

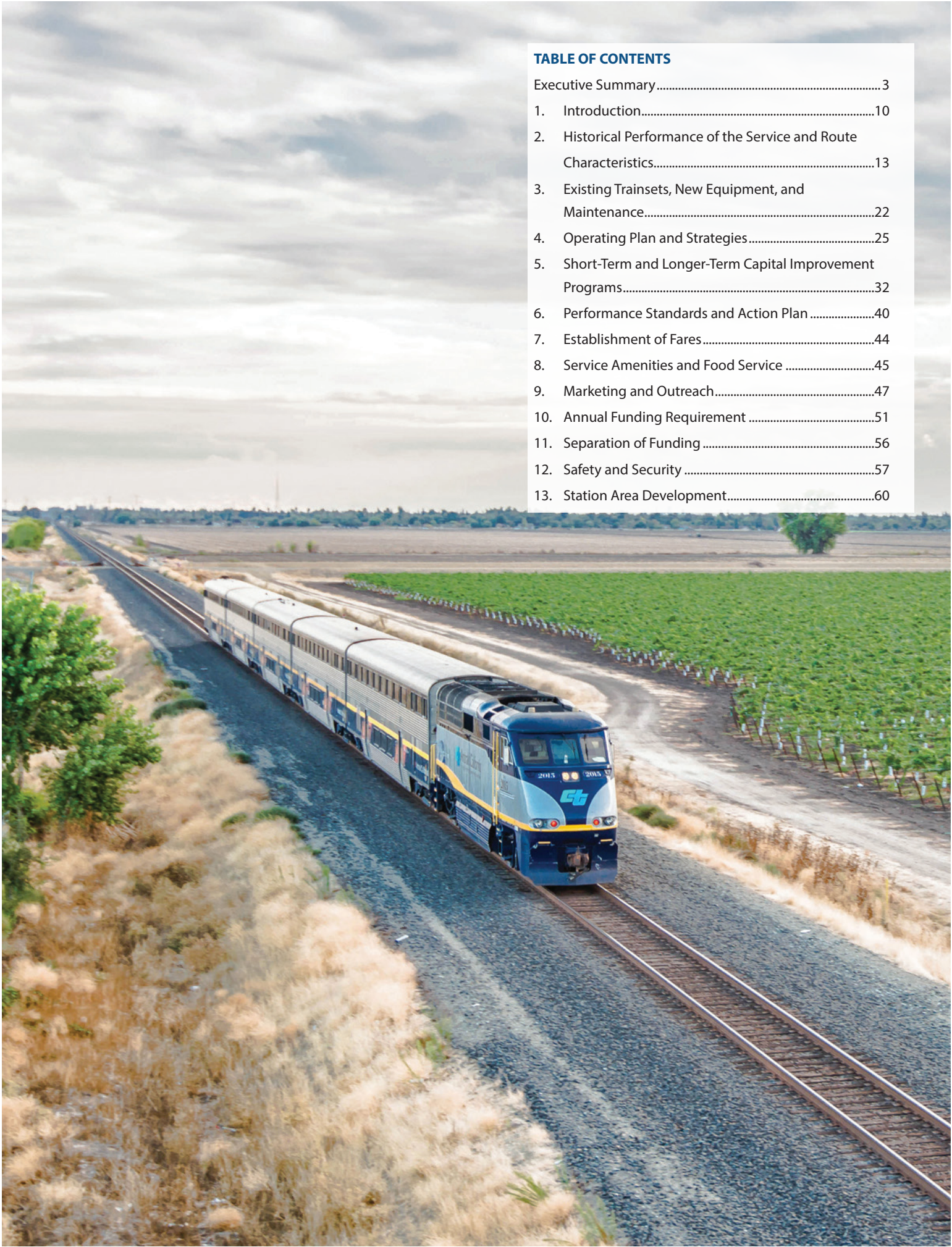


# SAN JOAQUIN JOINT POWERS AUTHORITY

## DRAFT 2018 SJJPA BUSINESS PLAN UPDATE

PREPARED FOR CALIFORNIA STATE TRANSPORTATION AGENCY  
UPDATED FOR FY 2018/2019 & FY 2019/2020





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## EXECUTIVE SUMMARY

The purpose of this 2018 San Joaquin Joint Powers Authority (SJJPA) Business Plan Update (“Business Plan”) is to identify SJJPA’s intentions for State Fiscal Year (FY) 2018/19 and FY 2019/20 in its proposed management of the San Joaquins Intercity Passenger Rail Service (San Joaquins) and to request the annual funds required by SJJPA to operate, administer, and market the San Joaquins. This Business Plan also describes planned service and capital improvements to ensure the continued success and future growth of the San Joaquins. This Business Plan will be submitted to the Secretary of the California State Transportation Agency (CalSTA) in draft form by April 1st, 2018 and in final form by June 15th, 2018.

### Administrative Role

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The primary role of SJJPA is the day-to-day management of the San Joaquins. In 2017, SJJPA selected the San Joaquin Regional Rail Commission (SJRRRC) as its Managing Agency for a second three-year term. SJRRRC’s consolidated agency approach results in the most efficient and cost-effective management of the San Joaquin Valley’s two passenger rail services. SJJPA will provide the level of service consistent with funding appropriated by the State and any cost savings identified by SJJPA or revenues in excess of the Business Plan projections, which may be used by SJJPA for service improvements in the San Joaquins Corridor.

### Operating Plan, Morning Express Service, 8th and 9th Daily Round-Trips, and Short-Term Service Improvements

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The San Joaquins have great potential for increased ridership, revenue, service coordination, and performance. SJJPA is currently implementing a number of strategies to improve the San Joaquins. Some of the strategies require little or no additional resources, including improved schedules and reduced trip lengths, reduced travel times, improved train monitoring, train and connecting bus schedule adjustments, and improved service coordination. SJJPA is also in the process of pursuing a significant expansion of service for the San Joaquins within the next five years, including implementation of the 8th and 9th Daily Round-Trips. Planned expansion of the San Joaquins Service is fully coordinated and consistent with the Draft 2018 State Rail Plan and the CHSRA’s Connected Corridors North Study.

**Morning Express Service:** On May 7, 2018, SJJPA will inaugurate the Morning Express Service (Morning Express) between Sacramento and Fresno, allowing San Joaquins trains to arrive in Sacramento before 8 a.m. The early-morning nature of this service is anticipated to increase ridership by encouraging more business travel (a growing market segment for both the Pacific Surfliner and Capitol Corridor services) and leisure day trips. In FY 2018/19, SJJPA is planning to inaugurate a second Morning Express, with service to the Bay Area to/from Fresno. With the implementation of Morning Express, the seven existing daily round-trips will be maintained, but two will be modified to start/end at mid-corridor in Fresno, allowing trains to arrive in the early morning in both Sacramento and the Bay Area. Morning Express is anticipated to result in substantial increases in ridership and reduce operational costs. Several capital improvements are currently underway to prepare for Morning Express, including a temporary layover facility in Fresno, additional parking at several stations, and various station enhancements.

**8th and 9th Daily Round-Trips:** A significant increase in ridership is anticipated if the frequency of service to Sacramento can be increased and offered at the right times of the day. SJJPA is currently working to implement the 8th and 9th Daily Round-Trips, which will allow a doubling of trains serving Sacramento from two to four. As part of this effort, SJJPA has been exploring utilizing the Sacramento Subdivision between Sacramento and Stockton for expanded passenger rail service in coordination with CalSTA, CHSRA, Caltrans, Central Valley Rail Working Group, and Sacramento Regional Rail Working Group. This resulted in SJJPA’s Board formally adopting the Sacramento Subdivision as the preferred corridor for future passenger rail expansion in 2017. To implement the 8th and 9th Daily Round-Trips and necessary improvements along the Sacramento Subdivision, SJJPA submitted a Transit and Intercity Rail Capital Program (TIRCP) grant application in January 2018. The schedule developed for 8th and 9th Daily Round-Trips is based on a pulsed-service approach, which provides more efficient operations, better use of infrastructure, and improved on-time performance.

Additional key short-term programs for the San Joaquins include:

**Thruway Bus Partnerships:** SJJPA is exploring ways to maximize the utilization of the San Joaquins’ Thru-

way Bus network and other connecting bus services. Through coordination with the State and regional transportation agencies, SJJPA is currently pursuing partnerships with several regions to optimize bus connections for San Joaquins passengers that would allow non-Amtrak passengers to utilize excess seating capacity in key corridors, or utilize the services of an existing outside bus provider. SJJPA and the Shasta Regional Transportation Agency are in the process of creating a partnership that would allow SJJPA to shorten Thruway Bus Route 3 by terminating in Chico rather than in Redding, while San Joaquins passengers traveling to Red Bluff or Redding would be able to take SRTA's new North State Express Bus service. SJJPA would support the operations of the new service with cost savings realized from the reduction in the length of Thruway Bus Route 3.

SJJPA is also in initial conversations with Butte County Association of Governments (BCAG) about the possibility of BCAG incorporating a portion of Thruway Bus Route 3 (between Chico and Stockton) into their proposed intercity bus service between Chico and Sacramento in exchange for SJJPA operating support. In addition, SJJPA is working with several jurisdictions, including State Senator McGuire's office and Sonoma-Marín Area Rail Transit (SMART) District, about new models for operating Thruway Bus Route 7 in the Marin-Sonoma-North Coast Region.

**Renewable Diesel Implementation:** SJJPA is committed to helping meet California's Greenhouse Gas (GHG) emission reduction goals. Utilizing renewable diesel in locomotives and in the Thruway Bus fleet will help to advance this objective. Testing of renewable diesel in Northern California Fleet locomotives is complete for the older F59 locomotives and currently underway for the new Charger Locomotives and scheduled for completion in early summer of 2018. If results are positive, all locomotives are expected to utilize renewable diesel as early as the fall of 2018. SJJPA is also planning to require the use of renewable diesel for all future Amtrak Thruway Bus contracts to further reduce the San Joaquins system's carbon footprint.

**Relocate Madera Station:** SJJPA is working with Madera County, Madera County Transportation Commission, and CalSTA about relocating the Madera Amtrak Station to a more accessible location. Additionally the station would be co-located with a California High-Speed Rail station to allow for direct transfers between the two systems.

**Reduce Running Times between the Bay Area and Bakersfield:** SJJPA is exploring ways to reduce travel times for trains running between the Bay Area and Bakersfield to under six hours. This will result in significant operational cost savings, as a crew change can be eliminated for each train. As part of this program, SJJPA is considering a variety of strategies, including implementing measures to reduce dwell times and schedule recovery time, utilizing increased acceleration/deceleration of new Charger Locomotives, terminating some trains in Emeryville, and increasing operating speeds (up to 90 mph).

**Integration with High-Speed Rail:** Like other high-speed rail (HSR) services throughout the world, California will need to have extensive networks of conventional intercity and commuter rail networks that complement and provide "feeder" service to the proposed HSR system for it to be successful. SJJPA believes the San Joaquins provide important connectivity that is critical to the phased implementation of HSR in California. A Joint Policy Statement, which was adopted by CHSRA, SJJPA, and Caltrans on July 26, 2013, is intended to ensure cooperation and input of local communities on all decisions related to any changes in the San Joaquins service and consistent planning between these agencies. SJJPA recently partnered with CHSRA on the development of their Connected Corridor North Study which complements and supports the SJJPA's Sacramento expansion program utilizing the Sacramento Subdivision.

### **Performance Standards and Action Plan**

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CalSTA created a set of uniform performance standards in 2014 for all state-supported intercity passenger rail corridors in an effort to control costs and improve efficiency. The three primary uniform performance standard measures used are: usage, cost efficiency, and service quality. SJJPA has adopted the CalSTA performance standards, and will continue to develop strategies to maintain the successful performance of the San Joaquins. In addition to meeting CalSTA's performance standards, SJJPA is also focused on the environmental benefit of the San Joaquins and its role in helping to create a more sustainable California by working to reducing air pollution and greenhouse gas emissions and help to encourage sustainable, transit-oriented development.



SJJPA's FY 2018/19 and FY 2019/20 "Action Plan" includes:

- Negotiate additional revisions to the Amtrak operating agreement to improve performance reporting and decrease operating costs. Reinvest savings to improve service.
- Refine schedules and a service plans to accommodate the Morning Express Service to the Bay Area and for the planned 8th and 9th Daily Round-Trips trains in conjunction with UPRR, BNSF, Amtrak, and the State.
- Deploy Morning Express Service to the Bay Area.
- Work with UPRR, BNSF, Amtrak, and the State to improve ridership and revenue by improving reliability, adjusting the service plan, and/or implementing projects that add capacity and reduce travel times.
- Contribute to the ongoing fleet analysis being conducted by Caltrans.
- Contribute to the Service Optimization Study, which is currently under development by CCJPA.
- Evaluate service changes that optimize the utilization of crews and equipment.
- Implement a transit transfer program for San Joaquins passengers if funding permits.
- Evaluate measures to improve train and Thruway Bus performance, including modifications to the service.
- Explore new partnerships with public or private bus operators with the goals of allowing non-Amtrak passengers to utilize excess seating capacity on buses that connect with San Joaquins trains to save on operations costs.

### **Capital Improvement Programs**

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Based upon the planned service expansions and enhancements, SJJPA has developed a "10-Year Capital Improvement Program", estimated at \$1.5 billion. The program includes SJJPA's overall vision for the implementation of the Morning Express Service, the 8th and 9th Daily Round-Trips, and ultimately hourly service between Sacramento and Fresno within the next 10-15 years, while optimizing service to the Bay Area and Southern San Joaquin Valley.

SJJPA is currently implementing its Short-Term Capital Improvement Program, which has a five-year horizon. This program focuses on completing two Morning Express Services (Sacramento-Fresno and Bay Area-Fresno), the 8th and 9th Daily Round-Trips, several other station projects, and corridor and other projects to improve the San Joaquins Service. In January 2018, SJJPA submitted a Transit and Intercity Capital Program (TIRCP) grant application (jointly with the San Joaquin Regional Rail Commission) to fund a program of capital improvements associated with the implementation of the 8th and 9th Daily Round-Trips. As part of this service, the Sacramento Subdivision would be upgraded between Sacramento and Stockton to allow for passenger rail service with up to six new stations along the corridor. Additionally, new layover facilities would be constructed in Natomas (in Sacramento) and Fresno, and two six-car trainsets would be procured for the expanded service. Other projects include additional parking, a new station in Oakley, and a relocated Madera Station (see Table ES-1).

SJJPA also has a Longer-Term Capital Improvement Program, which envisions improvements to achieve hourly service between Sacramento and Fresno, as well as to consider extensions of service north of Sacramento and to the Oakland Coliseum/Airport. Hourly service will require additional capacity enhancement projects such as improvements at the Robert J. Cabral Station in downtown Stockton, improvement of the Stockton Diamond, a new maintenance facility, additional track work and/or capital access fees, and additional rolling stock. Potential future extensions of the San Joaquins being investigated include, rail service north of Sacramento along the UPRR rail line from Sacramento to Redding with potential stations initially in Yuba City/Marysville and Oroville, and trains five miles past the Amtrak Oakland Station to serve the Amtrak Coliseum/Airport Station. Longer-term utilization of the Altamont Corridor to bring the San Joaquins to additional Bay Area markets is also being explored.



Table ES.1: Summary of State Funding Request for the San Joaquins

San Joaquins Corridor - Short-Term Capital Projects (\$ Millions)					
Improvement Program/Project (0-5 Years)	Project Cost	Funding Secured	Funding Sources	Lead Agency	Status
<b>Morning Express Service</b>					
Temporary Layover Facility - Fresno	\$1.7	\$1.7	Cal OES	SJJPA	Construction
Modesto Station Parking Lot	\$0.4	\$0.4	LTF	City of Modesto	Construction
Turlock-Denair Station Parking Lot	\$0.29	\$0.29	Minor Cap/Cal OES	Stanislaus Co.	Construction
Stockton (Cabral) Station Parking Lot	\$1.3	\$1.3	CMAQ	SJJPA/SJRRC	Construction
Station Enhancements - Antioch	\$0.3	\$0.3	Cal OES	SJJPA/City	Construction
Station Enhancements - Security Cameras	\$1.5	\$1.5	Minor Cap/Cal OES	SJJPA	Construction
Station Enhancements - Other <sup>1</sup>	\$2.3	\$2.3	Minor Cap/Cal OES	SJJPA	Construction
<b>8th and 9th Daily Round-Trips</b>					
Track Improvements - UPRR Sac. Sub	\$149.1		TIRCP (Applied)	SJJPA/UPRR	Planning/Env.
Track Improvements - BNSF Stock. Sub	\$20.0		TIRCP (Applied)	SJJPA/BNSF	Planning/Env.
New Stations (Lodi, Elk Grove, 4 in Sac.)	\$111.5		TIRCP (Applied)	SJJPA	Planning/Env.
Track Extension (RMF to Cabral Station)	\$23.7	\$23.7	Prop1A/CMAQ/Other	SJJPA/UPRR	Planning/Env.
New Rolling Stock (2-new 6-car trainsets)	\$87.6		TIRCP (Applied)	SJJPA	Planning/Env.
Merced-LeGrand Dbl. Tracking (Seg. 2)	\$23.2	\$23.2	ITIP	Caltrans/BNSF	Construction
Stockton-Escalon Dbl. Tracking (Seg. 3)	\$20.5	\$20.5	ITIP	Caltrans/BNSF	Construction
Stockton-Escalon Dbl. Tracking (Seg. 4)	\$23.0	\$23.0	ITIP	Caltrans/BNSF	Construction
Layover Facility - Fresno	\$15.9		TIRCP (Applied)	SJJPA	Planning/Env.
Layover Facility - Natomas	\$17.7		TIRCP (Applied)	SJJPA	Planning
Merced Station Dbl. Platform/Trackwork	\$10.3	\$10.3	ITIP	Caltrans/BNSF	Design/Const.
Other Stations Dbl. Platform/Trackwork <sup>2</sup>	\$36.0	\$36.0	ITIP	Caltrans/BNSF	Planning
Capital Access Fees	TBD		TIRCP (Applied)	SJJPA	Planning
<b>Other Station Projects</b>					
Wasco Station Reconstruction	TBD		CHSRA Funds	CHSRA	Design
Madera Station Relocation/Expansion	\$26.7		TIRCP (Applied)	SJJPA	Planning/Env.
New Oakley Station	\$8.6		TIRCP (Applied)	SJJPA	Planning/Env.
Allensworth Accessibility Improvements	\$0.3	\$0.3	Cost Savings	SJJPA	Planning
New Parking Lots	TBD		Cost Savings	SJJPA	Planning
Station Enhancements - Other <sup>3</sup>	\$0.1	\$0.1	Minor Cap/Cal OES	SJJPA	Planning
<b>Corridor and Other Projects</b>					
Stockton Wye	\$8.7		TIGER/SB-1 (Applied)	UPRR	Planning
Platform Accessibility for High-Floor Cars	TBD		TBD	SJJPA	Planning
Positive Train Control - Host Railroads			Cal OES/UPRR/BNSF	UPRR/BNSF	Construction
Positive Train Control - Amtrak			Caltrans	Amtrak	Construction
Onboard Information System (OBIS)	\$25.0	\$25.0	Caltrans	Caltrans/CCJPA	Design/Const.
Increasing Operating Speeds (e.g. 90mph)	TBD		TBD	SJJPA	Planning
Cal PIDS Replacement/Upgrade	\$0.9	\$0.9	TBD	SJJPA/CCJPA	Planning
Safety Improvements <sup>4</sup>	TBD		TBD	SJJPA/CCJPA	Planning
<b>Notes</b>					
<sup>1</sup> Consists of a variety of station improvement that include lighting, signage, landscaping, repairs, and other projects.					
<sup>2</sup> Projects may include new platforms at Modesto, Turlock-Denair, and Fresno Stations.					
<sup>3</sup> Consists of non-Morning Express Service station improvement that include lighting, signage, landscaping, repairs, and other projects.					
<sup>4</sup> Safety improvements could include upgrades lighting, security cameras, fencing, and at-grade crossings, as well as grade separation projects.					
Source: Caltrans Division of Rail and Mass Transportation and SJJPA, 2018.					



## Fare Policy

SJJPA will work to develop fares that ensure the service is attractive and competitive with other modes of transportation along the corridor. The San Joaquins Service was formally on reserved ticketing, and fares were determined by Amtrak's "dynamic pricing" revenue management policy, which escalated prices significantly as capacity of the train decreased. SJJPA cancelled Amtrak's reserved ticketing and revenue management policies due to the policies' potential for ridership losses by pricing riders out of the market and disproportionately affecting low-income and disadvantaged communities. SJJPA is developing its own "one-bucket" fare structure (similar to Capitol Corridor and Pacific Surfliner), which will hold prices constant.

SJJPA was recently notified that Amtrak was changing its "Tariff Policy" to adjust the nationwide senior, disabled, child, AAA, Veterans, and student discounts, as well as changes to its cancellation policy. Amtrak provided SJJPA with a summary of projected ridership and revenue impacts on the San Joaquins for the Student, AAA, and Senior Discount changes. Ridership is projected to decrease by 10,295 while revenue is projected to increase \$116,573. These changes do not align with SJJPA's marketing or fares strategy. To retain some of these discounts, SJJPA, CCJPA, and LOSSAN JPA partnered together to create the "Califor-

nia Everyday Discount" program. As a part of this program, the California JPAs retained the senior, disabled, and student discounts with a commitment to try to negotiate AAA and Veterans discounts. By partnering together, the JPAs are ensuring that riders within California interact with a united marketing message from all three corridors.

## Service Amenities and Food Service

The San Joaquins service boasts many great amenities that are integral to the attraction of riders and are a key component of the marketable features of the service. These features add value to the customer experience and SJJPA is working with Caltrans, Amtrak and the other JPAs to improve current amenities and add additional services. Current service amenities include: free Wi-Fi, bicycle storage, comfortable seating, and a generous baggage policy.

SJJPA is evaluating the existing food and beverage service to provide high quality options in the most efficient and cost-effective manner. SJJPA is considering food service changes to underperforming trainsets, including the removal of the café car or utilization of lower cost cart service. SJJPA is actively increasing the sale of and promotional opportunities for products grown or produced in the San Joaquins Corridor.





## Marketing Strategies

For FY 2018/19 and FY 2019/20, SJJPA assumes \$1,000,000 each fiscal year for marketing to increase awareness and use of the service along the corridor, as well as \$500,000 for advertising to promote the launch of the Morning Express Service to the Bay Area for FY 2018/19 and \$500,000 for advertising the initiation of the 8th and 9th Daily Round-Trips for FY 2019/20. The SJJPA Marketing and Outreach Plan employs advertising, social media, and grassroots strategies to market and conduct outreach for the San Joaquins. SJJPA is expanding its use of advertising and social media in response to the success of these strategies in driving more traffic to [amtrak-sanjoa-quins.com](http://amtrak-sanjoa-quins.com) and online channels, which comprise the majority of ticket purchases.

