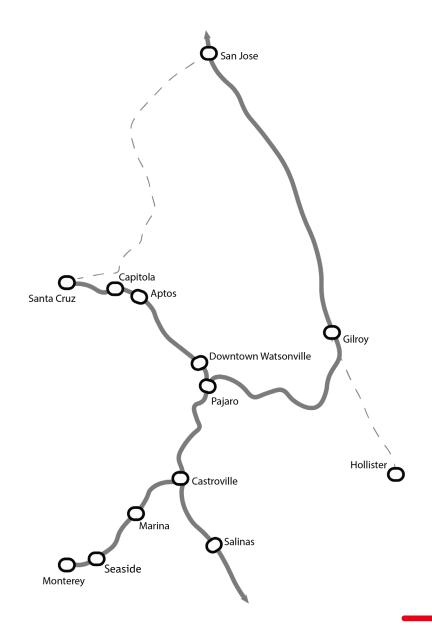


Service Vision Technical Appendices

This document is intended to serve as a technical appendix to TAMC's Monterey Bay Area Network Integration Study Service Vision Memo. It documents the technical outputs of the service design process and provides documentation of the phased implementation strategy and identifies required high-level technical considerations for delivering the future integrated network.

This document also serves as a technical guide for stakeholders and for providing inputs to the implementation planning process.





Agenda





Stringlines

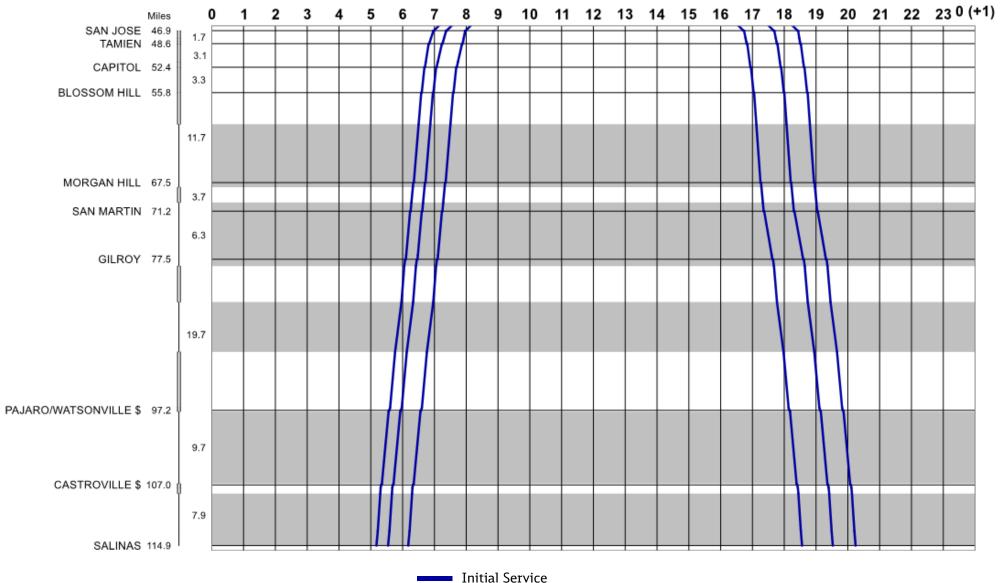
Train Performance Calculations

Minimum Equipment Requirements

Minimum Infrastructure Requirements

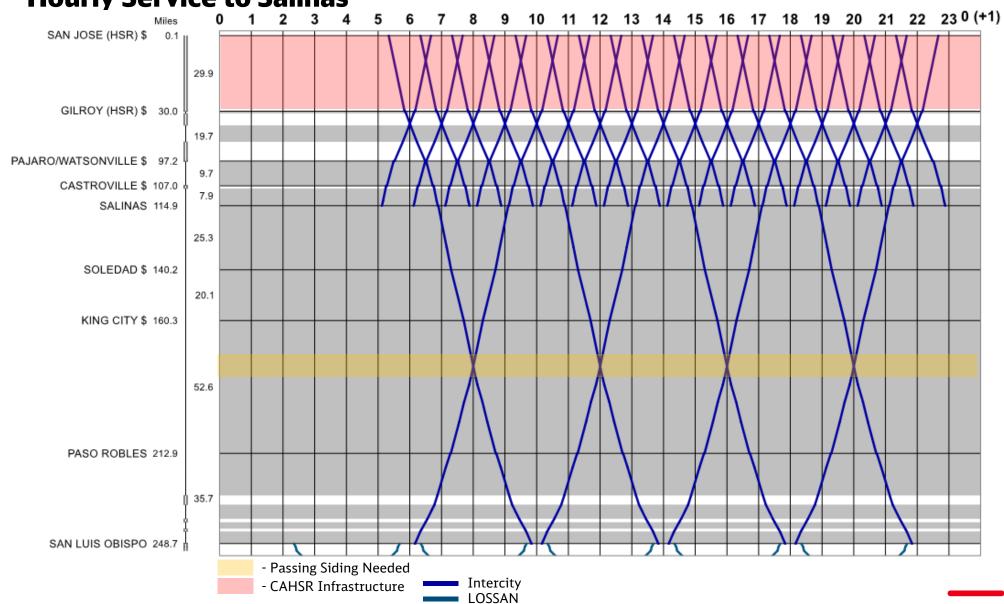
Technical Service Planning Initial Service





