STANDARD	PRELIMINARY STANDARD
NUMBER OF DAILY TRAINS (SAC-OAK)	30	30			30	30	30	30 (a)	30 (a)
USAGE									
Route Ridership	1,607,277	1,520,000	87,277	5.7%	1,612,000	1,670,400	1,695,000	1,745,100	1,780,000
Passenger Miles	108,609,358	93,752,600	14,856,758	15.8%	108,133,000	112,050,000	113,701,000	116,573,000	118,904,000
Average Daily Ridership	4,403	4,164	239	5.7%	4,416	4,576	4,644	4,781	4,877
Percent Change in Route Ridership	9.0%	2.0%			6.1%	3.6%	1.5%	3.0%	2.0%
Percent Change in Train Passenger Miles	9.8%	-3.9%			15.3%	3.6%	1.5%	2.5%	2.0%
Percent Change in Train Miles	0.0%	0.4%			-0.2%	0.2%	0.0%	1.9%	0.0%
Passenger Miles per Train Mile (PM/TM)	92.8	80.2	12.6	15.7%	92.7	95.9	97.3	97.9	99.8
COST EFFICIENCY									
System Operating Ratio	59%	48%	10.3%	--	51%	54%	54%	54%	54%
Total Operating Costs per Passenger Mile					\$0.60	\$0.58	\$0.59	\$0.60	\$0.61
Percent Change in Total Revenue	12.9%	-5.4%	--	--	12.2%	6.5%	3.6%	3.9%	3.0%
Percent Change in Total Expenses	-0.7%	1.4%	--	--	6.4%	-0.3%	3.3%	4.9%	2.8%
Train Revenue per Train Mile	\$26.80	\$23.56	\$3.25	13.8%	\$26.55	\$28.17	\$29.19	\$29.98	\$30.88
Train Revenue per Passenger Mile (Yield)	\$0.289	\$0.276	\$0.01	4.4%	\$0.282	\$0.288	\$0.293	\$0.299	\$0.305
Train Expenses per Train Mile	\$45.99	\$53.12	-\$7.13	-13.4%	\$54.71	\$56.36	\$58.05	\$59.79	\$61.58
Train Only State Cost per Train Mile	\$19.18	\$24.60	-\$5.42	-22.0%	\$25.48	\$23.74	\$24.47	\$25.34	\$25.67
Train Only State Cost Per Passenger Mile	\$0.21	\$0.31	-\$0.10	-32.6%	\$0.27	\$0.25	\$0.25	\$0.26	\$0.26
SERVICE QUALITY									
End-Point On Time Performance	91%	90%	1%	--	90%	90%	90%	90%	90%
Stations On Time Performance	94%	90%	4%	--	90%	90%	90%	90%	90%
Operator Delays per 10,000 Miles	329	>325	4	1%	>325	>325	>325	>325	>325
Percent of California Car Fleet Available	82%	87%	-5%	--	87%	87%	87%	87%	87%
OPERATING RESULTS									
TRAIN AND BUS									
Total Revenue	\$ 33,968,835	\$ 29,558,000	\$4,410,835	14.9%	\$ 33,159,000	\$ 35,300,000	\$ 36,576,000	\$ 37,985,000	\$ 39,125,000
Total Expenses (b)	\$ 58,010,359	\$ 61,288,000	\$ (3,277,641)	-5.3%	\$ 65,233,000	\$ 65,063,000	\$ 67,185,000	\$ 70,466,000	\$ 72,404,000
Total CCJPA Operating Budget	\$24,041,524	\$31,730,000	(\$7,688,477)	-24.2%	\$32,074,000	\$29,763,000	\$30,609,000	\$32,481,000	\$33,279,000
TRAIN ONLY									
Train Only Revenue	\$ 31,361,088	\$ 27,539,000	3,822,088	13.9%	\$ 30,981,000	\$ 32,935,000	\$ 34,119,000	\$ 35,706,000	\$ 36,778,000
Train Only Expenses	\$ 53,807,161	\$ 56,301,000	(2,493,839)	-4.4%	\$ 60,711,000	\$ 60,692,000	\$ 62,726,000	\$ 65,885,000	\$ 67,351,000
Train Only State Operating Cost	\$ 22,446,073	\$ 28,762,000	(6,315,927)	-22.0%	\$ 29,730,000	\$ 27,757,000	\$ 28,607,000	\$ 30,179,000	\$ 30,573,000
Train Miles	1,170,000	1,169,000	1,000	0.1%	1,167,000	1,169,000	1,169,000	1,190,900	1,190,900

(a) Anticipated start of two (2) additional round trip trains to/from Roseville in FY20/21, based upon the expected completion of Phase 1 of the Sacramento-Roseville 3rd track project.

(b) Includes operating expenses for call center/phone information and customer services provided by CCJPA/BART.

^ - Includes payments to Amtrak for use of equipment (including insurance) and minor capital costs. Not included in any other line item.

• - Represents fixed price contract cost Actual contract cost may be lower, but not higher.

¶ - Per Business Plan Update/Amtrak Contract

@ - Standard assumes increased train service to San Jose, Placer County: 30 Oakland-Sacramento weekday trains (22 on weekends), 22 daily trains to/from San Jose, 8 daily trains to/from Roseville and 4 daily trains to/from Auburn.

NOTE 1 - Performance measures not calculated where no standard was developed.

APPENDIX D