SJJPA is also carrying out specific strategies for reaching out to minority, non-English-speaking constituencies, and disadvantaged communities along the San Joaquins Corridor. With Hispanics comprising well over 50% of the San Joaquin Valley population, but less than one-third of the Amtrak ridership, a concerted effort has been made to tailor promotional materials in Spanish and utilize informational outlets that are more effective. The grassroots strategy has helped SJJPA identify and address other markets throughout the San Joaquins Corridor that are underserved, or lacking information.

## Annual Funding Requirement

A primary purpose of this Business Plan is to request the annual funds required by SJJPA to operate, administer, and market the San Joaquins for agreed-upon service levels. Table ES-2 summarizes the funding request by the SJJPA.

## Safety and Security

The primary objectives of SJJPA's Safety and Security Program include the continuation of a broad-based program of educational activities and to aggressively pursue capital improvements that help eliminate unsafe conditions.

Educational efforts are two-fold: to increase public awareness of rail safety and security along the San Joaquins Corridor; and to ensure all personnel involved in operating the San Joaquins has the proper training to be effective in implementing SJJPA's Safety

**Table ES.2: Summary of State Funding Request for the San Joaquins**

SJJPA State Funding Request for the San Joaquins (FY 2017/18 - FY 2019/20)			
Expense Category	FY 2017/18 (Approved/Current)	FY 2018/19 (Requested)	FY 2019/20 (Projected)
Operating			
-Amtrak Contract	\$45,260,010	\$46,617,810	\$48,016,345
-Other Operations <sup>1</sup>	\$3,873,275	\$3,989,473	\$4,109,157
-8th/9th Round-Trips <sup>2</sup>	----	----	\$731,030
Administrative	\$2,110,414	\$2,181,424	\$2,231,660
Marketing	\$1,000,000	\$1,000,000	\$1,000,000
Minor Capital	\$500,000	\$500,000	\$500,000
Morning Express Express Service Launch Advertising	\$500,000	\$500,000	----
8th/9th Daily Round-Trips Launch Advertising	----	----	\$500,000
Market Analysis (Bi-Annual)	----	\$150,000	----
<b>Total Request</b>	<b>\$52,243,699</b>	<b>\$53,938,708</b>	<b>\$56,088,192</b>

<sup>1</sup> Expenses under the "Other Operations" category (i.e. outside of the Amtrak contract) include, but not limited to: On-Time Performance (OTP) payments; ROW clean-up crew for the corridor; operation of the Wi-Fi and Onboard Information System (starting in late 2019); leased parking (e.g. adjacent to Fresno Station); and the Passenger Information Display System (PIDS).

<sup>2</sup> SJJPA plans to commence operations of the 8th and 9th Daily Round-Trips in June 2020. The funding request includes one month of operations in State FY 2019/20. The projected amount is based on calculations done for the 2018 SJJPA-SJRRCT TIRCP application. This number will be refined as operating costs for the new service are negotiated with Amtrak.

and Security Program. SJJPA will leverage a network of rail safety education resources through California Operation Lifesaver, free DHS security training resources, and safety and security grant programs to coordinate, develop new programs, and build upon and enhance programs currently undertaken by Amtrak. SJJPA will also continue collaborative efforts with various stakeholders, including the State, SJJPA member agencies, Amtrak, UPRR, BNSF, California Operation Lifesaver, Transportation Security Administration (TSA), California Governor's Office of Emergency Services (Cal OES), and local law enforcement and first responders along the San Joaquins Corridor to address safety and security issues impacting the service.

In an effort to identify needed physical improvements, SJJPA will continue to conduct a systematic evaluation of the conditions along the railroad right-of-way and in and around San Joaquins stations (including parking lots and platforms), as well as onboard trains. California's Office of Emergency Services has provide



much of the funding for SJJPA's program of Safety and Security capital improvements. Important capital projects that SJJPA is currently implementing or pursuing include:

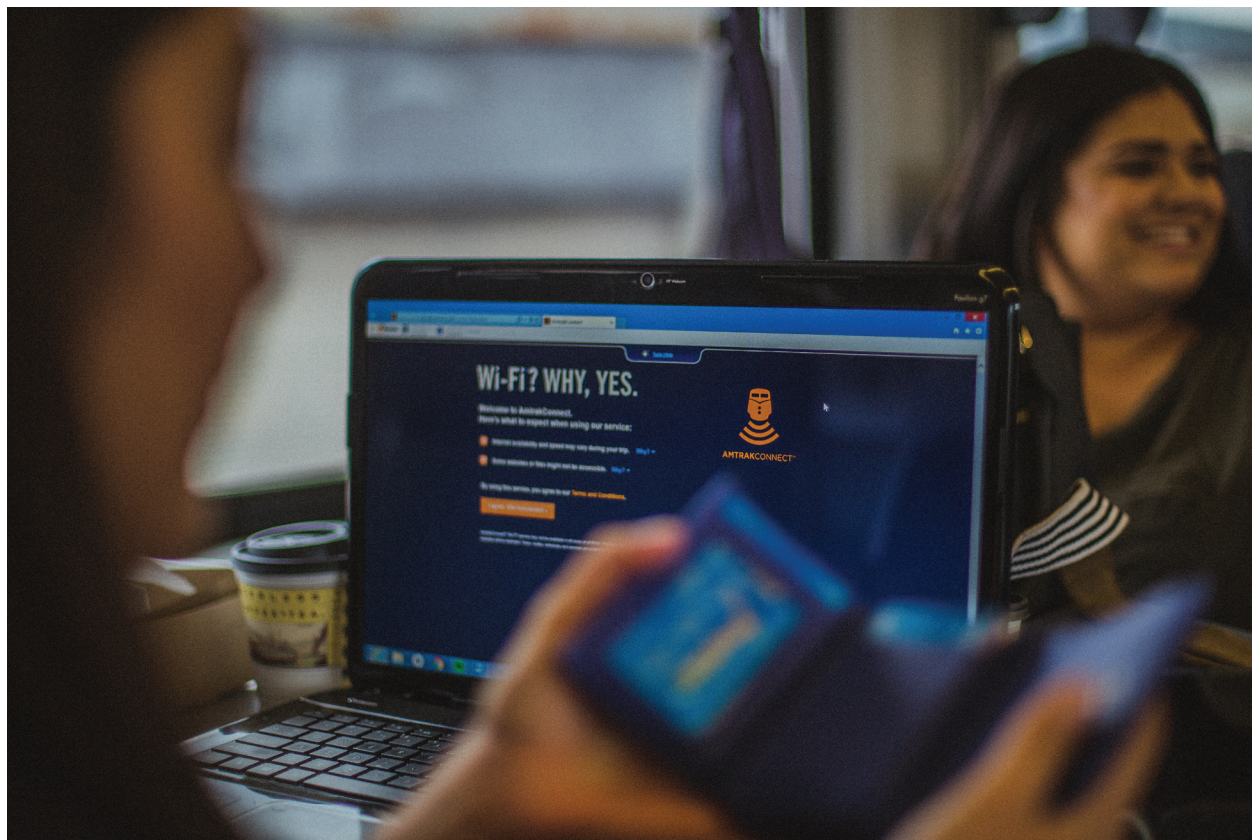
- Fencing projects at locations identified based on incident hot spots and high numbers of near misses;
- Increased lighting at stations and parking lots, as well as installing blue light phone towers (originally developed for use on college campuses); and
- Improved safety and security-related signage, including messaging around suicide prevention and railroad safety.

### Station Area Development

Increased development near San Joaquins stations promotes increased use of the San Joaquins, generating additional ridership and revenue to benefit the State. The responsibility and powers needed to focus growth and produce station area development reside

primarily with local government. To help ensure that the San Joaquins become an instrument for encouraging implementation of station area development principles, SJJPA will:

1. Encourage local governments to prepare/ update and adopt station area plans, amend city and county general plans, and promote transit-oriented development (TOD) in the vicinity of San Joaquins stations.
2. Assist local governments in securing grants/ funding for planning and implementing TOD around San Joaquins stations.
3. Require new San Joaquins stations be developed as multi-modal transportation hubs.
4. Encourage the location of new San Joaquins stations in traditional city centers and/or areas with high-potential for TOD around the station area.
5. Work with communities and organizations to support TOD and with developers to implement TOD.



## 1. INTRODUCTION

The purpose of this 2018 San Joaquin Joint Powers Authority Business Plan Update (“Business Plan”) is to identify the San Joaquin Joint Powers Authority’s (SJJPA) intentions for State Fiscal Year (FY) 2018/19 and FY 2019/20 in its proposed management of the San Joaquins Intercity Passenger Rail Service (San Joaquins), and to request the annual funds required by SJJPA to operate, administer, and market the San Joaquins. The State of California requires that an Annual Business Plan Update be submitted to the Secretary of the California State Transportation Agency (CalSTA) in draft form by April 1 of each year, and final form by June 15 of each year to allow Amtrak time to finalize operating cost estimates. This Business Plan will be reviewed and approved by the State and used to develop an annual appropriation request to the State Legislature.

### Business Plan Requirements

This Business Plan Update includes State-required information, including the following:

- Service performance;
- Operating and action plan strategies;
- Short-term and long-term capital improvements;
- Funding requirements for the upcoming fiscal year;
- External factors affecting the service;
- Plans for service expansion and enhancement efforts;
- Marketing and outreach efforts;
- Establishment of fares; and
- Delineation of how proposals to expand or modify service, including funding and accounting, are separate from locally-sponsored services in the corridor.

This Business Plan must also be consistent with the Draft 2018 California State Rail Plan and the California High-Speed Rail Authority (CHSRA) 2016 Business Plan.

### Regional Governance of the San Joaquins

In 2012, transportation planning agencies throughout the San Joaquin Valley worked together in order to set up a regional Joint Powers Authority and to support legislation that would enable regional governance of the San Joaquins. To protect the existing service and to promote its improvement, local and regional agencies throughout most of the San Joaquins Corridor sponsored and supported Assembly Bill 1779 (AB 1779). This bill enabled regional government agencies to form the San Joaquin Joint Powers Authority to take over the administration and management of the San Joaquins from the State. AB 1779 was passed by the Legislature on August 30, 2012 with bi-partisan





support, and was signed by Governor Brown on September 29, 2012. The first SJJPA Board Meeting was held on March 22, 2013 in Merced.

The SJJPA Governing Board includes elected representatives of ten Member Agencies, which include Alameda County, Contra Costa Transportation Authority, Fresno Council of Governments, Kings County Association of Governments, Madera County Transportation Commission, Merced County Association of Governments, Sacramento Regional Transit, San Joaquin Regional Rail Commission, Stanislaus Council of Governments, and Tulare County Association of Governments.

AB 1779 defines the composition of SJJPA, as well as requiring that the interagency transfer must result in administrative or operating cost reductions. AB 1779 also requires SJJPA to protect the existing service and facilities and seek to expand service as warranted by ridership and available revenue.

### **Roles and Responsibilities**

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On July 1, 2015, SJJPA became the primary managing entity of the San Joaquins. The SJJPA is responsible for the following:

- Oversight and management of the day-to-day San Joaquins operations, which includes entering into an operating agreement with the current contract operator, the National Railroad Passenger Corporation (Amtrak);
- Negotiating changes to the current contract or selecting another qualified operator;
- Advising the Capitol Corridor Joint Powers Authority (CCJPA) on the management and administration of the State-owned and other rolling stock (passenger cars and locomotives) assigned to the San Joaquins;
- Overseeing the dedicated feeder bus system for the San Joaquins, which is subcontracted to private bus operators through the Amtrak contract;
- Planning for future service improvements;
- Coordinating with CCJPA and Los Angeles-San Diego-San Luis Obispo (LOSSAN) JPA and the State on issues such as scheduling, connecting buses, and ticketing; and
- Marketing for the San Joaquins.

The State and Amtrak share operating responsibility for the San Joaquins with SJJPA. Under the provisions of AB 1779, the State continues to provide the funding necessary for service operations, administration, and marketing. Furthermore, Caltrans Division of Rail and Mass Transportation remains responsible for the development of the California State Rail Plan; coordination and integration between the three state-supported intercity passenger rail services; the preparation of grant applications to the federal government; and the development of state budget requests. The State also remains the owner of the trainsets used for the San Joaquins and Capitol Corridor Services and continues to be responsible for the procurement of new equipment for the state-supported intercity passenger rail services. Amtrak continues to serve as the operator of the San Joaquins.

The San Joaquin Regional Rail Commission (SJRRRC), the managing body for the Altamont Corridor Express (ACE) Service between Stockton and San Jose, was selected by the SJJPA Board to be the Managing Agency at the July 26, 2013 SJJPA Board Meeting in Fresno for an initial 3-year term (September 27, 2013 – September 27, 2016). At the May 27, 2016 SJJPA Board Meeting, the SJJPA Board approved SJRRRC as the Managing Agency for an additional 3-year term (September 27, 2016 – September 27, 2019).

### **Advocacy**

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In addition to more cost-effective administration and operations, there are many benefits to regional governance of the San Joaquins. Train riders and San Joaquin Valley residents now have a stronger voice in deciding what happens with the service, as local decision-making is more responsive and adaptive to passenger issues. SJJPA, which is made up of elected officials throughout the San Joaquins Corridor, is a strong voice in advocating for service improvements and expansions – particularly in Washington D.C. and in Sacramento. SJJPA is taking advantage of joint marketing and partnerships with local agencies throughout the San Joaquin Valley. Since SJJPA's Board Members are part of the communities in the San Joaquins Corridor, they are able to facilitate the engagement of local communities throughout the corridor to use and support the San Joaquins.

## Public Outreach for this Business Plan

Public outreach for the 2018 SJJPA Business Plan included briefings for key stakeholder groups, electronic outreach to the SJJPA stakeholder list, and posting a public review draft on [sjjpa.com](http://sjjpa.com). This process is meant to engage with the public and stakeholders to provide information about this document and the opportunity for public comment.

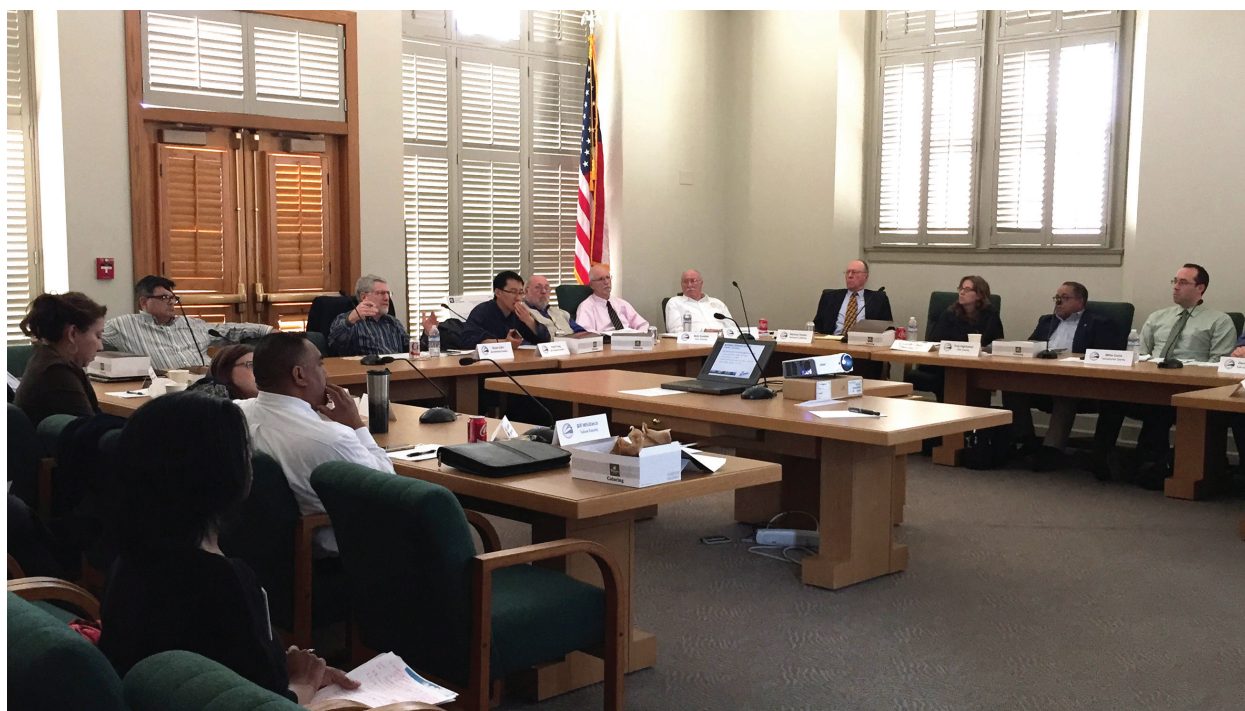
Briefings were held during the development and comment period of the Business Plan. These briefings provided an opportunity to engage key stakeholder groups within the corridor. Briefings were also held with the SJJPA Board, Central Valley Rail Working Group, CalSTA, Caltrans, Freight Railroads, San Joaquin Valley Rail Committee, and Amtrak. SJJPA sought input from these and other agencies and organizations that have an interest in intercity passenger rail.

As a part of its Stakeholder Engagement Strategy, SJJPA has developed an extensive stakeholder email list which it employs to notice about board meetings, service updates, and to engage stakeholders to participate in the Business Plan process. SJJPA sent electronic communications to its stakeholder list requesting public comment and provided links to the document. This process ensures those invested in intercity passenger rail are engaging with SJJPA in the San Joaquin Valley, Sacramento, and the Bay Area,

and have an opportunity to provide comment to the Business Plan. Finally, SJJPA posted the Public Review Draft Business Plan to its website ([sjjpa.com](http://sjjpa.com)) on February 20, 2018 for public review of the document, and was circulated to SJJPA's stakeholder list.

## 2018 SJJPA Business Plan Update Approval Process

This Business Plan is similar to the 2017 SJJPA Business Plan. The changes include providing current numbers for the San Joaquins operating expenses and bringing the plan up-to-date, including additional details on the capital improvement programs, and reducing the length of the document. The SJJPA Board discussed the general outline and highlighted changes planned for the 2018 Business Plan at its November 17, 2017 Board Meeting. Following the incorporation of comments from the public review period, an updated Draft Business Plan was presented to the SJJPA Board at the March 23, 2018 Board Meeting for approval. Following approval, the Draft Business Plan was submitted CalSTA by April 1, 2018. A final version of the Business Plan, which will include revised operating cost estimates from Amtrak and revisions based on CalSTA's comments, will be presented at the May 25, 2018 SJJPA Board Meeting for approval. Following Board approval, the Business Plan will be submitted to CalSTA by June 15, 2018.





## 2. HISTORICAL PERFORMANCE OF THE SERVICE AND ROUTE CHARACTERISTICS

Beginning with the introduction of the Amtrak national network in the early 1970s, passenger train service has been expanding in California. The State initiated, co-funded, and operated intercity rail service under the authority of Section 403(b) of the Federal Rail Passenger Services Act. Amtrak operates all three state-supported intercity rail services.

### San Joaquins Intercity Rail Service ("San Joaquins")

The San Joaquins extends 364 miles and provides direct rail service to 11 counties: Sacramento, Contra Costa, Alameda, San Joaquin, Stanislaus, Merced,

Madera, Fresno, Kings, Tulare, and Kern (see Figure 2.1). Between Oakland and Bakersfield, the San Joaquins route is 315 miles long and has 13 intermediate stops. The San Joaquins route is 49 miles between Sacramento and Stockton with one additional intermediate stop. The San Joaquins has seven daily round-trip trains (five between Oakland and Bakersfield and two between Sacramento and Bakersfield). Starting on May 7, 2018, this configuration will be adjusted to accommodate the Morning Express Service, which will move one northbound Bakersfield to Sacramento train to depart from Fresno, while terminating the last train leaving Oakland in Fresno. The current minimum scheduled San Joaquins running

Figure 2.1: San Joaquins Route



Source: San Joaquin Joint Powers Authority, 2018

Table 2.1: San Joaquin Historic Operating Performance

San Joaquin Route Annual Operating Performance – State Fiscal Years									
State Fiscal Year	Ridership Data		Financial Data for Operations						
	Ridership	PM/TM	Revenue	Expense	Loss	State Calculated	Amtrak Service Costs	Train Loss per PM	Farebox Ratio
Notes		(F1)		(F2)		(F3)	(F4)	(F5)	(F6)
1973-74 (S1)	38,770	83.6							
1974-75	66,990	44.2							
1975-76	66,530	43.8							
1976-77	87,642	56.0							
1977-78	80,611	52.7							
1978-79	87,645	60.2							
1979-80 (S2)	123,275	63.6	\$1,174,065	\$3,975,185	\$2,801,120	\$518,206		18.4¢	29.5%
1980-81	159,498	55.3	\$2,224,137	\$6,940,934	\$4,716,797	\$1,360,391		18.4¢	32.0%
1981-82	189,479	65.3	\$3,115,710	\$7,774,029	\$4,658,319	\$2,228,585		14.0¢	40.1%
1982-83	186,121	62.9	\$3,342,137	\$7,991,697	\$4,649,560	\$2,490,275		14.6¢	41.8%
1983-84	248,275	85.3	\$4,730,431	\$8,094,789	\$3,364,358	\$2,518,066		7.3¢	58.4%
1984-85	269,837	94.6	\$5,210,951	\$8,641,293	\$3,430,342	\$2,802,955		7.7¢	60.3%
1985-86	280,798	101.1	\$5,425,329	\$8,610,554	\$3,185,225	\$2,658,895		6.8¢	63.0%
1986-87	304,668	106.1	\$6,084,677	\$9,179,133	\$3,094,456	\$2,929,148		5.1¢	66.3%
1987-88	340,573	121.1	\$7,457,686	\$9,633,659	\$2,175,973	\$2,605,572		2.2¢	77.4%
1988-89	370,190	133.7	\$9,527,268	\$10,968,216	\$1,440,948	\$1,887,450		1.3¢	86.9%
1989-90 (S3)	418,768	116.9	\$11,845,743	\$15,286,520	\$3,440,777	\$3,544,332		3.2¢	77.5%
1990-91	463,906	104.1	\$12,691,986	\$18,456,785	\$5,764,799	\$5,803,565		4.9¢	68.8%
1991-92	483,593	104.3	\$12,369,805	\$18,633,777	\$6,263,972	\$6,472,598		4.3¢	66.4%
1992-93 (S4)	516,113	109.6	\$12,628,496	\$22,227,149	\$9,598,653	\$10,789,651		6.5¢	56.8%
1993-94	558,569	94.6	\$13,894,624	\$26,678,861	\$12,784,237	\$12,335,021	\$3,937,150	8.3¢	52.1%
1994-95	524,680	88.8	\$12,244,668	\$25,077,153	\$12,832,485	\$12,668,018	\$3,705,069	9.7¢	48.8%
1995-96	526,088	86.6	\$12,477,497	\$25,386,099	\$12,908,602	\$14,483,048	\$1,360,327	11.8¢	49.2%
1996-97	652,544	106.1	\$13,817,681	\$34,528,165	\$20,710,484	\$16,265,387	\$5,672,236	18.6¢	40.0%
1997-98	702,178	118.0	\$15,230,966	\$36,517,290	\$21,286,324	\$17,190,515	\$4,493,597	17.7¢	41.7%
1998-99 (S5)	680,687	102.8	\$16,496,457	\$37,269,835	\$20,773,378	\$19,938,254	\$1,712,168	17.6¢	44.3%
1999-00	671,295	92.7	\$18,061,512	\$41,791,782	\$23,730,270	\$24,232,326	\$652,236	19.0¢	43.2%
2000-01	710,833	97.9	\$19,667,681	\$43,404,325	\$23,736,644	\$24,350,127	\$540,809	18.2¢	45.3%
2001-02 (S6)	733,152	96.9	\$20,114,693	\$46,503,548	\$26,388,855	\$26,281,035	\$396,392	20.0¢	43.3%
2002-03	769,708	89.9	\$20,318,564	\$50,552,529	\$30,233,965	\$29,729,650	\$504,315	21.7¢	40.2%
2003-04	752,227	87.2	\$22,100,796	\$50,061,460	\$27,960,664	\$27,960,664	\$89,345	20.5¢	44.1%
2004-05	743,245	85.1	\$22,590,880	\$49,883,689	\$27,292,809	\$27,292,808		19.6¢	45.3%
2005-06	801,242	91.1	\$25,869,979	\$55,226,742	\$29,356,763	\$29,356,763		19.0¢	46.8%
2006-07	789,641	88.8	\$26,862,994	\$61,188,078	\$34,325,084	\$34,325,084		28.8¢	43.9%
2007-08	894,346	88.2	\$28,945,651	\$65,474,253	\$36,528,602	\$36,528,602		21.4¢	44.2%
2008-09	958,946	90.0	\$30,671,510	\$68,232,766	\$37,561,256	\$37,561,256		21.2¢	45.0%
2009-10	967,437	103.7	\$32,117,615	\$62,689,957	\$30,572,342	\$30,572,342		22.2¢	51.2%
2010-11	1,032,579	112.9	\$36,571,173	\$69,578,077	\$33,006,904	\$33,006,904		21.9¢	52.6%
2011-12	1,133,654	124.0	\$40,161,170	\$74,360,735	\$34,199,595	\$34,199,595		20.2¢	55.0%
2012-13	1,195,898	127.5	\$41,415,960	\$73,685,365	\$32,269,405	\$32,269,405		19.2¢	56.2%
2013-14	1,202,624	125.8	\$41,421,102	\$79,263,729	\$37,842,627	\$37,842,627		22.5¢	52.3%
2014-15	1,181,639	123.8	\$41,020,415	\$80,023,410	\$39,002,995	\$39,002,995		23.7¢	51.3%
2015-16 (S7)	1,135,424	118.6	\$39,040,339	\$77,388,218	\$38,347,879	\$38,347,879		24.2¢	50.4%
2016-17	1,120,037	107.9	\$38,880,344	\$78,939,791	\$40,059,447	\$40,059,447		25.7¢	49.3%

Source: Amtrak and the California Department of Transportation, 2018



**TABLE 2.1 Notes**

- (S1) Service started 3/6/74 with one round-trip between Oakland and Bakersfield Data is for four months only.
- (S2) State support started 10/1/79. Data is for nine months, during which time ridership totaled 93,206.
- (S3) Third round-trip added 12/17/89 between Oakland and Bakersfield.
- (S4) Fourth round-trip added 10/25/92 between Oakland and Bakersfield.
- (S5) Fifth round-trip added 2/21/99 between Sacramento and Bakersfield.
- (S6) Sixth round-trip added 3/18/02 between Sacramento and Bakersfield.
- (S7) Seventh round-trip added 6/20/16 between Oakland and Bakersfield.
- (F1) Passenger-miles per train mile (PM/TM), a measure of the average load on a train over its entire route.
- (F2) Prior to October 1983, all trains billed on solely related cost basis. From October 1983 through September 1995, all trains billed on short term avoidable cost basis. Effective October 1996, all trains billed on Full Cost (Train, Route and System) Basis. Includes cost of connecting buses. Depreciation and interest (equipment capital cost) included in operating cost under solely-related cost basis but excluded and charged separately under short-term, long-term avoidable and full cost bases.
- (F3) Calculated service costs shown here may not reflect actual State contract cost.  
From October 1979 through September 1983, State cost increased in stages from 18.5 to 48.5 percent of operating loss (including equipment costs). Between October 1983 and September 1995, State cost was 65 percent of train operating loss for first three round trips, plus 50 percent of depreciation and interest (equipment capital cost). For the fourth round trip, State cost was 70 percent of train operating loss plus equipment capital cost. Between October 1995 and September 1996, State cost was 100 percent of train operating loss and 60 percent of equipment capital cost. Between October 1996 and September 1997, State cost was 65 percent of train operating loss. Effective October 1997, State is billed contractually specified percentages of most individual cost elements, plus a fixed amount for certain other cost elements. Also includes State payment of costs of special agreements with Amtrak for use of equipment, and State payment of entire net cost of all connecting bus routes.
- (F4) Between State Fiscal Years 1993-94 and 2003-04, Amtrak cost is based on billings submitted and reflects cost basis and Amtrak shares as stated in notes (F2) and (F3) above. However, Amtrak does not include the unbilled Amtrak share of fixed cost elements. Prior to FY 1993-94, data to calculate Amtrak cost is not available/ beginning in FY 2004-05, no Amtrak share is billed.
- (F5) Train loss (deficit) per train passenger-mile. Connecting buses not included in loss per passenger mile data.
- (F6) Farebox Ratio, the ratio of Revenue to Expense.

time between Oakland and Bakersfield is 6 hours and 1 minute. Between Sacramento and Bakersfield the San Joaquins has a minimum 5 hours and 10 minute running time. Maximum speed for the San Joaquins is 79 mph.

In 1979-80, the San Joaquins only had two daily round-trips between Oakland and Bakersfield and annual ridership was a little over 123,000. Ridership steadily increased over the years, reaching a peak in FY 2013/14 when it recorded over 1.2 million passengers. In recent years, ridership has slightly decreased or held flat. Potential reasons for this include consistently low gas prices over the last few years, competition from new private intercity bus carriers, and periods of declining on-time performance (OTP). SJJPA is addressing these concerns through service changes and other planning efforts described in this Business Plan. Currently, the San Joaquins Service is the sixth most used intercity service within the Amtrak system. Table 2.1 presents historical annual operating performance of the San Joaquins between FY 1973/74 and FY 2016/17.

Amtrak operates the state-supported San Joaquins on track owned by the UPRR and the BNSF through operating agreements with the UPRR and BNSF.

UPRR owns the 49 miles of track used by the San Joaquins between Stockton and Sacramento, and 39 miles between Oakland and Port Chicago, whereas the remaining 276 miles (between Port Chicago and Bakersfield) are owned by BNSF (see Table 2.2). The UPRR track is primarily single track, while the BNSF line has approximately 65.7 miles of double-track divided among five segments.

Assessing the ridership patterns of the San Joaquins is critical to monitoring performance and conducting effective service planning. Table 2.3 shows passenger ons/offers (i.e. boardings/alightings) at San Joaquins train stations for Federal FY 2016. These numbers include trips with a Thruway bus connection (which comprise a considerable number of the trips at Bakersfield, Stockton [San Joaquin Street], Sacramento, Hanford, Martinez, and Emeryville Stations). Table 2.4 illustrates how ons/offers can differ significantly from the true origins/destinations points of passengers by excluding ons/offers of passengers making transfers between a bus and train. While ons/offers are useful for planning station capacity and design issues, origins/destinations statistics are far more useful (and accurate) for service planning. For example, in Table 2.3, Bakersfield is shown as having the most (491,824) passenger ons/offers in FY 2016. However, nearly 75%

Table 2.2: San Joaquins Ownership and Track Characteristics

San Joaquins Route Ownership and Track Characteristics								
Between	Mile Post	And	Mile Post	Route Miles	Owner of Track	*No. of Tracks	Max Speed	Signal System
Oakland Jack London Square	7.0	Oakland 10th Street	4.2	2.8	UP	2	50	CTC
Oakland 10th St.	2.2	Martinez	31.7	29.5	UP	2	79	CTC
Martinez	34.7	Port Chicago	41.3	6.6	UP	1	79	CTC
Port Chicago	1163.5	Stockton	1120.7	42.8	BNSF	1-2	79	CTC
Sacramento	89.0	Elvas	91.8	2.8	UP	2	35	CTC
Elvas	38.8	Stockton	84.7	45.9	UP	1	60	CTC
Stockton	1120.7	Bakersfield	886.9	233.8	BNSF	1-2	79	CTC
TOTAL				364.2				
* General Number of Mainline Tracks		Signal Systems:						
Owners:		CTC - Centralized Traffic Control - Wayside signals protect possession of blocks.						
BNSF - BNSF Railway Company		Signals and powered switches are also remotely controlled from the dispatching center to direct the movement of trains.						
UP - Union Pacific Railroad Company								
Source: California Department of Transportation								

of these passengers took a connecting bus between Southern California, reducing the number of passengers who actually traveled to/from Bakersfield as an origin/destination point to 125,823 (see Table 2.4). Stockton (San Joaquin Street) Station is shown as having the third highest ridership with 283,213 passengers in Table 2.3, but about 50% of these passengers took a connecting Thruway bus, reducing the number of passengers who actually traveled to/from Stockton (San Joaquin Street) Station as an origin/destination point to 141,405 (see Table 2.4). Many of those taking a Thruway bus at Stockton (San Joaquin Street) Station were actually traveling to/from Sacramento (about 48,000 passengers). For Sacramento Station, the total number of passengers (rail + Thruway bus) actually traveling to/from Sacramento was nearly 136,000 passengers. The Thruway bus station with the greatest number of riders is by far Los Angeles Union Station with over 110,000 San Joaquins passengers in FY 2016.

Table 2.5 provides Federal FY 2016 ridership for the top San Joaquins "city pairs" (including trips that start or end on an Amtrak San Joaquins Thruway Bus stop). This data includes the true origins/destinations of riders, providing an accurate picture of ridership mar-

kets. Tables 2.3, 2.4, and 2.5 highlight the importance of incorporating Thruway Bus travelers when discussing San Joaquins ridership.

### San Joaquins Amtrak Thruway Bus Service

The extensive network of dedicated Amtrak Thruway Buses connecting with the San Joaquins to and from destinations around California and Nevada is critical to the performance of the overall service. In addition to the Thruway Bus service connections in Bakersfield, other Amtrak Thruway Bus service connections are provided at Sacramento, Stockton, Lodi, Oakland, Emeryville, Martinez, Merced, Hanford, and Fresno. In Federal FY 2016, over 55 percent (625,835) of San Joaquins passengers used an Amtrak Thruway Bus on at least one end of their trip.<sup>1</sup> San Joaquins ridership to/from key Amtrak Thruway Bus stops can be found in Table 2.6.

All trains either initiating or terminating at Bakersfield are met by Amtrak Thruway Buses connecting south to Southern California. In FY 2016, over 366,000 San Joaquins passengers used an Amtrak Thruway Bus

<sup>1</sup> Amtrak, 2016



**Table 2.3: San Joaquins Train Station Ridership Report  
(Includes Passengers Making Thruway Bus Connections)**

San Joaquins Train Station Ridership Report – FY 2016* (Includes Passengers Making Thruway Bus Connections)		
	Station	Passenger Ons/Offs (FY 16)**
1	Bakersfield	491,824
2	Fresno	369,582
3	Stockton (San Joaquin St.)	283,213
4	Hanford	201,098
5	Merced	121,137
6	Modesto	117,422
7	Martinez	111,062
8	Sacramento	110,047
9	Emeryville	102,009
10	Oakland	68,559
11	Richmond	54,260
12	Wasco	41,424
13	Antioch	39,995
14	Stockton (Downtown)	37,916
15	Corcoran	30,104
16	Turlock-Denair	29,197
17	Madera	27,136
18	Lodi	8,617
TOTAL PAX ON/OFFS		2,244,602
<b>TOTAL RIDERSHIP</b>		<b>1,122,301</b>
*The Fiscal Year (FY) is based on Amtrak's fiscal year, which is October-September.		
**The above figures are total ons (boardings) and offs (alightings) at each station for both directions of travel. Since each trip contains two endpoints, total ridership is equal to half of total boardings and alightings.		
Source: Amtrak, 2016		

**Table 2.4: San Joaquins Train Station Ridership Report  
(Excludes Passenger Ons/Offs Made During a Transfer)**

San Joaquins Train Station Ridership Report – FY 2016* (Excludes Passenger Ons/Offs Made During a Transfer)**		
	Station	Passenger Ons/Offs (FY 16)***
1	Fresno	359,044
2	Hanford	173,328
3	Stockton (San Joaquin St.)	141,405
4	Sacramento	135,997
5	Bakersfield	125,823
6	Modesto	117,442
7	Merced	110,317
8	Oakland	69,692
9	Martinez	55,310
10	Richmond	54,260
11	Emeryville	43,796
12	Wasco	41,424
13	Antioch	39,995
14	Corcoran	30,104
15	Turlock/Denair	29,197
16	Madera	27,136
17	Stockton (Downtown)	17,732
18	Lodi	12,008
*The Fiscal Year (FY) is based on Amtrak's fiscal year, which is October-September.		
**Ons/Offs are excluded for passengers making transfers between a train and a bus at a San Joaquins train station. This allows for a more accurate accounting of how many passengers are utilizing a given train station as an origin or destination point.		
***The above figures are total boardings (ons) and alightings (offs) at each station for both directions of travel.		
Source: Amtrak, 2016		

**Table 2.5: San Joaquins City Pair Ridership**

San Joaquins City Pair Ridership - FY 2016 (Includes Key Train Stations and Thruway Bus Stops)	
City Pair	Ridership
Fresno - Hanford	64,111
Sacramento - Fresno	36,462
Oakland - Stockton (San Joaquin St.)	24,762
Fresno - Los Angeles (Union Station)	22,110
Fresno - Bakersfield	21,428
Richmond - Stockton (San Joaquin St.)	17,072
Sacramento - Bakersfield	17,029
San Francisco* - Fresno	16,001
Hanford - Corcoran	13,580
San Francisco - Stockton (San Joaquin St.)	13,430
Martinez - Fresno	12,832
Richmond - Fresno	12,713
Oakland - Fresno	12,616
Sacramento - Hanford	12,115
Sacramento - Modesto	10,002
Sacramento - Merced	9,783
Sacramento - Los Angeles (Union Station)	9,517
Hanford - Los Angeles (Union Station)	9,394
San Francisco* - Los Angeles (Union Station)	4,002
San Francisco* - Yosemite**	2,950
*Includes all bus stops in San Francisco.	
**Data for Yosemite includes all bus stops with the boundaries of Yosemite National Park and El Portal.	
Source: Amtrak, 2016	

between Bakersfield and Southern California, with over 30% of these passengers traveling to or from Los Angeles Union Station (over 110,000 passengers).<sup>2</sup> The Thruway Bus system extends north to Redding; east to Reno and Las Vegas, Nevada; south to Indio; and all along the California coast from Arcata to San Diego. See Figure 2.2 at the end of this chapter for a map of all Thruway Bus routes.

SJJPA contracts with Amtrak for dedicated feeder bus services, and Amtrak then contracts with bus

<sup>2</sup> Ibid.

**Table 2.6: San Joaquins Ridership at Key Thruway Bus Stops**

San Joaquins Ridership at Key Thruway Bus Stops FY 2016		
	Bus Stop	Passenger Ons/O s
1	Los Angeles (Union Station)	110,247
2	San Francisco*	63,750
3	Sacramento	47,914
4	San Jose	30,276
5	Van Nuys	12,823
6	Las Vegas**	12,684
7	Davis	12,442
8	Oxnard	12,359
9	Chico	11,804
10	Riverside	11,697
11	UCLA/Westwood	9,447
12	Santa Rosa	8,975
13	San Bernardino	8,692
14	Yosemite Valley***	7,974
15	Arcata	7,635
16	Long Beach	7,225
*Aggregate of all 5 San Francisco bus stops.		
**Aggregate of both Las Vegas bus stops.		
***Aggregate of all 4 Yosemite Valley bus stops.		
Note: The above figures are total ons (boardings) and offs (alightings) at each bus stop.		
Source: Amtrak, 2016		

operators. The bus routes function as part of the San Joaquins, with coordinated connections, guaranteed seating, integrated fares and ticketing procedures, and inclusion in Amtrak's central information and reservation system in the same manner as the trains. Ridership for these routes is shown on Table 2.7. The current Thruway bus routes and their origins/destinations are as follows:<sup>3</sup>

**Route 1 – Los Angeles Basin/San Diego**  
(from Bakersfield Station):<sup>4</sup>

- 1a–Bakersfield-Los Angeles-San Diego\*;

<sup>3</sup> Cities designated with asterisks (\*) are not serviced by all schedules on the route.

<sup>4</sup> Route 1 serves the Pacific Surfliner and San Joaquins routes.



- 1b–Bakersfield-Los Angeles-Long Beach\*/San Pedro\*;
- 1c–Bakersfield-Van Nuys-Torrance;

**Route 3** – Redding (from Stockton/Sacramento Stations): Stockton-Sacramento-Redding;

**Route 6** – South Bay (from Stockton Station): Stockton-San Jose;

**Route 7** – North Bay/Redwood Empire (from Martinez Station): Martinez-Vallejo-Napa-Santa Rosa-Eureka\*-McKinleyville\*;

**Route 9** – High Desert/Las Vegas (from Bakersfield Station): Bakersfield-Las Vegas;

**Route 10** – Santa Barbara (from Bakersfield Station): Bakersfield-Oxnard-Santa Barbara;

**Route 12** – Antelope Valley (from Bakersfield Station): Bakersfield-Victorville;

**Route 15** – Yosemite National Park (from Merced/Fresno Stations):

- 15a–Merced-Yosemite National Park;
- 15b–Fresno-Yosemite National Park (Summer Only)
- Note: Route 15 buses operated by YARTS - Yosemite Area Regional Transportation System;

**Route 18** – Central Coast/Visalia (from Hanford Station):

- 18a–Hanford-San Luis Obispo-Santa Maria;

- 18b–Hanford-Visalia

- Note: Route 18 buses are operated by Orange Belt Stages;

**Route 19** – Inland Empire-Coachella Valley (from Bakersfield Station):

- 19a–Bakersfield-Riverside-San Bernardino-Hemet\*;
- 19b–Bakersfield-Riverside-San Bernardino-Palm Springs-Indio;

**Route 20** – Reno/South Lake Tahoe (from Sacramento Station):<sup>5</sup>

- Route 20a–Sierra Foothills/High Sierra, Sacramento-Auburn/Reno/Sparks;
- Route 20c–Lake Tahoe, Sacramento-South Lake Tahoe/Stateline;\*;

**Route 34** – Bay Area (from Stockton Station): Stockton-Oakland-San Francisco;

**Route 35** – Santa Cruz (from San Jose Station): San Jose-Santa Cruz (buses operated by Santa Cruz Metropolitan Transit District). Note: Route 6 connects passengers to Route 35 via Stockton to San Jose Station;

**Route 56** – Stockton (from San Jose Station): San Jose - Stockton (Note: three one-way trips, Monday-Friday via the Altamont Corridor Express train);

**Route 99** – San Francisco (from Emeryville Station): Emeryville-San Francisco.

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<sup>5</sup> Managed by CCJPA but accessible from San Joaquins trains.



Table 2.7: San Joaquins Thruway Bus Route Ridership

San Joaquins Thruway Bus Route Ridership - FY 2016	
Thruway Bus Route	Ridership
Route 1a (Fresno - Bakersfield - Los Angeles - San Diego)	179,138
Route 1b (Bakersfield - Los Angeles - Long Beach/San Pedro)	81,081
Route 1c (Bakersfield - Van Nuys - Torrance)	43,209
Route 3 (Stockton - Sacramento - Redding)	137,150
Route 6 (Stockton - San Jose)	38,711
Route 7 (Martinez - Napa - Santa Rosa - Eureka - McKinleyville)	62,533
Route 9 (Bakersfield - Las Vegas)	16,293
Route 10 (Bakersfield - Oxnard - Santa Barbara)	26,285
Route 12 (Bakersfield - Victorville)	15,659
Route 15a/15b (Merced - Mariposa - Yosemite Valley / Fresno - Yosemite Valley)	10,483
Route 18a/18b (Visalia - Hanford - San Luis Obispo - Santa Maria)	28,496
Route 19a/19b (Bakersfield - Riverside - Hemet / Bakersfield - Riverside - Palm Springs - Indio)	46,109
Route 34 (Stockton - Oakland - San Francisco)	18,004
Route 56 (San Jose - Stockton)	3,332
Route 99 (Emeryville - San Francisco)	56,412
<b>TOTAL RIDERSHIP</b>	<b>762,895</b>
<p><i>Note: The above figures are total ons/offers (boardings/alightings) for each bus route, and includes ridership for both directions. Additionally, for shared Thruway bus routes, riders transferring to/from the Capitol Corridor and Pacific Surfliner trains are included in the ridership figures.</i></p>	
Source: Amtrak, 2016	





Figure 2.2: San Joaquins and Connecting Thruway Bus and Rail Services



Source: San Joaquin Joint Powers Authority, 2018

### 3. EXISTING TRAINSETS, NEW EQUIPMENT, AND MAINTENANCE

The San Joaquins Service currently utilizes eight trainsets for the existing seven daily round-trips. The fleet consists of a mix of locomotive types and train cars. The State of California owns or leases all locomotives and train cars utilized by the San Joaquins.

#### Existing Equipment

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The San Joaquins and Capitol Corridor currently share a combined fleet of 15 F59 PHI Locomotives, 3 P42 Locomotives (leased), 2 DASH-8 Locomotives, 6 Charger Locomotives, and 84 bi-level passenger coaches, food service and cab cars. The San Joaquins also utilizes 14 State-owned Comet Car coaches, as well as 3 Horizon Café cars and 3 F40 Cabbage cars (which the State leases from Amtrak). Taken together, this equipment is referred to as the Northern California Fleet.

#### California Cars

The San Joaquins primarily utilizes bi-level California Cars. The bi-level equipment was purchased by the State in the 1990's for use on the three California Inter-city Passenger Rail Corridors. The Northern California Fleet is shared between the San Joaquins and Capitol Corridor services to allow for maximum flexibility in seating capacity. Bi-level equipment assignments for the Northern California Fleet is currently being studied to see if there can be further optimization of equipment based upon peak loads of paired trains.

An essential feature of the bi-level coaches is the ability for doors to be operated remotely on either side of the train from a single point of control. This feature allows the operator to maximize passenger flow in boarding and alighting operations, and thereby minimizing station dwell time.

#### Comet Cars

The San Joaquins currently operate two trainsets that utilize refurbished Comet Cars consisting of seven cars each. Comet Cars have proved to be a valuable resource in providing needed seating capacity while Caltrans Division of Rail and Mass Transportation pursues the procurement of a large order of new rail cars for the Northern California Fleet. While the use of Comet Car trainsets has accomplished the goal of increasing seating capacity, this equipment has

presented some challenging operational aspects. High-level boarding (which requires all passengers to climb a steep set of stairs), narrow doors, and use of a manually cranked wheelchair lift at all stations often cause boarding delays, increasing dwell times and reducing on-time performance. Additionally, Comet Car coach doors are all manually operated, requiring additional conductors to be onboard while also preventing some doors in the trainset from being used when the trains are at stations.

#### Charger Locomotives

Caltrans recently completed a procurement of six new diesel-electric locomotives – called “Charger Locomotives” – which were delivered by Siemens for use in the Northern California Fleet in early 2017. The six locomotives are shared between the San Joaquins and Capitol Corridor trains, with all in service as of October 2017. The Charger Locomotives meet EPA Tier IV emission standards and are capable of 125 mph operation. These new locomotives will allow for the eventual replacement of the P42 locomotives currently being leased from Amtrak. Caltrans also has an option to procure an additional 14 Charger Locomotives.

#### New Equipment

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Caltrans, in partnership with the Federal Railroad Administration and States for Passenger Rail Coalition, is working to provide new rail equipment to meet increased demand from growth on existing services and plans for service expansions on the three State-supported services. With the Charger Locomotive order complete, Caltrans is now in the process of procuring additional passenger rail cars for the Northern California Fleet. Caltrans was successful in bringing together Federal High-Speed Intercity Passenger Rail (HSIPR) program funding and Prop 1B funds to acquire this additional equipment.

#### Siemens Single-Level Passenger Rail Cars

Caltrans has an agreement with Siemens to provide 49 single-level rail cars for use in the California Fleet. SJJPA, CCJPA and LOSSAN are currently working with the State and Siemens to specify features in the new trains so they can operate efficiently in California.



Delivery of these new cars are scheduled to begin in the summer of 2020 and end in 2023. The structure and design of these new rail cars will be based on the passenger cars being used in the recently-opened Brightline Service, which runs between West Palm Beach and Miami in Florida.

### **Accessibility of Equipment**

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SJJPA supports the State's goal to provide total accessibility to the State-owned equipment including all its features and amenities. No person shall be denied access on the basis of physical ability. Accessibility features for bi-level coaches include onboard 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.

On a temporary basis, the State has deployed Comet Car trainsets on the San Joaquins. Since the Comet Car trainsets have high-floors and do not have onboard wheelchair lifts, hand-cranked mobile wheelchair lifts are currently utilized to provide accessibility at all San Joaquins stations. Each single-level Comet Car coach has one wheelchair-accessible lavatory. SJJPA will continue to closely monitor the performance of the Comet Car trainsets in relation to accessibility.

As with the Comet cars, the new single-level Siemens passenger rail cars have high-floors. In-terms of accessibility, SJJPA is currently exploring more efficient ways to provide accessibility than the hand-cranked mobile wheelchair lifts. One option is to construct mini-high platforms. However, it is unclear if the current design of the Siemens car will provide a bridge plate long enough to span the distance to the mini-high platform (the host railroads require a wide setback requiring long bridge plates). Further planning will need to be undertaken to ensure that single-level rail cars are integrated effectively into the Northern California Fleet.

### **Onboard Information System (OBIS) and Wi-Fi**

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Currently, each passenger coach is equipped with electronic passenger information displays that provide the train numbers and destination, plus other public information. The State, in conjunction with Amtrak, are currently developing a more robust information display for the Northern California Fleet, which will greatly enhance information given to passengers,

as well as being more accessible. This upgraded system is called "Onboard Information System" (OBIS). Staff is currently working with the State, Amtrak and CCJPA to implement a prototype for testing of the system in early FY 2018/19. Following completion of the prototype and testing, the State is considering taking on the responsibility of implementing the full rollout of OBIS in place of Amtrak. Initiation of OBIS is scheduled for late 2019.

Associated with this is an upgraded onboard Wi-Fi system, which OBIS will utilize. Previously Amtrak was going to implement this project, however as a result of their reorganization, Amtrak is no longer going to be providing support to the WiFi system. SJJPA and CCJPA are now working to take on responsibility for the Wi-Fi upgrade from Amtrak, with CCJPA being the lead agency for procurement.

### **Renewable Diesel Implementation**

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SJJPA is committed to helping meet California's Greenhouse Gas (GHG) emission reduction goals. SJJPA is currently working with the Capitol Corridor to test the use of renewable diesel. Testing began for the older F59 Locomotives in November 2017 and is now complete. Testing in the Charger Locomotives is currently underway and scheduled for completion in early summer of 2018. Following the completion of testing, results will be documented in a report to be produced by the CCJPA. If results are favorable, renewable diesel could be in all the locomotives of the Northern California Fleet as early as the fall of 2018.

SJJPA is also committed to utilizing renewable diesel in bus fleets used to run the extensive Thruway Bus system. Several transit agencies, including the San



Francisco Municipal Transportation Agency, are already successfully using renewable diesel in bus and automobile fleets. SJJPA plans to work with Amtrak to require use of renewable diesel in all future contracts with bus operators.

### **Maintenance and Renovation**

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Currently, SJJPA and CCJPA are responsible for the administration and maintenance supervision of the State-owned fleet of rail cars and locomotives assigned to Northern California. CCJPA is the lead agency in the maintenance program of the Northern California Fleet, with SJJPA serving in a monitoring role to ensure the fleet is operated and maintained to the high standards of reliability, cleanliness, and safety. SJJPA will continue to work closely with CCJPA, Caltrans, and Amtrak to refine the maintenance and operations programs to improve the reliability, safety, and cost-effectiveness of the rail fleet.

Caltrans, Amtrak, and CCJPA have created a program of periodic overhauls to the existing train fleet

that will result in improved performance. The main engines of the original fleet of F59 Locomotives were rebuilt and upgraded from 2011-2015 to exceed current EPA TIER II emissions standards. They are also scheduled for a mid-life overhaul during 2018 and 2019. All locomotives are now equipped with a digital security camera system to improve safety and security. In addition, 14 California Cab Cars have been converted to Cab/Baggage/Bike cars similar to the five newer Surfliner Cabs, to provide greater baggage storage and 13 more bike racks.

Additional projects underway include replacing HVAC units to provide better air quality and climate control using new environmentally-friendly technology and refrigerants; rehabbing the upper level of diner cars to improve seating capacity, food storage, lighting, and counter top space; improving monitoring equipment in cab cars and locomotives; and replacing door mechanics and side paneling on certain passenger cars. SJJPA and CCJPA are also planning to upgrade the Wi-Fi system during FY 2018/19.





## 4. OPERATING PLAN AND STRATEGIES

SJJPA is in the process of a significant optimization and expansion effort of the San Joaquins Service. On May 7, 2018, SJJPA will inaugurate the Morning Express Service (Morning Express) between Sacramento and Fresno, allowing San Joaquins trains to arrive in Sacramento before 8 a.m. The early-morning nature of this service is anticipated to increase ridership by encouraging more business travel (similar to the increases in demand from these markets on the Capitol Corridor and Pacific Surfliner services) and leisure day-trips. To-date, the San Joaquins have missed out on growth related to serving business travel. In the latter part of FY 2018/19, an additional Morning Express train will commence service between the Bay Area and Fresno. Additional details about capital improvements associated with the Morning Express program can be found in Chapter 5.

SJJPA is also pursuing a significant increase in the frequency of the San Joaquins between Sacramento and the San Joaquin Valley. This aggressive program is in response to changing market demand and to capture a larger share of the business and leisure travel market to/from Sacramento. The most immediate priority for expansion of service is the implementation of the 8th and 9th Daily Round-Trips. Details about capital improvements associated with the 8th and 9th Daily Round-Trips can be found in Chapter 5, along with information on the joint SJJPA/San Joaquin Regional Rail Commission (SJRRRC) 2018 Transit and Intercity Rail Capital Program (TIRCP) grant application, which seeks to fund this expansion of service.

In terms of optimizing operations, the schedule SJJPA developed for the 8th and 9th Daily Round-Trips is based on a bi-hourly pulse system, providing statewide connectivity and consistent service frequency throughout the day. The bi-hourly pattern is augmented with hourly peak-direction frequency to serve Sacramento-bound day-trip passengers. The pulse approach not only allows for improved service, but is also more effective operationally and makes better use of infrastructure investments. The schedule results in a fixed interval between trains, and symmetrical northbound and southbound operations that reduce the number of locations needed for passenger-on-passenger train meets. BNSF simulations show high on-time performance with this schedule.

SJJPA is also continuing to contribute to the ongoing fleet analysis being conducted by Caltrans, which is examining ways to maximize deployment and scheduling efficiencies along the San Joaquins and Capitol Corridors, with the goals of allowing for increased capacity for rail service and more efficient utilization of equipment. SJJPA is also contributing to the Service Optimization Study, which is currently under development by CCJPA. The Study is an effort to identify solutions to optimize ridership and revenue and coordinate service transfers for Northern California's passenger rail system (including the Capitols, San Joaquins, ACE and Caltrain). Components of the Study include: integrated ticketing (now complete); strategies to improve the existing train scheduling and equipment utilization; a mode of access survey; and a reconciliation study between the California Amtrak ridership model and various Metropolitan Transportation Organization (MPO) models. SJJPA will ensure these ongoing studies include analysis regarding the integration of the Morning Express Service and the planned 8th and 9th Daily Round-Trips, as well as additional round-trips in the future.

SJJPA is pursuing partnerships to optimize Thruway Bus and other bus connections to the San Joaquins. The goal of future partnerships is to increase the load factor of buses that serve San Joaquins passengers by developing arrangements that would allow public or private bus operators to provide connecting bus service in lieu of Amtrak's Thruway Buses. These partnerships are anticipated to reduce operating expenses and increase ticket revenue, while complementing local and regional bus services. Details of the first partnership SJJPA is pursuing can be found under "Thruway Bus Operating Strategies" section of this chapter.

To enhance the current service of the San Joaquins, SJJPA is committed to working with CalSTA, Caltrans Division of Rail and Mass Transportation, CCJPA, LOS-SAN, San Joaquin Regional Rail Commission, Amtrak, BNSF, UPRR, and regional and local transit providers to improve connections to local/regional transit service to trains and connecting bus service along the San Joaquins Corridor. To help achieve this, SJJPA will utilize its Member Agencies to assist in coordinating improved communications and connectivity.

## FY 2018/19 Operating Plan

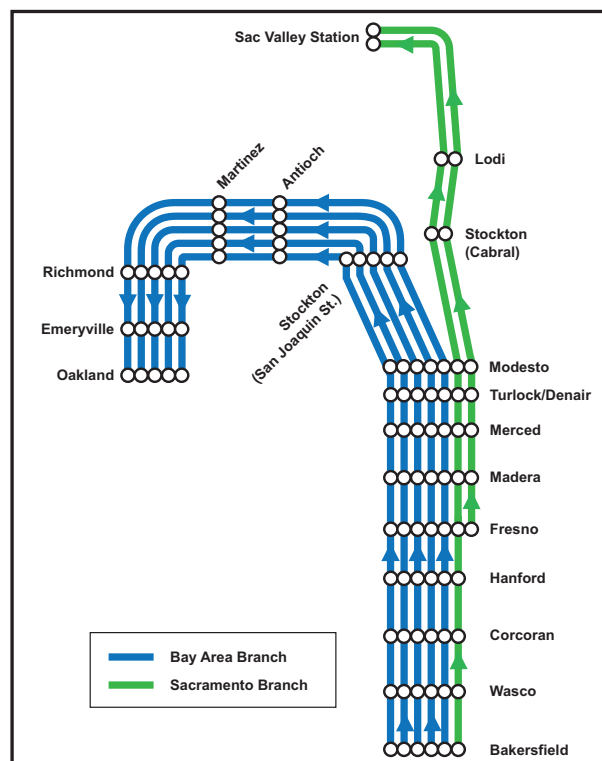
The FY 2018/19 operating plan for San Joaquins includes the first full year of operations of Morning Express between Sacramento and Fresno. While seven daily round-trips will be maintained, the Morning Express train will start at the mid-corridor location of Fresno (formerly departing from Bakersfield). The purpose of starting in Fresno is so trains can arrive in Sacramento before 8 a.m. If the train were to start in Bakersfield, it would need to leave around 2:15 a.m., which is too early to attract sufficient numbers of passengers and would negatively impact the overnight maintenance of the track. SJJPA also plans to initiate a second Morning Express train from Fresno to the Bay Area during the latter part of FY 2018/19.

### Service Pattern in FY 2018/19 – Prior to Implementation of Morning Express Service to the Bay Area

#### Northbound Trains:

- Bakersfield – Sacramento: 1 daily train
- Fresno – Sacramento: 1 daily train (“Morning Express” Train)
- Bakersfield – Oakland: 5 daily trains

Figure 4.1: San Joaquins Northbound Service Pattern (Including Sacramento Morning Express Service)



Source: San Joaquin Joint Powers Authority, 2018

#### Southbound Trains:

- Sacramento – Bakersfield: 2 daily trains (one will be -the “Morning Express” Return Train)
- Oakland – Bakersfield: 4 daily trains
- Oakland – Fresno: 1 daily train

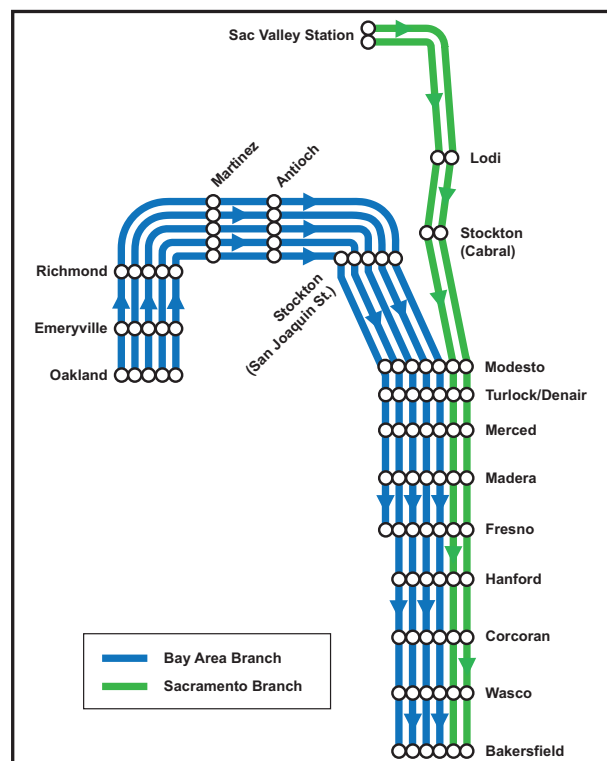
### Service Pattern in FY 2018/19 – After Implementation of Morning Express Service to the Bay Area

SJJPA is currently working with UPRR and BNSF to determine the configuration of service following the implementation of a second Morning Express train, which is planned to operate between the Bay Area and Fresno.

## FY 2019/20 Operating Plan

For the first eleven months of FY 2019/20, the operating plan will continue the service pattern begun in late FY 2018/19 – seven daily-round trips, with two Morning Express trains starting at mid-corridor in Fresno.

Figure 4.2: San Joaquins Southbound Service Pattern (including Sacramento Morning Express Service)



Source: San Joaquin Joint Powers Authority, 2018

## Commencement of the 8th and 9th Daily Round-Trips

Starting in June 2020, SJJPA plans to launch the 8th and 9th Daily Round-Trips. This expansion of service will increase the total number of daily round-trip trains serving Sacramento from two to four (while maintaining five daily round-trips to the Bay Area). One of the round-trips serving the Bay Area will originate/terminate at the Cabral Station rail hub in Stockton and will serve as a connecting train (with a timed transfers) for passengers traveling on San Joaquin Valley - Sacramento trains.

Between Sacramento and Stockton, two of the four daily round-trips will utilize the UPRR Fresno Subdivision (which the San Joaquins currently use for service to the Sacramento Valley Station), while the other two will utilize the UPRR Sacramento Subdivision, a corridor currently not used by passenger rail services. While the Sacramento Subdivision does not connect to the Sacramento Valley Station, it does allow for the San Joaquins to provide service to six planned new stations, including four in Sacramento (Natomas, Old North Sacramento, Midtown, and City College), as well as in Elk Grove and Lodi. A shuttle serving the Natomas Station will also meet each San Joaquins train to provide a convenient connection to the Sacramento International Airport.

## Operating Plans Beyond FY 2019/2020

SJJPA long-range operating plans center around seeking capital and operational funding to increase the frequency of San Joaquins trains between Sacramento and Fresno to achieve hourly service, while maintaining adequate service levels to locations south of Fresno and into the Bay Area. With these frequencies, the San Joaquins will be well positioned to provide robust feeder service to future high-speed rail service between Sacramento and Madera, while truly transforming travel options between Sacramento and the San Joaquin Valley. SJJPA is also considering expanding service north of the Sacramento Region.

## Rail Operating Strategies

The San Joaquins have great potential for increased ridership, revenue, service coordination, and performance. SJJPA has implemented a number of strategies to improve the San Joaquins. Some of the strategies listed are being pursued with little or no additional resources.

## Increasing On Time Performance (OTP)

Staff has worked closely with Amtrak and host railroads to improve OTP, employing collaborative strategies and open channels of communication to resolve issues impacting OTP. This has resulted in significant improvement in OTP between FY 2015 (73.6%) and FY 2016 (84%). Unfortunately, due to a significant amount of weather-related delays, OTP declined to 76.5% in FY 2017 (see Table 4.1). SJJPA understands how critical OTP is for attracting and growing additional ridership markets, including business travel, and is committed to achieving the highest level possible.

Specific strategies for improving OTP include:

*Table 4.1: On-Time Performance of the San Joaquins*

On-Time Performance of the San Joaquins (Based on Federal Fiscal Year)	
FY 2012	88.1%
FY 2013	77.7%
FY 2014	75.4%
FY 2015	73.6%
FY 2016	84.0%
FY 2017	76.5%
Source: Amtrak, 2017	

1. Coordinating with the host railroads and Amtrak to provide computer displays with real-time viewing of all train movement (freight and passenger) on the San Joaquins Corridor.
2. Conducting conference calls with the host railroads and Amtrak to discuss the types of delays, reasons for delays, and identifying potential solutions so future delays can be prevented.
3. Coordinating with the host railroads to bring dispatchers out to tour the San Joaquins Corridor and ride the trains to develop an understanding of the territory being dispatched.
4. Working with the host railroads and Amtrak to identify capital and/or system improvements to improve on-time performance.



5. Working with Host Railroads to develop strategies and incentives that will lead to improved OTP, including providing additional incentive-based access payments between SJJPA and the host railroads similar to what has proven to be extremely successful with the Capitol Corridor over many years.

### **Reduce Travel Times between the Bay Area and Bakersfield to Under Six Hours**

Currently, labor agreements limit the maximum scheduled trip time between two crew change points to six hours. Scheduled trips exceeding six hours from end to end, per current labor agreements, require a planned mid-route crew change. If a train consistently violates the agreement by running longer than six hours without a crew change, then crew penalties are incurred until the train reliably runs under the six-hour threshold.

Today's San Joaquins service between the Oakland Station in the Bay Area and Bakersfield is scheduled to run just over the six-hour threshold. In order to meet labor requirements, a crew change is currently scheduled at Merced. This is a significant expense for the operating budget. Furthermore, the implementation of PTC is estimated to increase the time it takes to swap crews by as much as 15 minutes due to a new set of procedural requirements. The new protocol will add a considerable amount of trip time for passengers. Given the significant cost and schedule implications of continuing to have a crew change in Merced, SJJPA is committed to developing a plan that will eliminate this crew change.

Several strategies to reduce operating times to under six hours between the Bay Area and Bakersfield will be explored during FY 2018/19, including but not limited to the following:

- Identifying potential areas to institute operational efficiencies that would allow for reduced dwell times at several stations;
- Implementing measures that would allow for a reduction in schedule recovery time at strategic locations;
- Skipping a limited number of stations for each train, while ensuring all stations still have sufficient service each day;
- Terminating some trains in Emeryville;
- Having some trains skip Emeryville while continuing to terminate in Oakland;

- Utilizing increased acceleration/deceleration of the new Charger locomotives to reduce trip time; and
- Exploring the feasibility of increased speeds along portions of the corridor.

### **Other Rail Service Coordination Strategies**

- SJJPA will continue to evaluate existing train and connecting bus schedules and determine if there are potential changes which could improve ridership, revenue, and cost effectiveness. Schedule adjustments have the potential to improve the San Joaquins performance without additional resources.
- Assess operational impacts and potential schedule changes from the implementation of planned and potential new stations along the existing San Joaquins Route, including Oakley, Hercules, Berkeley, Oakland Coliseum, and Madera, as well as additional stations in the Fresno and Bakersfield metropolitan areas.
- Explore the feasibility and operational impacts of shifting service from the Stockton "San Joaquin Street" station location to the Cabral (ACE) Station in downtown Stockton.
- Represent the San Joaquins at monthly Capital Improvement Team (CIT) meetings with the Union Pacific Railroad (UPRR). Operational issues encountered over the prior month and any upcoming capital and system projects that could affect train performance are discussed at these meetings.
- Participate in quarterly CIT meetings with the BNSF and UPRR to discuss operational issues encountered over prior months and any upcoming capital and system projects that could affect train performance.
- Work with the Capitol Corridor JPA, LOSSAN JPA, and Caltrans to provide improved connections to the Capitol Corridor and Pacific Surfliner.
- Participate in the Bi-Monthly Construction meetings with LOSSAN and Caltrans to identify potential maintenance projects and projects required to increase service to 8 daily round-trips, as well as to monitor progress on projects in construction.
- Work with the Federal Railroad Administration on regulatory requirements associated with the San Joaquins, i.e. Positive Train Control.

## **Thruway Bus Operating Strategies**

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Thruway Bus service is a key component of San Joaquins operations, providing important connections to transit systems and tourist destinations, such as Yosemite and San Francisco. Additionally, many routes operate through rural communities, offering corridor-wide connections to San Joaquins trains. However, Thruway Bus service is currently restricted to ticketed Amtrak train passengers which results in underutilization of bus capacity and high operating costs. Opening key segments of Thruway Bus service to non-rail passengers could reduce operating expenses, increase ticket revenue, increase public and environmental benefits, and complement/augment local and regional bus services.

To accomplish this, SJJPA is currently pursuing partnerships with public and private operators that would allow San Joaquins passengers to utilize intercity bus services of other agencies/companies, while allowing non-Amtrak passengers to utilize the same services. By increasing the load factor on connecting bus services (i.e. the number of seats filled on each bus), SJJPA anticipates a significant reduction in operating expenses and higher ticket revenue.

### **Partnership with the Shasta Regional Transportation Agency on the “North State Intercity Bus System”**

Shasta Regional Transportation Agency (SRTA) is currently planning a new express bus service between Redding and Sacramento as part of the proposed North State Intercity Bus System. To fund the necessary capital investments (including several electric buses), SRTA recently submitted a TIRCP application. SJJPA and SRTA have formed a partnership to that would allow San Joaquins passengers currently traveling on Amtrak Thruway Buses from Sacramento to Red Bluff or Redding to utilize the new SRTA express bus instead. Correspondingly, SJJPA staff is planning to terminate the Thruway Bus Route 3 in Chico (approximately 75 miles south of the current terminus in Redding) to save on operating costs, which would enable SJJPA to financially support the operations of express bus service. If SRTA is successful in getting funding for the project, an MOU will be negotiated between the two agencies that would outline the parameters of SJJPA’s financial support, while ensuring San Joaquins passengers have seamless access/ticket-

ing on the new SRTA express bus. The service would provide much faster travel times between Sacramento and Redding as the new line would run along I-5 corridor rather than the more circuitous SR 99 corridor.

### **Potential Partnership with Butte County Association of Governments**

A similar partnership is being explored with the Butte County Association of Governments (BCAG). BCAG is planning a new commuter bus service between Chico and Sacramento, and has also applied for a TIRCP grant. SJJPA and BCAG are exploring the possibility of BCAG incorporating the remainder of the Thruway Bus Route 3 (from Chico – Stockton) into their new bus operations in exchange for operating support. SJJPA would produce the cost savings by eliminating the entire Thruway Bus Route 3.

### **Potential Partnerships with North Coast Stakeholders to Optimize Thruway Bus and Other Bus Services**

Stakeholders in Marin and Sonoma Counties and farther north along the North Coast have expressed a strong interest in optimizing the Thruway Bus service (Route 7) that currently operates between McKinleyville and Martinez. SJJPA has engaged in initial discussions with representatives in various cities, State Senator McGuire’s office, and officials from Sonoma-Marín Area Rail Transit (SMART) on developing strategies for improving utilization of the existing Thruway Bus service and to provide connecting Thruway Bus service to SMART trains. In FY 2018/19, SJJPA will conduct planning work around these issues with the goal of identifying a range of solutions to increase the usefulness of Thruway Bus and other connecting bus services.

## **Studies of New Proposals**

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In FY 2016/17 and FY 2017/18, SJJPA received two proposals received from stakeholder groups advocating for service changes to the San Joaquins, which are described below. SJJPA has committed to conducting analysis of these proposals.

### **Proposed Limited-Stop San Joaquins Rail Service between Sacramento and Bakersfield**

A group of stakeholders from Kern County recently approached the SJJPA with a proposal for faster ser-

vice between Sacramento and Bakersfield by running a morning northbound and evening southbound express train that would skip seven stations. The proposal would add Morning Express Service direct to Sacramento from the South San Joaquin Valley (currently only served by a Thruway Bus connection in Stockton). The proposal was presented to the SJJPA Board on September 22, 2017. The Board directed staff to study the proposal. In 2018, SJJPA will conduct a detailed analysis of the proposal in coordination with the State and host railroads. Analysis will include ridership forecasts (including potential Thruway Bus connections), operational analysis to verify travel time savings, and the identification of potential operational issues and/or benefits.

### **Proposed New Thruway Bus Route between Silicon Valley and Southern San Joaquin Valley**

Kern COG has requested SJJPA study the possibility of an running an additional Thruway Bus line between Silicon Valley and Southern San Joaquin Valley with the goal of capturing additional ridership markets. SJJPA will conduct detailed analysis regarding the feasibility of this proposal in FY 2018/19. There are many factors that ultimately determine the initiation of new or expanded service, including ridership forecasts and the availability of funding. SJJPA is committed to thoroughly examining the benefits of this proposed new Thruway Bus route before a final determination is made.

### **Coordination of Operations with Future High-Speed Rail Service**

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Recognizing the complimentary nature of the San Joaquins and the future high-speed rail system, a Joint Policy Statement was adopted by CHSRA, SJJPA, and Caltrans in 2013 that ensures cooperation and input of local communities on all decisions related to any changes in the San Joaquins and consistent planning between these agencies. As required by the enabling legislation for SJJPA, this Draft 2018 SJJPA Business Plan Update is consistent with the Draft 2018 California State Rail Plan (DCSRP) and the CHSRA's 2016 Business Plan.

With California's phased approach to implementing the State's high-speed rail (HSR) project, conventional rail services are particularly critical to the success of the initial operating segment (IOS) of the proposed

HSR system. The San Joaquins (including the Thruway Buses), with its desirable rail connectivity to the Bay Area, Sacramento, and the northern San Joaquin Valley, provides strong support for the proposed HSR IOS, which would run from San Jose to Bakersfield via Pacheco Pass. With billions of dollars being investing in the California HSR project, the improvement and expansion of the San Joaquins as a feeder network should be a very high priority for SJJPA, California High-Speed Rail Authority (CHSRA), the State, the regions, and the FRA, in consultation with the BNSF and UPRR.

In an attempt to improve the connection between in the California HSR project, the CHSRA's 2016 Business Plan added a high-speed rail (HSR) station in Madera County. The track alignments for both future HSR service and San Joaquins meet in Madera County, creating the potential for a direct connection between the two services. Currently, there are no other stations in the San Joaquin Valley envisioned to provide such a high-quality connection. SJJPA is currently working with CHSRA, CalSTA, officials from Madera County Transportation Commission, and the City of Madera on plans to develop a location where the San Joaquins and HSR trains could realize a direct transfer. As part of this process, there is an opportunity to move the current Amtrak station to a better location that is more accessible to residents of Madera County, provides more connectivity to transit, more opportunity for transit-oriented development around the station, and aligns better with the planned future growth of Madera County. SJJPA has applied for TIRCP funding for a new/relocated Madera Station.

SJJPA, along with CalSTA, Caltrans, and the Central Valley Rail Working Group worked cooperatively on the CHSRA's "Merced to Sacramento Connected Corridors North Study." The purpose of this study was to identify elements of an integrated investment program that aligns the goals of rail-planning efforts by SJJPA and the region more closely with the phased implementation of the High-Speed Rail (HSR) program. By collaborating to align regional goals, better passenger rail service can be delivered to the Northern San Joaquin Valley Region, from Merced to Sacramento, than would not be possible with uncoordinated efforts. The Study concluded that an incremental and well-coordinated approach to service expansion and capital investment leading to full HSR deployment will allow the region to achieve better, faster, and



more-frequent service, sooner than would occur if each agency pursued their interests independently. The Connected Corridors North Study and CHSRA's coordination with SJJPA resulted in an approach for phased regional investment which is fully consistent with SJJPA's planning for service improvements. This collaborative effort enabled CHSRA to strongly support the joint SJJPA/SJRRC 2018 TIRCP application for providing additional passenger service to Sacramento which will serve as a complementary "feeder" service to HSR and is an important first step towards bringing direct HSR service to Sacramento.

While coordination work is taking place for a seamless connection of the two systems, to ensure full utilization of the investment in the HSR infrastructure, the Federal Railroad Administration (FRA) required that the first construction section of California HSR project have "independent utility." This means if no additional

funding becomes available for a significant period of time, that the construction segment built using federal grant funds would have an intercity passenger rail operational use. CHSRA has publicly stated, and SJJPA is in agreement, that it is preferable the San Joaquins never has to utilize the first construction section of the HSR system. However, should it become a necessity due to a significant delay of the HSR program, SJJPA will work CHSRA and the State to develop an appropriate contingency plan for interim use of the first construction section by the San Joaquins. SJJPA and the local communities along the corridor believe that any potential interim use of the first construction section must not be to the detriment of continuing service from Madera to Bakersfield along the existing BNSF alignment and continuing through service along the entire existing BNSF alignment.



## 5. SHORT-TERM AND LONGER-TERM CAPITAL IMPROVEMENT PROGRAMS

A key goal of SJJPA is to build upon the State's efforts to improve the performance and increase the frequency of the San Joaquins and expand ridership through increased awareness of the service and the development of new ridership markets. SJJPA has developed an aggressive \$1.5 billion "Estimated 10-Year Capital Improvement Program" to expand the capacity of the San Joaquins Corridor. This chapter details this program, as well as identifying specific projects in SJJPA's Short-Term and Longer-Term Capital Programs.

### Estimated 10-Year Capital Improvement Program

In coordination with the State, BNSF, and UPRR, SJJPA is in the process of implementing its Estimated 10-Year Capital Improvement Program (see Figure 5.1), which will transform the San Joaquins Corridor to one that will not only vastly improve intra-Central Valley and inter-Central Valley-Bay Area travel, but also performs as an efficient feeder service to the State's future high-speed rail (HSR) system. The improvements for this program will benefit multiple agencies and other rail services, and are consistent with the 2018 Draft State Rail Plan. A major feature of this program is creation of a new passenger rail corridor along UPRR's Sacramento Subdivision between Sacramento and Stockton, on which San Joaquins trains are envisioned to share tracks and stations with Altamont Corridor Express (ACE) rail service. Improvements associated with Sacramento Subdivision are consistent with CHSRA's Connected Corridor North Study to bring early implementation of HSR to Sacramento. The Estimated 10-Year Capital Improvement Program also maintains and optimizes service to the Bay Area and improves safety and security along the entire San Joaquins Corridor. Ultimately this program of improvements is designed to allow for hourly service from Sacramento to Fresno, while maintaining service levels in the other segments of the San Joaquins Corridor.

Elements of the Estimated 10-Year Capital Improvement Program include:

**Corridor Capacity Enhancements for Additional Daily Round-Trips:** This program includes the 8th and 9th Daily Round-Trips, which are detailed in the Short-Range Capital Improvement Program. It also includes additional round-trips to eventually achieve hourly service between Sacramento and Fresno,

which are discussed in the Longer-Term Capital Improvement Program. Capacity enhancements are also currently being evaluated between Stockton and Oakland.

**Morning Express Service:** This early-morning service is currently being implemented from Fresno to Sacramento and the Bay Area and is intended to open up new markets related to business travel and leisure day trips. This program is detailed in the Short-Range Capital Program. Additionally, SJJPA is exploring implementing a Morning Express Service Fresno and Bakersfield in the longer-term.

**New Maintenance and Layover Facilities:** To support the 8th and 9th Daily Round-Trips, two layover facilities will also be needed as part of the Short-Term Capital Improvement Program. To provide additional service between Sacramento and Fresno (eventually hourly), a new maintenance facility will be needed as part of the Longer-Term Capital Improvement Program.

**Safety and Improvements:** SJJPA is in the process of planning and implementing projects that will improve safety throughout the San Joaquins Corridor, including station lighting upgrades, improved pedestrian crossings at the tracks, new fencing along sections of the corridor with high incident rates, etc.

**New Stations:** As part of the 8th and 9th Daily-Round Trips and establishing service along the Sacramento Subdivision, the SJJPA is currently working to implement up to six new stations north of Stockton, including Lodi, Elk Grove, and four in Sacramento. A new station in Oakley is also being planned, as is a relocated station in Madera. These are contained in the Short-Term Capital Improvement Program. New stations will also be considered as part of any extension of service north of Sacramento. SJJPA is also implementing numerous station enhancement and parking projects to ensure a high-quality passenger experience.

**New Equipment:** To enable additional round-trips and extensions of service, additional trainsets will be necessary beyond what is currently being procured by the State of California. In the Short-Term Capital Improvement Program, additional trainsets are included for the 8th and 9th Daily Round-Trips. To reach hourly



**Table 5.1: Estimated 10-Year Capital Improvement Program**

Estimated 10-Year Capital Improvement Program (\$ Millions)	
Project	Cost
Corridor Capacity Enhancements - Additional Daily Round-Trips to Reach Hourly Service (Fresno - Sacramento) <sup>1</sup>	\$600
Corridor Capacity Enhancements (Stockton - Bay Area) <sup>2</sup>	\$200
Projects Related to Initiation of Sacramento Morning Express Service <sup>3</sup>	\$5
Projects Related to Initiation of Bay Area Morning Express Service <sup>4</sup>	\$4
Projects Related to Initiation of Fresno/Bakersfield Morning Express Service <sup>5</sup>	\$6
New Maintenance and Layover Facilities	\$64
Safety Improvements (Grade Crossings Improvements/Fencing/Road Closures, etc.)	\$38
New Stations <sup>6</sup>	\$208
Service Extensions	\$175
New Equipment	\$200
<b>TOTAL:</b>	<b>\$1.5 Billion</b>
<p><sup>1</sup> Improvements needed to enable 8th and 9th Daily Round-Trips between Sacramento and Fresno are defined in SJJPA's/SJRRC's TIRCP application. Additional capacity enhancement projects and/or capital access fees will be required to allow achieve hourly service between Sacramento and Fresno, such as double-tracking, eliminating hold-outs at stations and increase capacity at the Cabral Station rail hub.</p> <p><sup>2</sup> Improvements to allow additional train slots between from Stockton to Oakland as necessary to ensure enough capacity exists for both San Joaquins and Capitol Corridor Services.</p> <p><sup>3</sup> Projects include the Temporary Layover Facility in Fresno and parking/station enhancements.</p> <p><sup>4</sup> Projects include various parking/station enhancements.</p> <p><sup>5</sup> SJJPA is considering initiating a Fresno-Bakersfield Morning Express Service after construction of HSR is substantially complete. Improvements may include additional parking and station enhancements.</p> <p><sup>6</sup> Up to eight new stations are being planned along along the Sacramento Subdivision service extension (four in Sacramento plus stations in Elk Grove, Lodi and two more north of Sacramento). Madera and Oakley would also see new stations. Additional stations are being considered, but are beyond the 10-year horizon.</p>	

service between Sacramento and Fresno, another order of trainsets will be needed (see the Longer-Term Capital Improvement Program).

**Service Extensions:** In conjunction with the 8th and 9th Daily Round-Trips, SJJPA is working to extend service along the Sacramento Subdivision to new locations in Sacramento. Details are contained in the Short-Term Capital Improvement Program. In the longer-term, extensions north of the Sacramento Region and to the Oakland Coliseum/Airport are being considered.

During implementation of this ambitious capital improvement program, SJJPA will continue to work with the State to:

- Secure funding for future projects;
- Ensure that projects meet the delivery schedule;
- Minimize the construction impacts of projects;
- Maximize the benefits of projects on overall service performance; and



- Coordinate with CHSRA regarding grade separations or improvements being done to the BNSF track as a result of the implementation of the initial construction of the HSR system.

The Estimated 10-Year Capital Improvement Program consists of a Short-Term Capital Improvement Program (0-5 years) and a Longer-Term Capital Improvement Program (5+ years), both of which are detailed below.

### Short-Term Capital Improvements

SJJPA is currently focused on implementing a substantial Short-Term Capital Improvement Program over the next five years. The Program contains four areas of improvements: Morning Express Service, 8th and 9th Daily Round-Trips, Other Station Projects, and Corridor and Other Projects (see Table 5.2).

#### Morning Express Service

To increase ridership and help demonstrate the need for improved service to Sacramento, SJJPA has been working with CalSTA, Caltrans, Amtrak, UPRR, and BNSF to initiate the “Morning Express Service” (Morning Express), in which trains start at the mid-corridor location of Fresno Station and arrive around 8 a.m. in Sacramento and the Bay Area, enabling the San Joaquins to serve the increasing demand for business travel to these markets. As a result of this effort, Morning Express to Sacramento will begin on May 7, 2018 and is planned to begin to the Bay in mid-2019.

Historically all San Joaquins trains have run the entire length of the San Joaquins Corridor (i.e. between Oakland-Bakersfield and Sacramento-Bakersfield), which made it infeasible to have an early-morning train arrival at economic centers in Sacramento and the Bay Area due to the long travel times from Bakersfield. As a result, schedules for the San Joaquins have not been well timed to provide attractive service for business travel or round-trip leisure travel done during a single day. This situation will change after the inauguration of the Sacramento Morning Express.

SJJPA and its partners are currently working to implement improvement projects for Morning Express, including:

- Temporary Layover Facility in Fresno (to allow for the storage of two trainsets);

- Parking expansions at key stations, including Stockton ACE (Cabral), Modesto, Turlock-Denair, Merced, and Fresno Stations;
- Re-design of the Antioch Station; and
- Station enhancements, including improved lighting, fencing, improved signage, landscaping, etc.

SJJPA is utilizing a variety of funding sources for capital improvements related to the Morning Express program, including State Minor Capital funds, Cal OES safety and security funds, CMAQ, and matching funds from cities and counties within the San Joaquins Corridor. After demonstrating successful Morning Express Service to Sacramento and to the Bay Area, SJJPA will explore the possibility of running a Morning Express Service between Fresno and Bakersfield.

#### 8th and 9th Daily Round-Trips

The deployment of the 7th Daily Round-Trip between Oakland and Bakersfield on June 20th, 2016 was the first step in increasing San Joaquins service frequency. SJJPA is now focusing on improvements needed to increase frequency of service to Sacramento, with the next step being the implementation of the 8th and 9th Daily Round-Trips.

Many of the required capacity improvements for the 8th Daily-Round Trip are completed or will be completed shortly between Stockton and Fresno. These improvements consist primarily of double-tracking projects (see Tables 5.2). There are also plans to install second platforms at four stations over the next few years, which will reduce holdouts, thereby increasing capacity.

Determining improvements needed between Sacramento and Stockton for the 8th and 9th Daily Round-Trips have been more complicated. Running additional passenger trains on the UPRR’s Fresno Subdivision will be very difficult in the near-term. Given this situation, SJJPA began exploring the option of utilizing the Sacramento Subdivision, a parallel UPRR-owned rail corridor to the west in coordination with CalSTA, CHSRA, Caltrans, SJRRRC, and the Central Valley Rail Working Group. Feasibility studies by SJJPA/SJRRRC and CHSRA determined that the Sacramento Subdivision was the most viable alternative for expanded passenger rail service from the San Joaquin Valley to Sacramento, and UPRR has indicated there is potential

Table 5.2: San Joaquins Corridor – Short-Term Capital Projects

San Joaquins Corridor - Short-Term Capital Projects (\$ Millions)					
Improvement Program/Project (0-5 Years)	Project Cost	Funding Secured	Funding Sources	Lead Agency	Status
<b>Morning Express Service</b>					
Temporary Layover Facility - Fresno	\$1.7	\$1.7	Cal OES	SJJPA	Construction
Modesto Station Parking Lot	\$0.4	\$0.4	LTF	City of Modesto	Construction
Turlock-Denair Station Parking Lot	\$0.29	\$0.29	Minor Cap/Cal OES	Stanislaus Co.	Construction
Stockton (Cabral) Station Parking Lot	\$1.3	\$1.3	CMAQ	SJJPA/SJRRRC	Construction
Station Enhancements - Antioch	\$0.3	\$0.3	Cal OES	SJJPA/City	Construction
Station Enhancements - Security Cameras	\$1.5	\$1.5	Minor Cap/Cal OES	SJJPA	Construction
Station Enhancements - Other <sup>1</sup>	\$2.3	\$2.3	Minor Cap/Cal OES	SJJPA	Construction
<b>8th and 9th Daily Round-Trips</b>					
Track Improvements - UPRR Sac. Sub	\$149.1		TIRCP (Applied)	SJJPA/UPRR	Planning/Env.
Track Improvements - BNSF Stock. Sub	\$20.0		TIRCP (Applied)	SJJPA/BNSF	Planning/Env.
New Stations (Lodi, Elk Grove, 4 in Sac.)	\$111.5		TIRCP (Applied)	SJJPA	Planning/Env.
Track Extension (RMF to Cabral Station)	\$23.7	\$23.7	Prop1A/CMAQ/Other	SJJPA/UPRR	Planning/Env.
New Rolling Stock (2-new 6-car trainsets)	\$87.6		TIRCP (Applied)	SJJPA	Planning/Env.
Merced-LeGrand Dbl. Tracking (Seg. 2)	\$23.2	\$23.2	ITIP	Caltrans/BNSF	Construction
Stockton-Escalon Dbl. Tracking (Seg. 3)	\$20.5	\$20.5	ITIP	Caltrans/BNSF	Construction
Stockton-Escalon Dbl. Tracking (Seg. 4)	\$23.0	\$23.0	ITIP	Caltrans/BNSF	Construction
Layover Facility - Fresno	\$15.9		TIRCP (Applied)	SJJPA	Planning/Env.
Layover Facility - Natomas	\$17.7		TIRCP (Applied)	SJJPA	Planning
Merced Station Dbl. Platform/Trackwork	\$10.3	\$10.3	ITIP	Caltrans/BNSF	Design/Const.
Other Stations Dbl. Platform/Trackwork <sup>2</sup>	\$36.0	\$36.0	ITIP	Caltrans/BNSF	Planning
Capital Access Fees	TBD		TIRCP (Applied)	SJJPA	Planning
<b>Other Station Projects</b>					
Wasco Station Recontruction	TBD		CHSRA Funds	CHSRA	Design
Madera Station Relocation/Expansion	\$26.7		TIRCP (Applied)	SJJPA	Planning/Env.
New Oakley Station	\$8.6		TIRCP (Applied)	SJJPA	Planning/Env.
Allensworth Accessibility Improvements	\$0.3	\$0.3	Cost Savings	SJJPA	Planning
New Parking Lots	TBD		Cost Savings	SJJPA	Planning
Station Enhancements - Other <sup>3</sup>	\$0.1	\$0.1	Minor Cap/Cal OES	SJJPA	Planning
<b>Corridor and Other Projects</b>					
Stockton Wye	\$8.7		TIGER/SB-1 (Applied)	UPRR	Planning
Platform Accessibility for High-Floor Cars	TBD		TBD	SJJPA	Planning
Positive Train Control - Host Railroads			Cal OES/UPRR/BNSF	UPRR/BNSF	Construction
Positive Train Control - Amtrak			Caltrans	Amtrak	Construction
Onboard Information System (OBIS)	\$25.0	\$25.0	Caltrans	Caltrans/CCJPA	Design/Const.
Increasing Operating Speeds (e.g. 90mph)	TBD		TBD	SJJPA	Planning
Cal PIDS Replacement/Upgrade	\$0.9	\$0.9	TBD	SJJPA/CCJPA	Planning
Safety Improvements <sup>4</sup>	TBD		TBD	SJJPA/CCJPA	Planning
<b>Notes</b> <sup>1</sup> Consists of a variety of station improvement that include lighting, signage, landscaping, repairs, and other projects. <sup>2</sup> Projects may include new platforms at Modesto, Turlock-Denair, and Fresno Stations. <sup>3</sup> Consists of non-Morning Express Service station improvement that include lighting, signage, landscaping, repairs, and other projects. <sup>4</sup> Safety improvements could include upgrades lighting, security cameras, fencing, and at-grade crossings, as well as grade seperation projects.					
Source: Caltrans Division of Rail and Mass Transportation and SJJPA, 2018.					

to provide passenger service on this corridor. In 2017, SJJPA's Board adopted the Sacramento Subdivision as the preferred corridor to pursue for future service expansion to Sacramento.

SJJPA has been engaged in planning and environmental work over the last year to determine needed improvements to establish passenger rail service along the Sacramento Subdivision as part of the development of a Transit and Intercity Rail Capital Program (TIRCP) grant application. SJJPA has worked in partnership with San Joaquin Regional Rail Commission (SJRRRC) on the TIRCP application, as the SJRRRC-managed Altamont Corridor Express (ACE) rail service would share the tracks and stations along the Sacramento Subdivision with San Joaquin trains between Sacramento and Stockton. On January 12, 2018, SJJPA and SJRRRC submitted a joint TIRCP to CalSTA.

The following improvements related to the 8th and 9th Daily Round-Trips (see Table 5.2) were developed and included in the TIRCP application:

- Track Improvements (UPRR Sacramento Subdivision);
- New Stations (six along the Sacramento Subdivision, including Natomas, Old North Sacramento, Midtown, City College, Elk Grove, and Lodi);
- Track Extension (Stockton Cabral Station to the ACE Maintenance Facility);
- Layover Facilities (in Natomas for the Northern Terminus and in Fresno for the Southern Terminus of the expanded service);
- New Rolling Stock for the San Joaquin (two new 6-car trainsets); and
- Capital Access Fees.

If TIRCP funding is received, SJJPA-SJRRRC will move forward on constructing improvements for the Stockton-Sacramento segment along the Sacramento Subdivision. These improvements will also lay the groundwork for additional round-trips to Sacramento in the future for the San Joaquin and ACE services.

### **Other Station Projects**

In addition to the station projects associated with the Morning Express and 8th and 9th Daily Round Trips, SJJPA is currently involved in several other station projects.

**Wasco Station:** The high-speed rail alignment goes directly through the Wasco Station site, necessitating a re-design and re-construction. SJJPA is working to ensure that high-quality access to the station is preserved during and after construction (which will be performed by the CHSRA).

**Relocated Madera Station:** SJJPA is working with CHSRA, Madera County, and the City of Madera to relocate the Amtrak station in Madera County. A new station location is being sought to support the potential for greater ridership and transit oriented development, improve connectivity and accessibility for transit and automobiles. The new station would also be co-located with the planned HSR station to provide a direct connection between San Joaquin and high-speed rail trains. Therefore, the new location should aim to reduce the costs and impacts of developing this large multi-modal hub station facility.

**New Oakley Station:** SJJPA is working with the City of Oakley on the development of the new station. SJJPA included the station in its portion of the TIRCP application. The City of Oakley will also be providing matching funds for the parking and other station facilities.

### **Other Station Projects Include:**

- Allensworth Station - Platform and accessibility improvements (currently in planning);
- New parking lots in Merced, Fresno, and other stations as needed; and
- Station Enhancement Projects – lighting, signage, landscaping, repairs, etc. (non-Morning Express Stations).

### **Corridor and Other Projects**

**Stockton Wye:** This project will provide a connector track between the UPRR Fresno Subdivision and the BNSF Stockton Subdivision, which will result in enhanced capacity of train movement within the busy rail environment of Stockton. This project supports SJJPA goals of increase capacity in the San Joaquin Corridor and the frequency of San Joaquin trains.

**Platform Accessibility for High-Floor Cars:** SJJPA currently operates two trainsets that consist of Comet Cars, which have high-floors, requiring passengers to utilize steep stairs to embark/disembark trains. This limits accessibility and slows boarding, increasing



the dwell time of trains at stations. Additionally, the State is procuring new single-level passenger rail cars, which also have high-floors. There is a possibility these rail cars may be assigned to the San Joaquins. To improve accessibility and speed boarding for existing and future high-floor passenger cars, SJJPA is currently exploring the possibility of installing Mini-High Platforms (small sections of the platform that are raised to the same height as the high-floor rail cars and accessible via a ramp from the lower part of the platform) at all existing and planned San Joaquins stations.

**Positive Train Control:** Federal law requires that a Positive Train Control (PTC) system be implemented by December 31, 2018. Caltrans Division of Rail and Mass Transportation and Amtrak have completed work for the onboard installation of the PTC equipment on the cab control cars and locomotives. The UPRR is nearing completion, while BNSF has already completed trackside installation of PTC equipment. The entire PTC system will be tested and initiated to meet the federal deadline of December 31, 2018. More information about PTC can be found in the Safety and Security Chapter of this Business Plan.

**Onboard Information System:** Amtrak and the State are currently developing a more robust information display system for on all three state-supported services, include the San Joaquins. This is called “Onboard Information System” (OBIS). Staff is currently working with Amtrak and CCJPA to provide input as OBIS is developed. Initiation of OBIS is scheduled for late 2019.

**Increasing Operating Speeds:** Increasing the operating speed of the San Joaquins in key locations could reduce travel times, and improve reliability (i.e. on-time performance) in the San Joaquins Corridor. It could also help eliminate a costly crew change in Merced due to running times between Oakland and the Bay Area being just over six hours. In coordination with BNSF, UPRR, and Caltrans, SJJPA will work to identify locations along the San Joaquins Corridor where key track improvements (such as curve realignments) could increase speeds, potentially to 90 mph in certain locations. Any increase in speeds, especially if as high as 90 mph, should be balanced against the need for increased costs in maintenance of the tracks.

**Cal PIDs Replacement/Upgrade:** The Passenger Information Display System for California’s Intercity Rail Services – or Cal PIDS – is the network of digital information signs present at all station platforms. The current generation of digital signs that make up Cal PIDS have limited capabilities and are reaching end of their useful lifespan. This project, in partnership with CCJPA, will upgrade the entire Cal PIDS system, including the replacement and upgrade of all platform digital signs and back office systems that support them.



***Safety Improvement Projects (Lighting, Security Cameras, Fencing, At-Grade Crossing Improvements, Grade Separations, Wayside Horns, and Quiet Zones):***

SJJPA currently is conducting comprehensive station area assessments for safety. Related projects being pursued include improving lighting and security camera infrastructure at both stations and platforms, walkways, parking lots, and other station improvements. Another high priority for SJJPA is to discourage trespassing along the corridor by installing fencing in high-incident areas.

Accidents between intercity passenger rail services and vehicles predominately occur where the railroad track and a road cross at the same level. These are called “at-grade” crossings. There are hundreds of at-grade crossings along the San Joaquins Route. SJJPA will continue to work with BNSF, UPRR, CCJPA (where the route is shared), and Caltrans to develop a plan and prioritization for at-grade crossing improvements. This will include an inventory of all previous at-grade crossing incidents along the route, potential improvements, and the identification of key crossings which should be prioritized for future grade separation. Grade crossing improvements will increase safety and will also improve the performance of the San Joaquins and freight operations.

Two approaches to ensuring at-grade crossing safety while also reducing community impacts are the use of Wayside Horns and the development of Quiet Zones. Wayside Horns are mounted on poles at an at-grade crossing and emit a sound which is directed at approaching motorists, pedestrians, and bicycles on the roadway. Where these are deployed, they eliminate the need for trains to use their horns through at-grade crossings. It is estimated that the area of noise impact is about 10% of the area compared to a train mounted horn. Wayside horns have already been successfully deployed on the San Joaquins alignment in the City of Escalon (at four at-grade crossings). The deployment of Wayside horns at other locations along the San Joaquins Route will be evaluated as a way of reducing community impacts from both the San Joaquins and freight operations.

An alternative to wayside horns are quiet zones, where horns are silenced by establishing a “New Quiet Zone.” To accomplish this, the jurisdiction with authority of the grade crossing initiates a quiet zone establishment process following the procedures listed

in 49 CFR Part 222. One method of establishing a Quiet Zone is to install Supplemental Safety Measures (SSMs) which are physical devices that improve crossing safety. Types of physical improvements that may be implemented to establish a quiet zone include signage, raised medians or median channelization, and/or quad gates. SJJPA will work with jurisdictions that are seeking to establish a quiet zone along the San Joaquins Corridor.

Grade separations at busy crossings are also effective in increasing safety. Given the high cost, these projects require a large effort. SJJPA will work with local jurisdictions to determine any locations that are candidates for a grade separations and to look for funding sources.

### **Longer-Term Capital Improvements**

SJJPA is developing a comprehensive program of improvements to increase the frequency of trains beyond the 8th and 9th Daily Round-Trips, reduce travel time, increase ridership, and improve service reliability of the San Joaquins. Longer-term improvements are identified below. The development of these projects will require further review by SJJPA and is subject to approval from the State, Union Pacific, BNSF, local and regional agencies, and other interested parties.

### **Hourly Service (Sacramento and Fresno)**

In addition to maintaining a minimum five daily round trips for the entire San Joaquins Corridor, SJJPA aims to continue to increase service between Sacramento and Fresno until hourly frequencies are achieved. This purpose of this increase in frequency is twofold: 1) accommodate increasing demand for business travel and leisure day trips; and 2) provide a connection from Sacramento and Northern San Joaquin Valley to the high-speed rail system at the Madera Station. While improvements being planned as part of the 8th and 9th Daily Round-Trips will go a long way toward preparing the corridor for the future, it is likely additional capacity and other projects will be needed to reach hourly service, especially in the Stockton area and southward toward Fresno.

Elements of achieving hourly service may include: increasing the capacity of Robert J. Cabral Station in downtown Stockton, constructing improvements the Stockton Diamond (i.e. the intersection of UPRR Fresno Subdivision and the BNSF Stockton Subdivi-



sion), double-tracking projects work as necessary, construction of a new maintenance facility, and the procurement of additional rolling stock. The full extent of improvements required to reach hourly service are still being determined. Additionally, optimization of both scheduling and equipment has the potential to reduce the need for physical infrastructure. When optimization studies currently underway at Caltrans and CCJPA are completed, SJJPA will re-evaluate the need for some of the mentioned infrastructure projects. In addition to optimization, capital access fees are being considered as another approach to constructing infrastructure directly.

### **Corridor Capacity Enhancements (Stockton – Oakland)**

Additional track improvements between Stockton and Oakland would improve the reliability of existing service as well as possibly allow for an increase in the number of daily round-trips from the five that operate today. Caltrans has previously identified a variety of improvements between Oakley and Port Chicago that SJJPA is considering. Additionally, significant investment would be required between Port Chicago and Oakland for improvements to allow additional trains to reach all the way to Oakland (from Martinez) for either the San Joaquins or Capitol Corridor. Additional specific projects still need to be identified to understand the full extent of the improvements needed. SJJPA will work with Caltrans, CCJPA, BNSF, and UPRR to determine the needs that remain beyond the current projects identified.

### **Longer-Term Projects (Under Development)**

In addition to extension of service along the Sacramento Subdivision, SJJPA is investigating additional extensions. SJJPA is currently examining scenarios that could lead to service north of Sacramento. The 2013 State Rail Plan identifies a “San Joaquin Extension to Redding” as a potential expansion of the San Joaquins, and SJJPA is examining this possibility. As first steps, extensions to Yuba City/Marysville and Oroville are under consideration. Another extension of the San Joaquins SJJPA is studying is from the current terminus at Oakland Station to the Oakland Coliseum/ BART Station (currently served by Capitol Corridor trains). Extending the service just five additional miles to this station would provide another direct link between the San Joaquins and BART, as well as new connections to the Coliseum complex and the Oakland Airport via the BART to OAK Automated Guideway Transit service (formerly called the Oakland Airport Connector). SJJPA also will continue to explore the longer-term possibility of having some San Joaquins in the future utilize the Altamont Corridor to bring San Joaquins to additional Bay Area markets.

Another project under consideration is to consolidate Stockton’s two rail stations at Cabral Station, which would enable Stockton to be served by a single station, providing a safer environment for passengers, more secure parking, a direct connection to Sacramento – Fresno/Bakersfield San Joaquins trains, ACE commuter trains, and promote transit-oriented development.





## 6. PERFORMANCE STANDARDS AND ACTION PLAN

Pursuant to AB 1779, the Secretary of CalSTA submitted a set of uniform performance standards on June 30, 2014 for all state-supported intercity passenger rail corridors. These standards require the administrators and operators of these intercity services to control cost and improve efficiency. SJJPA adopted the CalSTA performance standards on September 27, 2014.

CalSTA identified three uniform performance standards measures to be used for the State supported intercity passenger rail services: usage, cost efficiency, and service quality.

- **Usage** – measured by passenger miles and ridership.
- **Cost Efficiency** – measured by farebox recovery and total operating cost per passenger mile.
- **Service Quality** – measured by endpoint on-time performance, all-station on-time performance, and operator responsible delays per 10,000 train miles.

In support of the State's performance standards, SJJPA has developed measures to continuously monitor the financial, operational, and ridership performance, as well as outreach effectiveness of the San Joaquins. Additionally, SJJPA already has and will continue to develop strategies to maintain successful performance of the San Joaquins.

In addition to the CalSTA performance standards, SJJPA has focused on the environmental impact of the San Joaquins and its role in helping to create a more sustainable California. Increases in San Joaquins ridership benefit the environment by reducing air pollution and greenhouse gas emissions and help to encourage sustainable, transit-oriented development. It is estimated that in FY 2016, San Joaquins passengers (including those on Thruway Buses) traveled over 240 million passenger miles, resulting in a significant net reduction in CO2 emissions. Additionally, SJJPA is pursuing use of renewable diesel fuel in all locomotives and buses, which will further reduce emissions, along with the planned 8th and 9th Daily Round-Trips and other proposed service increases.

### FY 2018/19 and 2019/20 Action Plan

FY 2018/19 and FY 2019/20, SJJPA will continuously develop action plans with service criteria and objectives to increase ridership, control costs, improve quality, increase the benefits of the San Joaquins Corridor, and better integrate all corridor public transit systems with the San Joaquins (including dedicated Thruway Bus services). Each action will be part of SJJPA's overall management of the San Joaquins as a transportation product in a highly competitive travel market. The following is a list of areas to be covered:

- Negotiate additional revisions to the Amtrak operating agreement to improve performance reporting and decrease operating costs. Plan to reinvest these savings to improve service.
- Deploy Morning Express Service to the Bay Area.
- Refine schedules and a service plans to accommodate the Morning Express Service to the Bay Area and for the planned 8th and 9th Daily Round-Trips in conjunction with UPRR, BNSF, Amtrak, and the State.
- Contribute to the ongoing fleet analysis being conducted by Caltrans, which is examining ways to maximize deployment and scheduling efficiencies along the San Joaquins and Capitol Corridors, allowing for increased capacity for rail service and more efficient utilization of equipment.
- Contribute to the Service Optimization Study, which is currently under development by CCJPA. The Study is an effort to identify solutions to optimize ridership and revenue and coordinate service transfers for the Northern California passenger rail system (including the Capitols, San Joaquins, ACE and Caltrain). SJJPA will work to ensure the Study include the integration of the Morning Express Service and the planned 8th and 9th Daily Round-Trips schedule, which was developed using a "pulse" scheduling approach.
- Develop SJJPA policy for service standards for extensions, new station stops, train running times, station design criteria, etc.

- Continue SJJPA's Marketing and Outreach efforts.
- Develop the FY 2019 SJJPA Business Plan Update for FY 2019/20 and FY 2020/21.
- Continue to participate in California's Network Integration Strategic Service Planning (NISSP) process.
- Continue daily performance reporting.
- Work jointly with the CHSRA and Caltrans to develop viable strategies and solutions to support phased implementation of high-speed rail and to meet the needs of the San Joaquins and the stakeholder communities of the San Joaquins Corridor.
- Continue to coordinate with UPRR, BNSF, and Amtrak on schedule and train performance.
- Conduct market research to solicit feedback from passengers and potential riders to understand existing ridership markets and to identify emerging markets.
- Monitor and report on the status of Business Plan commitments.
- Continue to refine SJJPA's Capital Improvement Program.
- Work to improve coordination of fares and service schedules with connecting transit systems.
- Evaluate measures to improve train and Thruway Bus performance, including modifications to existing service routes.
- Work with Amtrak to create a set of monthly data reports for the Thruway Bus network, including easy to understand origin/destination data, bus stop utilization, and route capacity.
- Work with Amtrak to generate origin/destinations data by regions rather than just station pairs for both train and Thruway Bus trips.
- Expand efforts to monitor Thruway Bus performance.
- Work to improve areas surrounding Thruway Bus stops.
- Conduct preliminary market analysis for an additional Thruway Bus route to serve the travel market between the Southern San Joaquin Valley and Silicon Valley.
- Explore new partnerships with public or private bus operators with the goal of allowing non-Amtrak passengers to utilize excess seating capacity on buses that connect with San Joaquins trains to save on operations costs.
- Conduct analysis on operational impacts and ridership potential of the Kern County stakeholder proposal for express train service between Bakersfield and Sacramento and bring forward to the SJJPA Board as an action item before the end of 2018 to determine whether or not to pursue this concept.
- Identify future infrastructure (track, signal, and bridge) and facility projects to support increased service levels and extensions and improve performance of service.
- Monitor and expand the programs with transit agencies to improve and promote connectivity between the trains and local transit services.
- Implement a transit transfer program for San Joaquins passengers if funding permits.
- Pursue improved connectivity through partnerships with bike sharing, carsharing, ridesharing, ferry, and transportation network services, as well as increasing availability of car rental services where appropriate.
- Identify locations for electric car charging stations at San Joaquins stations.
- Increase bike parking and storage (i.e. lockers) capacity at stations, as well as ensuring enough bicycle racks are available onboard trains to meet demand.
- Explore implementing a business class section and/or "Quiet Car" on Morning Express Service trains.
- Work with Amtrak to increase performance tracking through detailed monthly reports on ticketing (including e-Ticketing), delays, and food service.

- Work with UPRR, BNSF, Amtrak, and State to grow ridership and revenue by improving reliability, adjusting the service plan, and/or implementing projects that add capacity and reduce travel times.
- Work with Amtrak to secure additional cost efficiencies to be reinvested in service enhancements.
- Continue planning and environmental work related to additional service to Sacramento in coordination with BNSF, UPRR, CHSRA, CalSTA, and the Central Valley Rail Working Group.
- Continue working with Amtrak, CCJPA, LOSSAN, and Caltrans on identifying additional standards for equipment reliability and availability, maintenance of minimum trainset capacity, service performance, and crew size.
- Work with Amtrak, CCJPA, Caltrans, UPRR, and BNSF on identifying variables that effect on-time performance.
- Coordinate with Caltrans and Amtrak to identify and implement equipment modifications to increase reliability, improve passenger amenities, and improve service.
- Coordinate with Caltrans and the Statewide Intercity Passenger Rail Working Group to identify rolling stock needed for increased service levels.
- Coordinate with the California Freight Advisory Committee and provide input on the implementation of the California Freight Mobility Plan and the California Sustainable Freight Action Plan.
- Develop and work to establish a program to provide subsidies for residents of disadvantaged communities within the San Joaquins Corridor who cannot afford the regular fares.
- Work with Amtrak, BNSF, and UPRR to reduce run times between Bakersfield and the Bay Area to under six hours with the goal of avoiding the need for crew changes.
- Work with Amtrak, BNSF, the City of Antioch, and CalSTA to implement SJJPA's plan to improve the Antioch Amtrak Station by removing part of the structure to improve visibility and reduce loitering.
- Work with CHSRA, Amtrak, the City and County of Madera, and CalSTA to develop a relocated Amtrak Madera station that would provide a seamless connection between the San Joaquins and future high-speed rail service, as well as improved access over the existing Madera Amtrak Station.
- Establish Redding – Sacramento as an “Emerging Corridor” for an extension of the San Joaquins to be eligible for potential state capital funding for emerging corridors.
- Explore applying for and utilizing Strategic Growth Council (SGC) grants to improve San Joaquins stations located in disadvantaged communities.
- Implement a “one-bucket” fare policy similar to Capitol Corridor and Pacific Surfliner and analyze the impacts of deployment on the San Joaquins compared to the current Amtrak revenue management system.
- Enact strategies to improve café car cost efficiency including suspension of café service on underperforming trains and/or utilization of lower cost cart service.





## 7. ESTABLISHMENT OF FARES

SJJPA will work with Caltrans and Amtrak to develop fares ensuring the service is attractive and competitive with other modes of transportation along the corridor. Available ticket types on the San Joaquins are: one-way, round-trip, 10-ride tickets, and monthly passes. The multi-ride tickets, and tickets purchased by seniors, students, military personnel, the disabled, and children under the age of 15 are sold at a discounted rate. Additionally, Amtrak provides reduced fares for groups of more than 15 people. A “Friends and Family” discount program has been established for the San Joaquins, enabling small groups of 2 to 6 passengers to travel for less every day of the week with the exception of a few black-out dates during peak travel periods. Passengers that buy one full-fare ticket save 50% on up to five companion fares with the Friends and Family discount. As of May 1, 2017, 10-ride tickets are valid for 60 days from the first use.

Formally, the San Joaquins had reserved ticketing with tickets sold in advance and limited based upon the number of revenue seats in each consist. Amtrak held a 10% overbooking policy on the San Joaquins to ensure that passengers desiring to travel will not experience undue “sold out” trains when only a short segment of the trip is actually “sold out” or last-minute cancellations make seats available. Additionally, Café

seating is available as it is not considered revenue seating. This policy had been in place since November of 2016 with limited issues being reported. Standees have occurred on the San Joaquins, but most of these situations were not due to the overbooking policy but the combining of trains due to accidents or mechanical failures. In all cases, Amtrak staff ensure that the safety of the passengers remained intact.

The previous revenue management policy on the San Joaquins increased fares as San Joaquins trains started to reach capacity. The current fare policy for the San Joaquins is unreserved ticketing with no revenue management. SJJPA cancelled the dynamic pricing revenue management policy due to its potential for ridership losses, especially on the San Joaquins with its low-income and disadvantaged riders. The escalation of fares can price riders out of the market and create a misperception in the market that travel on the San Joaquins is “too expensive”. Also, revenue management negatively affects riders purchasing tickets at stations. A portion of San Joaquins riders arrive at the station with cash to purchase their ticket from the ticket agent. Revenue management disproportionately impacts these passengers as fares increase over time and have a greater likelihood of increasing nearer to departure time when most cash paying pas-



sengers are at the station to purchase their ticket(s). Additionally, Amtrak has misallocated fare “buckets” (i.e. price categories), namely in November 2017, which has led to high pricing and ridership loss. Due to these and other concerns, SJJPA cancelled dynamic pricing for the San Joaquins and is developing its own “one-bucket” fare grid similar to Capitol Corridor and Pacific Surfliner. This change will provide a stable pricing structure for the riders and bring the San Joaquins in-line with the other two state supported California corridors.

This cancellation also applies to all four trains on the Sacramento Branch, providing a stabilized pricing structure. The cancellation of reserved ticketing opens San Joaquins trains to potential overbooking, but this is not a current issue during normal operations. Due to the limited capacity of the Thruway Bus system, it remains reserved to ensure proper capacity control is maintained. SJJPA is taking a more active role in monitoring ticket sales to ensure capacity is available. Additionally, this change allows riders to purchase a ticket for one train, but ride another train between the same origin and destination points. This will allow regular riders more flexibility with the tickets they purchase and limit the responsibility of the passenger to change his/her ticket.

SJJPA will look into other opportunities to increase fare revenue, including but not limited to:

- Explore smart-card fare collection technology or other current best-fit technology provided it can be incorporated into the Amtrak ticketing structure;
- Continue and expand the transit connectivity programs such as the Transit Transfer Program, joint ticketing, and transfer of motorcoach bus routes to parallel local transit services;
- Increase public awareness of the Service to increase ridership and revenue;
- Encourage new riders by promoting discounts for group travel and families; and
- Explore establishing a program to subsidize tickets for residents within disadvantaged communities along the San Joaquins Corridor who cannot afford to pay regular San Joaquins fares.

## Amtrak Tariff Changes

On November 8, 2017, SJJPA was notified that Amtrak was changing its “Tariff Policy” to adjust the nationwide senior, disabled, child, and student discounts, as well as changes to its cancellation policy. Below is a summary of changes:

- Senior Discount Reduced from 15% to 10%, while applicable age increased from 62+ to 65+;
- Disabled Discount reduced from 15% to 10%;
- Reduce Child Discount being applied to 2 children for 1 adult to 1 child per adult; and
- Discontinue nationwide Student Discount.

Subsequent to the above changes in the tariff policy, SJJPA was later notified by Amtrak of changes to other discounts and its reservation cancellation/change policy. These policy changes increase cancellation and change fees for both Saver and Value Fares. Additionally, Amtrak has cancelled its AAA discount and will cancel the Veterans Advantage discount shortly. These changes were made without consultation with SJJPA or other Amtrak state partners.

In response to these changes, Amtrak provided SJJPA with a summary of projected ridership and revenue impacts on the San Joaquins for the Student, AAA, and Senior Discount changes. Ridership is projected to decrease by 10,295 while revenue is projected to increase \$116,573.

The changes above do not align with SJJPA’s marketing or fares strategy. To retain some of these discounts, SJJPA, CCJPA, and LOSSAN JPA partnered together to create the “California Everyday Discount” program. As a part of this program, the California JPAs retained the senior, disabled, and student discounts with a commitment to try to negotiate a AAA and Veterans discount. By partnering together, the JPAs ensure that riders within California interact with a united marketing message from all three corridors. The discount usage methodology has changed from a drop-down list to a promo code which may become a barrier to usage, but the JPAs are working together to educate passengers.

## 8. SERVICE AMENITIES AND FOOD SERVICE

The San Joaquins boasts many great amenities that are integral to the attraction of riders and are key marketable features of the service. These features add value to the customer experience. SJJPA is working with Caltrans, Amtrak, and the other JPAs to improve amenities and add additional services. The San Joaquins also provides a food and beverage service for passengers.

### Service Amenities

All coaches in the Northern California Fleet have Wi-Fi service. This service is free to the customer and permits e-mail and webpage viewing. Amtrak's Wi-Fi service prohibits streaming services which would use up large amounts of bandwidth. In FY 2016/17, SJJPA in partnership with Amtrak, launched AmtrakConnect onboard the San Joaquins. AmtrakConnect is a mini-site tailored to San Joaquins passengers that is automatically launched when users join the onboard Wi-Fi network. This platform is used to inform passengers of the train status, offer helpful information regarding their destination station, present information about discounts, and as a promotional tool for strategic marketing partnerships within the corridor. AmtrakConnect is continuing to be updated and expanded to improve the customer experience and offer more helpful information.

Amtrak recently informed SJJPA aware that it is planning changes to its Wi-Fi program, which may lead to changes or cancellation of Wi-Fi service support and maintenance. In response, SJJPA is working with Caltrans, CCJPA, and LOSSAN JPA to ensure passengers do not experience a disruption in service and plan for future management of Wi-Fi service.

Bi-level coaches have bicycle storage units that hold three bicycles on the lower level of the car. In addition, 14 first generation California Cab Cars (8300-series) have undergone a retrofit 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 baggage area. Comet Car coaches have no bicycle storage. For the Comet Car trainsets, there are 4 bicycle storage units in the "Cabbage" car which also is used for baggage. It is important to note that on the Comet Car trainsets, bicycles are only accommodated at staffed stations.

Both the bi-level and Comet coaches feature comfortable seating. Seating arrangements offer passengers a traveling experience without a middle seat with ample leg room. Power plug access is available at each seat and can power and charge passengers' various electronic devices. Drop-down trays for holding food, laptops, or other items are also provided. Each coach car features areas where four seats are arranged with a work table. The overall seating arrangements offers a relaxed customer experience. Additionally, the San Joaquins feature overhead luggage racks and a no baggage fee policy for two checked bags and two carry-on bags within specified dimension and weight requirements.

### Food and Beverage Services

Each San Joaquins train has a café car which offers food and beverage service throughout most of the end-to-end trip. SJJPA and CCJPA share the Oakland Amtrak Commissary where product is warehoused and ordered to be loaded onto the trainsets. Due to the co-location of the commissary, SJJPA and CCJPA share in the responsibility of providing oversight and





direction for the café car program which is generally consistent across trainsets for both corridors.

A wide variety of entrees, snacks, and beverages are available. SJJPA is evaluating the existing food and beverage service to provide high quality options in the most efficient and cost-effective manner. Topics being evaluated include: menu; inventory and storage; increasing the capacity and usefulness of the space in the cars; patron flow; signage and information; securing and accounting for stock and materials; restocking logistics; and hours of operation. SJJPA is focused on reducing the number of items on the menu to ease loading, reduce cost, provide a simpler customer experience, open storage space for limited-time specialty items, and make it easier to promote items on the menu. In addition to these efforts, SJJPA

is considering café car changes to underperforming trainsets including the removal of the café car or utilization of lower-cost cart service.

SJJPA is actively increasing the sale of and promotional opportunities for products grown or produced in the San Joaquins Corridor. The San Joaquins offers a very unique opportunity to highlight and promote food and beverage products from the San Joaquins Corridor and can help market the service and the corridor. SJJPA is continuing to work with Amtrak and CCJPA to explore providing more locally-sourced food and beverage products in the most cost-effective way on an ongoing basis. Current local offerings include: craft beer, coffee, hot dogs, and San Joaquin Valley nuts.



## 9. MARKETING AND OUTREACH

The San Joaquins serve markets from Bakersfield to Sacramento via the San Joaquin Valley and branch off from Stockton through the East Bay Area to Oakland. The San Joaquins are unique in the State and Nation, with a vast network of Thruway Bus services that provide convenient connections between northern and southern California. Between the trains and connecting buses, the San Joaquins provide easy access to many of California's popular destinations, including: cultural attractions; museums; universities; amusement parks; entertainment and music venues; national, state, regional, and local parks; state and county fairs and festivals; seasonal cuisine and artisan foods; the State Capitol; and major population centers.

SJJPA staff has developed and continues to implement the SJJPA Marketing and Outreach Plan, which focuses on a combination of advertising, social media, and grassroots strategies. It is the combination of strategies and channels that provide greater coverage and focus to the Marketing and Outreach Plan, providing SJJPA the best opportunity to reach community stakeholders and passengers.

The marketing and outreach efforts have resulted in corridor-wide support from stakeholders for Inter-city Passenger Rail. Many corridor stakeholders and stakeholder groups have submitted grant application support letters and have attended SJJPA Board of Directors meetings to support planning efforts for Morning Express Service and future service expansion. In addition, many stakeholder groups have taken group trips on the San Joaquins to experience the service and promote its use on social media. Stakeholder individuals that utilize the service are continuing to participate in SJJPA's 'Look Who's Riding' social media campaign, which shares photos and testimonials from corridor stakeholders.

### Grassroots Outreach Strategies

SJJPA contracts with qualified Outreach Teams to engage in several activities to reach corridor communities and stakeholders including: engaging stakeholders, working with the media, facilitating group trips, tabling at large local events, and presenting to community groups.

### Engaging Stakeholders

Local, committed stakeholders are vital to promote the service, improve local presence, and activate communities to ride the train. Stakeholder education meetings and presentations are key components to the grassroots marketing efforts.

Stakeholder group outreach is a key component of both the Outreach Team contracts as well as a staff priority. There are several key groups, chambers, partnerships, agencies, universities, and organizations within the corridor that are an essential component of awareness and messaging multiplication. SJJPA is also expanding outreach to include other stakeholder groups throughout corridor, including bicycle coalitions, university Alumni Associations, League of California Cities, and California State Association of Counties.

Each Outreach Team is leveraging its contacts and SJJPA contacts, while also placing and emphasis on new stakeholder acquisition, to schedule formal meetings that serve to education stakeholders about the San Joaquins Service. A key component to Stakeholder Development is to create a reliable database of contacts to inform about service updates, call upon





for help, and utilize to increase the SJJPA message throughout the corridor.

SJJPA staff also coordinates and hosts regular meetings of the San Joaquin Valley Rail Committee (SVRC). The SVRC is a technical advisory committee composed of a diverse group of rail advocates from various backgrounds and affiliations. Committee members represent all the counties through which the San Joaquins operate, as well as Thruway Bus regions including Los Angeles, San Francisco, and Northern California. SVRC members provide critical feedback to SJJPA staff on how to improve the San Joaquins from the perspective of ordinary citizens.

### **Working with the Media**

The media is an important aspect of any marketing plan. The localized Outreach Teams assist with media relations, utilizing their established relationships with local and regional media. The Outreach Teams help to schedule interviews, facilitate press conferences, and ensure that SJJPA press releases and media advisories are successfully delivered.

### **Facilitating Group Trips**

In partnership with the community groups, agencies, organizations, school groups, businesses, and other stakeholders, Outreach Teams are facilitating group trips on the San Joaquins. They assist with building itineraries, navigating ticket purchases, offering safety

information, and other supporting activity necessary to accomplish the group trip.

Getting groups on the train helps cultivate community ambassadors by offering firsthand experience of the service. Outreach Teams' efforts in this area ensure that engaged parties do not just hear a presentation but ride the service, helping them get over the hurdle of the 'first ride' and using this as an opportunity to engage their constituents through testimonials via social media and other means.

### **Tabling at Local Events**

A key grassroots initiative for SJJPA is to meet current and potential riders in their communities. To this end, SJJPA Outreach Teams are tabling at local community events in the corridor to hand out service information, educate potential riders on the service, promote discounts, provide train safety information, and listen to the community's feedback on the service. Event tabling is an important strategy for reaching Hispanic and disadvantaged communities, allowing Outreach Teams to meet these communities in their contexts with materials adapted to their language. Additionally, Outreach Teams employ or contract bi-lingual service ambassadors for SJJPA.

### **Presenting to Community Groups**

Service education and awareness is an important grassroots marketing principle. To educate corridor





communities and stakeholders, Outreach Teams frequently give presentations to community groups, organizations, school groups, businesses, and others to grow awareness of the service and cultivate community ambassadors.

### **Advertising**

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In addition to the grassroots efforts, SJJPA is engaging in targeted advertising campaigns through both digital and traditional advertising channels. The advertising program utilizes a multi-touch methodology by which multiple mediums are employed to reach a broad base of current and potential riders with opportunity for the targets to see the advertising multiple times. Digital advertising types being utilized include: display networks, digital radio, social media, and pre-roll video advertising. Traditional advertising types being utilized include: television, radio, print, billboards, and theatre screen advertising. Advertising is being deployed primarily in English and Spanish with other languages being adapted on a targeted basis.

SJJPA will be placing a higher priority on advertising due to the success of past campaigns in driving traffic to the website and passenger preferences for purchasing tickets through online methods such as AmtrakSanJoaquins.com, Amtrak.com, and the Amtrak Mobile App.

In addition to traditional advertising, SJJPA is placing Amtrak San Joaquins logos and the phrase “Your Train Connection” on the sides of Thruway Buses throughout the state to increase public awareness and exposure to the service. This strategy will increase the reach and scope of SJJPA advertising efforts, as well as, serve as a cost-effective means of attracting additional ridership.

### **Morning Express Service Advertising**

SJJPA’s Morning Express program is designed to attract additional business travelers and same-day leisure travelers for the San Joaquins. With the launch of the Sacramento Morning Express on May 7, 2018, SJJPA is preparing to launch Bay Area Morning Express in 2019. In support of Bay Area Morning Express, SJJPA will conduct an extended advertising campaign geo-targeted to communities served and employment centers along the route benefitting from the service. To carry out this focused one-time advertising campaign, SJJPA is requesting advertising funds in the amount of \$500,000.

### **Social Media**

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Building on SJJPA’s successful social media strategy for the Amtrak San Joaquins, SJJPA is expanding the use of social media. Social Media strategies include both content posting and paid advertising. SJJPA is utilizing the following platforms: Facebook, In-



stagram, Twitter, and YouTube. Social Media is an effective tool to engage customers, increase communication, and ensure brand visibility. Capitalizing on SJJPA's extensive grassroots efforts, content is being aggregated corridor-wide to market station area communities and events. Discounts and promotions are organically posted as part of customer conversations, as well as in social advertising with a primary focus on Facebook.

Social Media is also being used to create a one-click channel to AmtrakSanJoaquins.com or subsequent discount pages. Social media platforms offer extensive targeting capability, ensuring relevant content and promotions are reaching the desired demographics.

#### **Increase Marketing and Outreach to Universities and Community Colleges Served by Thruway Buses**

The San Joaquins' Thruway Bus network provides connections to numerous universities and community colleges throughout California. SJJPA has initiated efforts to engage students through event tabling and will work to expand outreach efforts to additional campuses. By conducting outreach to students attending schools near Thruway Bus stops, SJJPA will work to inform students on the many benefits of the San Joaquins and attract additional ridership.

#### **Increase Marketing and Outreach to Military Personnel and Veterans**

The San Joaquins currently provides discounts for both active military personnel and veterans. However, Amtrak will be cancelling the veterans discount shortly. SJJPA is currently exploring ways to preserve this important discount. SJJPA will focus a portion of its efforts engaging these groups with discount education as well as targeted trip planning ideas.

#### **Market Analysis**

SJJPA is utilizing market analysis reports performed by Amtrak and Caltrans to inform its marketing efforts and tailor messages. Caltrans has indicated its suspension of further market analysis programs. To continue to gather this market data, SJJPA is requesting additional funds in the amount of \$150,000 to perform market analysis on a bi-annual basis. Marketing analysis research will be performed both onboard to gather current ridership data and via other means (phone surveys, online surveys, in person intercepts, etc.) to collect non-rider data. Data will be compiled into a report and utilized to inform ongoing marketing efforts and messaging. A bi-annual methodology is being employed to allow time for advertising and other marketing strategies that are based on market analysis to have sufficient time to penetrate the market.



## 10. ANNUAL FUNDING REQUIREMENT

The annual state budget includes a line item for the operating costs of the three state-supported intercity rail services. For each service, the state budget provides funding for intercity train operations, a marketing budget, minor capital projects, and the administrative staff budgets. The California Legislature approved the FY 2017/18 State budget that continues this support.

A primary purpose of this Business Plan is to request the annual funds required by SJJPA to operate, administer, and market the San Joaquins for agreed-upon service levels. This chapter documents ridership and revenue projections; FY 2016/17 financial numbers (actuals); operating, marketing, and administrative funding requests of SJJPA for FY 2018/19 and FY 2019/20; and special funding requests for the marketing of new rail services and to conduct market analysis. Also documented are cost savings due to management decisions, and proposed uses for these funds per the ITA.

### Ridership and Revenue Projections

Ridership projections by Amtrak for Federal FY 2017 (October 2016 – September 2017) for the San Joaquins anticipated a 1.0% increase from FY 2016 actual ridership (increasing from 1,122,301 million in FY 16 to 1,130,730 million in FY 17). Actual Federal FY 17 ridership was 1% less than was forecasted by Amtrak (1,120,037 million actual vs. 1,130,730 million forecast). Actual ridership for FY 17 dropped slightly compared with FY 16 (1,120,037 million vs. 1,122,301 million respectively).

For FY 2017, Amtrak forecasted an increase in ticket revenue of 1.4%, from \$35,585,570 million in FY 16 (actuals) to \$36,101,000 million in FY 17 (forecasted). FY 2017 actual San Joaquins ticket revenue was about 1.1% less than was forecasted by Amtrak (\$35,702,920 million actual vs. \$36,101,000 million forecast) and slightly more than the actual ticket revenue for FY 16 (\$35,585,570 million actual).

Amtrak's Federal FY 2018 (October 2017 – September 2018) forecast for San Joaquins ridership is 1,184,700 million. This represents an increase of 5.5% from actual FY 17 ridership. Ticket revenue for Federal FY 2018 is estimated at \$37,687,000 million (an increase of 5.6% from actual FY 17 ticket revenues).

SJJPA expects to receive Amtrak's forecasts for FY 2019 (October 2018 – September 2019) for both ridership and ticket revenue in March of 2018. Amtrak does not yet have San Joaquins ridership and revenue forecasts for FY 2020.

### FY 2016/17 Operating Fiscal Report (Actuals)

The net operating costs (expenses less revenue) for Amtrak to operate the San Joaquins for FY 2016/2017 was \$40,059,447, which was \$3,879,658 below the FY 2016/17 allocation of \$43,939,105. There were no other operating costs incurred outside of the Amtrak contract.

### Operating Funding Request (FY 2018/19 and FY 2019/20)

The financial performance of the San Joaquins is dependent on several institutional arrangements. The most important arrangement is the contract with Amtrak to operate the service and maintain any assigned equipment and facilities.

San Joaquins operating expenses that fall under the Amtrak contract include:

- Onboard labor;
- Equipment maintenance;
- Railroad performance incentives;
- Train fuel and power;
- Property insurance for state-owned rolling stock operated (maintained by Amtrak);
- Liability insurance and indemnification;
- Lease of Amtrak equipment;
- Commissary and station costs;
- Terminal yard costs;
- Police presence;
- Support of Amtrak's national and local operation (e.g. phone information and reservations system); and
- Connecting bus service and other operating expenses.

The CTC allocated SJJPA \$49,133,285 in operating funding for FY 2017/18. Of this, \$45,260,010 is being utilized for the Amtrak contract. SJJPA is planning to use the remaining \$3,873,275 for several opera-



tional items outside of the Amtrak contract, which are described below. The funding request for FY 2018/19 is based on a 3% increase over the allocation from FY 2017/18, or \$46,617,810 for the Amtrak contract and \$3,989,437 for the non-Amtrak operational items (see Table 10.1). For FY 2019/20 the San Joaquins projected funding request is \$48,016,345 for the Amtrak contract and \$4,109,157 for non-Amtrak operational items, for an increase of 3% over the FY 2018/19 funding request. An additional \$731,030 is projected for one month of service expansion associated with the 8th and 9th Daily Round-Trips.

#### **Difference between the Amtrak State Payment Forecast and the Operations Budget**

No difference is anticipated.

#### **New Operating Service Level Costs above Minimum Service Level**

The ITA states that the Minimum Service Level consists of six daily round trips for the first three years. Beginning in June 2016, a 7th Daily Round-Trip was added, which added operational costs. This operational cost was estimated at \$5,712,370 for FY 2016/17.

**Table 10.1: SJJPA Funding Request for the San Joaquins**

<b>SJJPA State Funding Request for the San Joaquins (FY 2017/18 - FY 2019/20)</b>			
<b>Expense Category</b>	<b>FY 2017/18 (Approved/Current)</b>	<b>FY 2018/19 (Requested)</b>	<b>FY 2019/20 (Projected)</b>
Operating			
-Amtrak Contract	\$45,260,010	\$46,617,810	\$48,016,345
-Other Operations <sup>1</sup>	\$3,873,275	\$3,989,473	\$4,109,157
-8th/9th Round-Trips <sup>2</sup>	----	----	\$731,030
Administrative	\$2,110,414	\$2,181,424	\$2,231,660
Marketing	\$1,000,000	\$1,000,000	\$1,000,000
Minor Capital	\$500,000	\$500,000	\$500,000
Morning Express Express Service Launch Advertising	\$500,000	\$500,000	----
8th/9th Daily Round-Trips Launch Advertising	----	----	\$500,000
Market Analysis (Bi-Annual)	----	\$150,000	----
<b>Total Request</b>	<b>\$52,243,699</b>	<b>\$53,938,708</b>	<b>\$56,088,192</b>
<sup>1</sup> Expenses under the "Other Operations" category (i.e. outside of the Amtrak contract) include, but not limited to: On-Time Performance (OTP) payments; ROW clean-up crew for the corridor; operation of the Wi-Fi and Onboard Information System (starting in late 2019); leased parking (e.g. adjacent to Fresno Station); and the Passenger Information Display System (PIDS).			
<sup>2</sup> SJJPA plans to commence operations of the 8th and 9th Daily Round-Trips in June 2020. The funding request includes one month of operations in State FY 2019/20. The projected amount is based on calculations done for the 2018 SJJPA-SJRRRC TIRCP application. This number will be refined as operating costs for the new service are negotiated with Amtrak.			

## Operating Costs not included in Amtrak State Payment Forecast

SJJPA is in the process of taking on more direct responsibility for the operations of the San Joaquins outside of the Amtrak operating contract for operational items such as On-Time Performance Payments, leased parking around stations, ongoing railroad ROW clearance work (in partnership with the host railroads), and eventually Wi-Fi and Onboard Information System (in partnership with CCJPA and the State respectively). See Table 10.1 for a total estimated budget for non-Amtrak items.

SJJPA is also considering partnering with private and/or public bus operators to improve connecting bus service for San Joaquins passengers that would be outside of the Amtrak operating contract. Costs for these services are not determined yet, but a net savings is anticipated in costs as these partnerships would replace existing Thruway Bus services, and fill excess seating capacity, potentially as early as FY 2019/20.

## Administrative Funding Request (FY 2018/19 and FY 2019/20)

Funds are required for the SJJPA to provide administrative support for the San Joaquins. SJJPA administrative costs for FY 2018/19 are proposed at \$2,181,424. For FY 2019/20, SJJPA administrative costs are estimated at \$2,231,660. See Table 10.1 for a summary of these administrative costs alongside operations and marketing costs. These costs are based on a 2.5% increase for cost escalation, plus the continuation of funds for outside consulting assistance with ongoing planning efforts, as well as funds for railroad liability insurance. See Table 10.2 for a breakout of budgeted administrative costs.

### Special Administrative Funding Requests

- **On-Call Planning Consultant (Annual):** In SJJPA's 2017 Business Plan, funds were requested to contract with a planning consultant to assist with planning work associated with the 8th Daily Round-Trip. Since these funds were approved, SJJPA has submitted a TIRCP application for 8th Daily Round-Trip (and the 9th Daily Round-Trip) with a complex pulse schedule that will require ongoing planning resources to successfully implement. Additionally, work to lay the

ground work for hourly service between Sacramento and Fresno is necessary. Given these aggressive expansion plans, SJJPA believes the best solution is to procure an on-call planning consultant. Specific tasks an on-call consultant could provide include but are not limited to: environmentally clearing new parking facilities and other capital improvements for existing and new San Joaquins stations, provide cost estimating services to assist in planning various capital improvements, identifying infrastructure needed at Cabral Station to enable transfers between Sacramento trains and Bay Area trains, evaluate options for reducing operating times to under six hours between Oakland and Bakersfield, operations and scheduling analysis, etc. This request is for \$150,000 FY 2018/19, and then for it to be a budget line item going forward.

- **Railroad Liability Insurance (Annual):** SJJPA has recently begun capital improvements at stations and along the railroad ROW. This requires railroad liability insurance, which SJJPA previously did not need. Due to this annual expense, SJJPA is requesting \$22,000 for the FY 2018/19, and then for it to be a budget line item going forward.

## Marketing Funding Request (FY 2018/19 and 2019/20)

For FY 2018/19 and FY 2019/20, SJJPA assumes "Marketing Expenses" of \$1,000,000 for the ongoing annual marketing program, for which SJJPA has developed a Marketing and Outreach Plan. The marketing expenses represent only those direct expenses attributed to SJJPA and do not include any costs for marketing programs provided solely by Amtrak or the State.

## Minor Capital Funding Request (FY 2018/19 and FY 2019/20)

SJJPA is requesting the continuation of the \$500,000 per year provided for "Minor Capital" projects (projects valued at \$291,000 or less). This funding is critical to keeping the San Joaquins Corridor in a state of good repair, as well as making small service improvements.

Table 10.2: Detail of Administrative Budget for the San Joaquins

Administrative Budget for the San Joaquins - Detail (FY 2017/18 - FY 2019/20)			
Expense Category	FY 2017/18 (Approved/Current)	FY 2018/19 (Requested)	FY 2019/20 (Projected)
Salaries/Benefits/Contract Help	\$1,497,528	\$1,534,966	\$1,575,015
Office Expenses/Postage/Memberships, etc.	\$15,489	\$20,489	\$20,489
Computer Systems	\$13,429	\$5,000	----
Communications	\$28,200	\$28,905	\$29,628
Motor Pool	\$12,000	\$21,314	\$21,487
Transportation/Travel	\$30,000	\$30,000	\$30,750
Audits/Regulatory Reporter	\$20,000	\$20,000	\$20,500
Professional Services - Legislative	\$50,000	\$50,000	\$50,000
Professional Services - Legal	\$50,000	\$50,000	\$50,000
Professional Services - General	\$30,518	\$69,500	\$74,562
Professional Services - Operations	\$45,000	\$20,000	\$20,500
Professional Services - Grants	\$67,000	\$67,000	\$67,000
Professional Services - Planning	----	----	\$150,000*
Communications - Operations	\$10,000	\$10,250	\$10,506
Publication/Legal Notices	\$2,000	\$5,000	\$5,000
Maintenance of Headquarters	\$55,409	\$48,500	\$46,113
Insurance - Admin	\$15,000	\$16,000	\$15,375
Insurance - Railroad	----	----	\$22,000*
Insurance Management Fees	\$1,000	\$2,500	\$2,500
Security Services/Safety Programs	\$10,000	----	----
<b>Sub-Total</b>	<b>\$1,960,414</b>	<b>\$2,009,424</b>	<b>\$2,231,660</b>
Professional Services - Planning	\$150,000	\$150,000*	----
Insurance - Railroad	----	\$22,000*	----
<b>Total</b>	<b>\$2,110,414</b>	<b>\$2,181,424</b>	<b>\$2,231,660</b>
*Note: These budget line items are being requested to be included in the annual budget, rather than as "one-time" expenses. Therefore, they are included in main the administrative budget request for FY 2019/20.			



### Morning Express Service Launch Advertising Funding Request (FY 2018/19)

SJJPA is requesting \$500,000 in funding for FY 2018/19 for advertising for the initiation of the Morning Express Service to the Bay Area. Service is planned to start in mid-2019 during FY 2018/19.

### 8th and 9th Daily Round-Trip Launch Advertising Funding Request (FY 2019/20)

SJJPA is requesting \$500,000 in funding for FY 2019/20 for advertising for the initiation of the 8th and 9th Daily Trips. Service is planned to start in June of 2020.

### Market Analysis Funding Request (FY 2018/19)

SJJPA is currently utilizing market analysis reports performed by Amtrak and Caltrans to inform SJJPA marketing efforts and to tailor messaging. However, Caltrans has indicated its suspension of further market analysis programs. Additionally, the market analysis Amtrak provides SJJPA is insufficient to meet the needs for planning and marketing the San Joaquins, as SJJPA is unable to control the data points that are captured. To continue to gather necessary market data, SJJPA is requesting additional funds in the amount of \$150,000 to perform market analysis research on a bi-annual basis. Marketing analysis research will be per-

formed both onboard to gather current ridership data and via other means (phone surveys, online surveys, in person intercepts etc.) to collect non-rider data.

### Management Actions Resulting in Operating Cost Reductions/Revenue Enhancements

Per the ITA, SJJPA is currently planning to program cost savings realized as a result of management actions from FY 2015/16 and FY 16/17 to service improvements. Cost savings are identified below (see Table 10.3), followed by a list of potential items that could utilize these cost savings.

### Potential Cost Savings Utilization

- California Passenger Information Display System (Cal PIDS) Upgrade – SJJPA portion of the project;
- New Parking Lot for Turlock-Denair Amtrak Station – Construction costs (if necessary);
- New Parking Lot for Merced Amtrak Station – Land acquisition and construction costs;
- New Parking Lot for Fresno Amtrak Station – Land acquisition and construction costs;
- Accessibility improvements to Allensworth Station; and
- Contribute to the SJJPA's reserve account.

Table 10.3: Operating Cost Savings Analysis

Operating Cost Savings Analysis (FY 2015/16 and FY 2016/17)		
State Fiscal Year	Cost Savings Item	Cost Savings
FY 2015/16 and FY 2016/17	In response to substantially increasing costs related to the Thruway Bus Route 99 (Emeryville – San Francisco), SJJPA staff decided to reduce the number of bus stops from four to two in the City of San Francisco. This management action was undertaken at a time when labor costs were being increased per hour to accommodate higher union wages. Annual costs were scheduled to go up significantly for the same level of service when the bus contract was up for renewal. By deciding to cut the number of bus stops to two, driver hours were lowered, allowing the SJJPA to renew the contract with a smaller increased cost, providing a saving.	\$65,017/yr
FY 2016/17	<p>SJJPA staff utilized nearly two decades of rail operating experience to optimize equipment utilization by working with Amtrak to re-evaluate the trainset cycling, which allowed SJJPA to use only two instead of the originally planned three Comet Car trainsets, thereby reducing costs by approximately \$1.5 million.</p> <p>SJJPA staff was involved in the negotiations of price and service options with Amtrak and potential Thruway Bus providers. The involvement, input and recommendations provided by staff helped realize a savings just over \$1.0 million in savings over previous Thruway Bus contracts prior to SJJPA's involvement.</p>	\$2,512,716

## 11. SEPARATION OF FUNDING

As identified in the Joint Exercise of Powers Agreement (JEPA) for the SJJPA, the Controller of the Managing Agency of the SJJPA shall perform the functions of Auditor and Controller of the SJJPA, and the Treasurer of the Managing Agency of the SJJPA shall perform the functions of Treasurer of the SJJPA. SJJPA has selected SJRRC as the Managing Agency for the SJJPA during the term of the ITA. SJRRC utilizes the Auditor-Controller and the Treasurer of the County of San Joaquin. SJRRC has established the appropriate accounting and financial procedures to ensure that the funds appropriated and otherwise secured during FY 2018/19 and FY 2019/20 for SJJPA to support the San Joaquins are solely expended to operate, administer, and market the San Joaquins.

The ITA includes language confirming that the State shall perform audits and reviews of financial statements of the SJJPA with respect to the San Joaquins. In addition, per the Managing Agency Services Agree-

ment between the SJJPA and the SJRRC, SJJPA will require that the Auditor-Controller shall provide for an annual independent audit of the accounts of SJJPA (pursuant to Section 6506 of the Government Code) within six (6) months of the close of the applicable fiscal years.

The County of San Joaquin Auditor Controller and Treasurer are the official Auditor Controller and Treasurer of SJJPA. The County of San Joaquin maintains a separate fund for all financial activities of SJJPA and provide monthly reports to SJJPA. Day-to-day accounting transactions are performed by the SJRRC Fiscal Department under the direction of the Controller and Director of Fiscal Services. The SJRRC/SJJPA Controller will provide for an annual independent audit of the accounts of SJJPA (pursuant to Section 6506 of the Government Code) within six (6) months of the close of the applicable fiscal years.



## 12. SAFETY AND SECURITY

Establishing and maintaining the highest possible levels of safety and security in a passenger rail operation begins with clear, comprehensive safety messaging and effective, involved leadership. This messaging and the role that leadership plays must both be crafted from an awareness of what is happening in every level of the operation and the extent to which safety and security play a significant role in the duties and responsibilities of all employees every day.

SJJPA's Safety and Security Program will focus on the following areas:

- Vehicular and pedestrian safety at highway/rail grade crossings, including private crossings in rural areas of the San Joaquin Valley;
- Pedestrian safety along the railroad right-of-way;
- Security inside and around stations and at Thruway Bus stops;
- Security onboard trains and on Thruway Buses;
- Safety and security training of personnel involved in all aspects of operating the San Joaquins; and
- Emergency preparedness training and exercises with first responders in coordination with Amtrak, host railroads, state and federal regulatory agencies.

Components of the Program include:

- Assuring a common understanding of safety and security objectives, targets and goals throughout the San Joaquins Service workforce;
- Communicating and strengthening safety and security strategies and policies;
- Creating and sustaining a strong safety and security culture shared by everyone involved in operating the San Joaquins;
- Ensuring the program applies to all activities involving the design, construction, testing, operations, and maintenance of the rail service and system;
- Assigning each manager, department,

employee, and contractor with responsibility and accountability for safety and security program implementation and compliance;

- Requiring a robust communications protocol, including cooperation among all managers, departments, employees and contractors relative to matters of safety and security;
- Coordination with Amtrak and the two host freight railroads over whose rail lines the service is operated, the Burlington Northern Santa Fe (BNSF) Railway and the Union Pacific Railroad (UPRR);
- Pursuing an aggressive safety and security program of capital improvements; and
- Identifying relationships and responsibilities with local, state, and federal agencies that are responsible for and have governance over the San Joaquins Service, including the Federal Railroad Administration (FRA), National Transportation Safety Board (NTSB), California Public Utilities Commission (CPUC), Transportation Security Administration (TSA), and the California Office of Emergency Service (CalOES).

SJJPA collaborates with Amtrak, host railroads, and regulatory partners to identify and fully address safety concerns. As part of this collaboration, SJJPA participates in:

- Corridor Improvement Team (CIT) meetings;
- Northern California Rail Safety Team activities;
- Partnership Performance Action Teams (PPAT);
- Regional Transit Strategies Working Group (RTSWG);
- Northern California Emergency Preparedness Task Force meetings; and
- Joint Terrorism Task Force meetings.

SJJPA will continue to work with Amtrak, BNSF and UPRR to identify safety and security issues, develop remediation strategies, and to secure grant funding to expand and enhance safety and security programs onboard all trains and Thruway buses, and along the railroad right-of-way.



## Safety and Security Program for 2018/2019 and 2019/2020

The primary objectives of SJJPA's Safety and Security Program for FY 2018/19 and FY 2019/20 is to continue a broad-based program of educational activities and to aggressively pursue capital improvements that help eliminate unsafe conditions.

### Safety and Security Educational Activities

SJJPA's educational efforts focus on increasing public awareness of rail safety and security along the San Joaquins Corridor and to ensure all personnel involved in operating the San Joaquins have the proper training to be effective in implementing SJJPA's Safety and Security Program. To increase awareness of the public, a wide range of populations and stakeholders will be targeted, including the existing base of employees, non-English speakers, agriculture and seasonal workers, school groups, community audiences, professional drivers, law enforcement officers, and emergency responders. To this end, SJJPA will continue to leverage a network of rail safety education resources through California Operation Lifesaver (CAOL) to inform communities about safe behavioral practices around the San Joaquins Rail Corridor.

Educating railroad personnel is as critical as raising public awareness. SJJPA will continue to take advantage of Department of Homeland Security (DHS) training resources and safety and security grant programs to build upon related activities already underway and to develop and implement new programs. Specific training efforts include but are not limited to the following:

- Emergency Preparedness Training for rail corridor first responders;
- Rail security awareness training for train crews, maintenance staff, bus operators, and station staff;
- Disaster simulations to ensure employee and first responder readiness; and
- Emergency Preparedness Training for passenger operations that connect to the San Joaquins.

To support these educational and training activities, SJJPA will continue to conduct a systematic evaluation of current safety and security practices of all personnel involved with operating the San Joaquins. As part of this process, SJJPA will identify responsible parties for safety and security work to ensure they receive necessary training and education.

### Safety and Security Capital Improvements

An important aspect of safety and security are implementing physical improvements that will improve the safety and security of the Corridor and of train operations. In an effort to identify needed physical improvements, SJJPA will continue to conduct a systematic evaluation of the conditions along the railroad right-of-way and in and around San Joaquins stations (including parking lots and platforms), as well as onboard trains. California's Office of Emergency Services has provided much of the funding for SJJPA's Safety and Security capital improvements. Important capital projects that SJJPA is currently implementing or currently pursuing include:



- Fencing projects at locations identified based on incident hot spots and high numbers of near misses;
- Increased lighting at stations, parking lots, as well as installing blue light phone towers (originally developed for use on college campuses); and
- Improved safety and security-related signage, including messaging around suicide prevention and railroad safety.

A critical capital improvement being implemented is Positive Train Control (PTC), which is an advanced railroad communication system, consisting of signaling and other equipment along tracks as well as on-board trains. PTC increases the operational safety of passenger trains (and freight trains) by preventing the following:

- Train-to-train collisions;
- Over-speed derailments;
- Incursions into established work zone limits; and
- Movement of a train through a main line switch in the improper position.

SJJPA is cooperating with Amtrak, UPRR, and BNSF to implement PTC along the entire San Joaquins Corridor and onboard all San Joaquins trains. Am-

trak has completed the installation of onboard PTC equipment. BNSF and UPRR are continuing work on the track portion of PTC. Testing will take place for the system during FY 2018/19 until PTC comes online at the end of 2018 to meet the Federally-mandated deadline.

Other activities SJJPA will employ to improve safety and security include:

- Attending listening sessions with station personnel to help identify safety/security concerns and suggestions for improvements/solutions;
- Embracing the Transportation Security Administration's (TSA) offer to conduct threat / vulnerability assessments and station security profiles;
- Encouraging more police presence and patrol at stations by making areas available to officers that are stocked with snacks/beverages, and have Wi-Fi, printers, CCTV usage, and other amenities;
- Strategically utilizing local police over-time at events and in areas experiencing problems; and
- Work with host railroads to ensure the corridor is kept clear of homeless encampments, and other unauthorized activities.





### 13. STATION AREA DEVELOPMENT

There are great benefits to enhancing development patterns and increasing development densities near San Joaquins stations. In addition to potential benefits from minimizing land consumption needs for new growth, increased dense development near San Joaquins stations concentrates activity conveniently located to these stations. This promotes increased use of the San Joaquins, generating additional ridership and revenue to benefit the State. It also accommodates new growth on a smaller footprint. A dense development pattern can better support a comprehensive and extensive local transit and shuttle system, bicycle and pedestrian paths, and related amenities that can serve the local communities. Local governments will determine which mechanisms best suit each community and could be implemented to enhance the benefits from potential San Joaquin station area development.

Applying transit-oriented development (TOD) measures around rail stations is a strategy that works for large, dense urban areas, as well as smaller central cities and suburban areas. Local governments play a significant role in implementing station area development by adopting plans, policies, zoning provisions, and incentives for higher densities, and by approving a mix of urban land uses. TOD measures generally applied to areas within about one-half mile of stations.

#### Implementation Strategies for TOD at San Joaquins Stations

Applying The responsibility and powers needed to focus growth and station area development guidelines in the areas around San Joaquins stations reside primarily with local government. Key ways in which SJJPA can help ensure that the San Joaquins become an instrument for encouraging implementation of station area development principles include:

1. Encourage local governments to prepare/update and adopt station area plans, amend city and county general plans, and promote TOD in the vicinity of San Joaquins stations.
2. Assist local governments in securing grants/funding for planning and implementing TOD around San Joaquins stations.
3. Work with communities and organizations to support TOD and with developers to implement TOD.
4. Require new San Joaquins stations be developed as a multi-modal transportation hubs.
5. Encourage the location of new San Joaquins stations in traditional city centers and/or areas with high-potential for TOD.





## **Transit Oriented Development Around San Joaquins Stations**

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The San Joaquins has 18 rail stations. Most of the San Joaquins stations are multi-modal transportation hubs and many are located in traditional city centers. Table 13.1 presents the existing amenities and services at San Joaquin stations, as well as a preliminary assessment of their potential for new TOD. TOD opportunities are considered low at San Joaquins stations that are located in outlying areas away from the city centers/downtowns. The highest potential for new TOD at San Joaquins stations is likely to be in the major cities. To encourage TOD, SJJPA is working to improve the usability of stations and Thruway Bus stops. Comprehensive assessments have begun with the objective of updating and improving signage at and near stations and stops to enhance the experience of riders.

There are several large TODs that have developed or are being developed in the vicinity of San Joaquins stations or planned new stations. There are also opportunities to encourage TOD at several other stations. In addition to encouraging TOD, SJJPA is working with local and regional governments to improve transit connectivity at the stations described below, along with other stations.

### **Sacramento TOD**

SJJPA's plans for four new stations in Sacramento provide a great opportunity to not only leverage TOD that is already underway (especially around the planned Midtown Station), but to encourage TOD from the presence of new San Joaquins rail stations. In addition to Midtown, Natomas and Old Town Sacramento hold promise for TOD in the immediate vicinity of the planned station sites.

A 244-acre mixed-use TOD called The Railyards is currently being developed on land immediately north of the Sacramento Valley Station, which San Joaquins trains currently share with Capitol Corridor trains. Plans call for a mix of housing types, a large retail component of over one million square feet, a significant level of office space at 2.3 million square feet, along with other uses such as a hotel and recreational cultural land uses. SJJPA supports The Railyards development as a way to activate the environment surrounding the station, and believe it will engender additional rail ridership.

### **Stockton ACE Station (Cabral Station) TOD**

A master plan was recently approved by the City of Stockton for a TOD called the Open Window Project, which is being developed by a local development company named Open Window Project, LLC. The plan calls for over 1,000 housing units and 400,000 square feet of commercial space within a 15-block area immediately west of the Robert J. Cabral Station (Cabral Station), which serves as the Downtown Stockton Station for the San Joaquins. This station serves all San Joaquins trains to/from Sacramento. Open Window Project, LLC has expressed interest in highlighting the rail connections available at the station in their marketing efforts. SJJPA is very supportive of this development as it will not only improve connectivity and walkability to the station, but will greatly improve the surrounding neighborhood, which will likely lead to ridership increases on the San Joaquins. In support of furthering development around the station, the San Joaquin Regional Rail Commission recently applied for a grant in the amount of \$2 million for a streetscape improvement project along Channel Street, which directly connects the Cabral Station to the new development and greater downtown, as well as San Joaquin Regional Transit District's Downtown Transit Center.

### **Richmond TOD**

The Richmond Station is located in between a previously developed TOD that includes several hundred units of housing, along with a few shops that greet people entering/exiting the BART/Amtrak Station complex. There is also another TOD under construction at the other entrance/exit to the station. Additionally, there is a large bus depot at the station, providing excellent connectivity. Richmond TOD is good case study in TOD for the San Joaquins as it is one of the most developed in the system.

### **Antioch TOD**

The Antioch Station is located in Antioch's downtown along the waterfront. SJJPA sees great potential for a re-designed station that enhances its waterfront location by opening up views of the Bay, while also integrating with other planned downtown improvements. SJJPA is currently working with Amtrak and the City of Antioch to plan for improvements at the station that would seamlessly blend with city plans for a public plaza and other enhancements along the waterfront

in the downtown district. SJJPA is also supporting private TOD projects being planned in the vicinity that would enable more people to live downtown and utilize the San Joaquins by walking to the station.

### **Madera TOD**

SJJPA has been working with the Madera County Transportation Commission and the City of Madera and County of Madera to find an improved location for a relocated Madera Station. The existing station has limited use, no transit connections, poor access to SR-99, and its location is expected to see only marginal growth in employment and transportation demand.

The proposed relocated Madera station is currently being considered for a location just north of the new Avenue 12 grade separation. This proposed site has excellent access to SR-99, and Avenue 12 is a primary transit corridor for Madera County. The proposed station is consistent with the growth of Madera east of the BNSF line; provides the opportunity for TOD in the station vicinity; and will be proximate to Madera Community College. Moreover, the proposed station location is adjacent to where the CHSRA could more easily implement a station with a direct transfer opportunity.

### **Fresno TOD**

While most TOD planning is focused on the immediate vicinity of the future HSR station in Fresno, which

lies about one mile to the west of the Amtrak Station, SJJPA sees a great opportunity to encourage further development of the downtown in between the two stations. Also, development is already happening. Several multi-family housing developments have recently been completed or are underway within walking distance of the station.

### **Oakley TOD**

SJJPA has been coordinating with the City of Oakley to implement a San Joaquins station for several years. The City has recently completed a feasibility study to determine the best location for the proposed station. The Oakley Station is a key component of the Morning Express Service to the Bay Area. In consultation with the City, it was agreed that the SJJPA/SJRRC TIRCP application will include the construction of the station platform and track, while the City of Oakley will develop local access elements and parking facilities. High-levels of growth is taking place in eastern Contra Costa County. It is anticipated that a new San Joaquins station will encourage TOD in the vicinity.



*Table 13.1: San Joaquins Stations and TOD Potential*

Station	Existing Amenities/Transit Connectivity	Within City Center	New TOD Potential
Sacramento	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, ATM, 165 overnight parking spaces, Amtrak Thruway Bus, Local/Regional Bus Services and Light Rail	Yes	High
Lodi	Enclosed waiting room, ticket machine, phone, 380 parking spaces, Amtrak Thruway Bus, Local/Regional Bus Services	Yes	Medium
Stockton–ACE	Enclosed waiting room, ticket machine, phone, 185 parking spaces, Amtrak Thruway Bus, ACE Commuter Rail & Local/Regional Bus Service	Yes	High
Oakland–Jack London Square	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, ATM, 500 short-term and 500 long-term parking spaces, Amtrak Amtrak Thruway Bus, Local/Regional Bus Services, Ferry	Yes	High
Emeryville	Enclosed waiting room, ticket office and machine, restrooms, ATM, 125 shared parking spaces, Amtrak Thruway Bus, Local/Regional Buses	Yes	High
Richmond	Platform with shelter, ticket machine, phone, 400 shared parking spaces, Local/Regional Bus Services, BART	Yes	High
Martinez	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 370 parking spaces, Amtrak Thruway Bus, Local/Regional Bus Services	Yes	Medium
Antioch	Platform with shelter, ticket machine; City parking avail., Bus Service	Yes	Medium
Stockton–Amtrak	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 24 parking spaces	No	Low
Modesto	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 230 parking spaces, Local/Regional Bus Service	No	Low
Denair/Turlock	Platform with shelter, ticket machine, 8 parking spaces, Dial-a-Ride	No	Low
Merced	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 46 parking spaces, Amtrak Thruway Bus, Local/Regional Bus Service	Yes	Medium
Madera	Platform only, ticket machine, restrooms, 19 parking spaces, Dial-a-Ride	No	Low
Fresno	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 109 parking spaces (60 additional available shortly), Bus Service	Yes	High
Hanford	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, 47 parking spaces, Amtrak Thruway Bus, Local/Regional Bus Service	Yes	Medium
Corcoran	Enclosed waiting room, ticket machine, restrooms, phone, 90 parking spaces, Local/Regional Bus Services	Yes	Medium
Wasco	Platform with shelter, ticket machine, 35 parking spaces, Bus Services	Yes	Medium
Bakersfield	Enclosed waiting room, ticket office, ticket machine, restrooms, phone, ATM, 276 parking spaces, Amtrak Thruway Bus Services, Bus Services	Yes	High









**San Joaquin**  
Joint Powers Authority

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