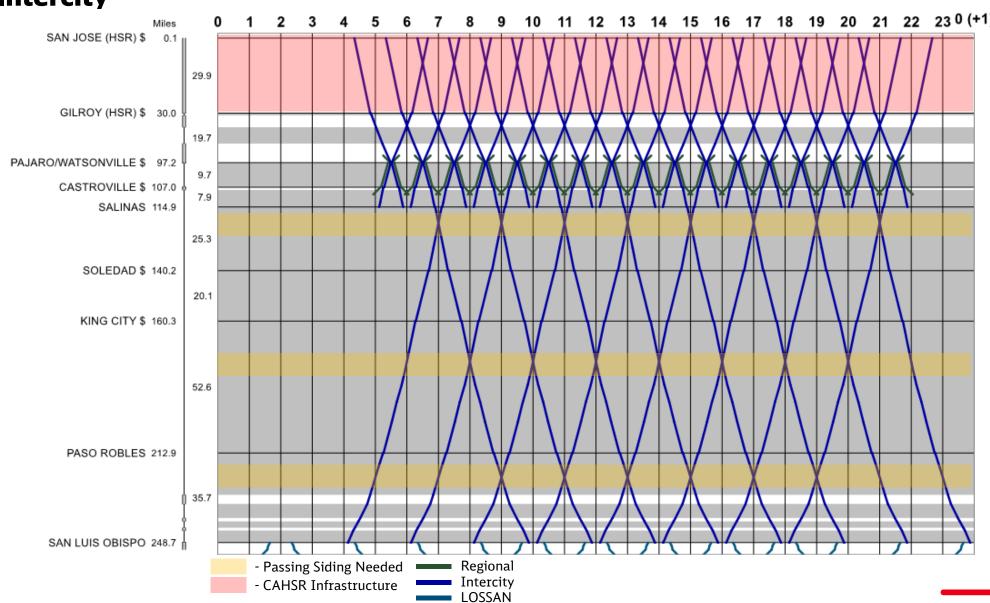
Technical Service Planning Phased Service – Hourly Service to Salinas





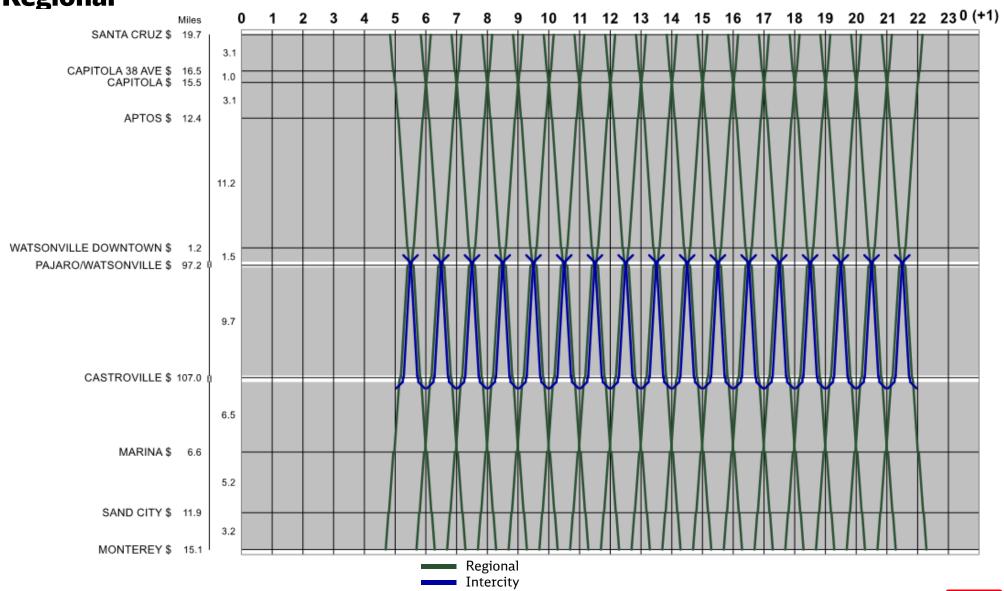
Technical Service Planning Vision Service - Intercity





Technical Service Planning Vision Service - Regional





Agenda





Stringlines

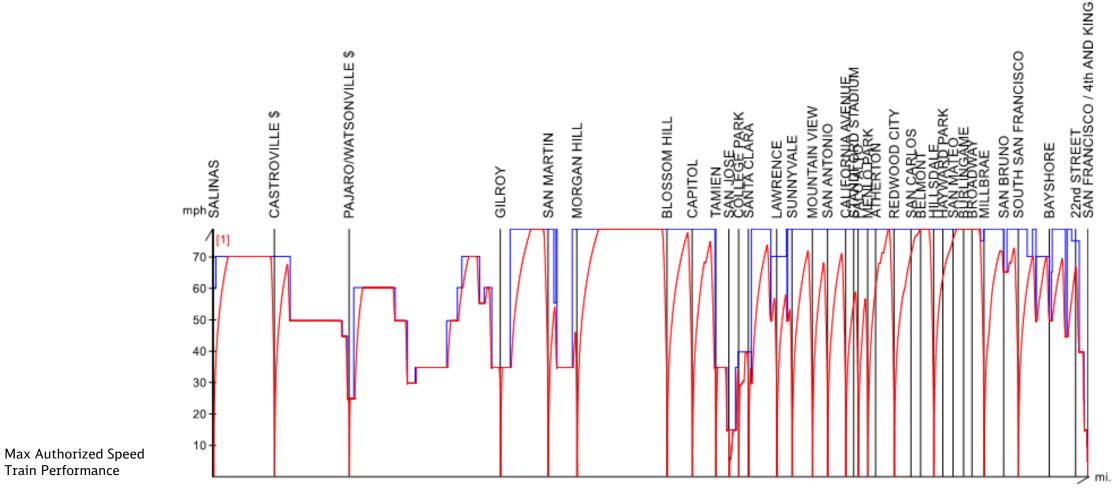
Train Performance Calculations

Minimum Equipment Requirements

Minimum Infrastructure Requirements

Train Performance Initial Service

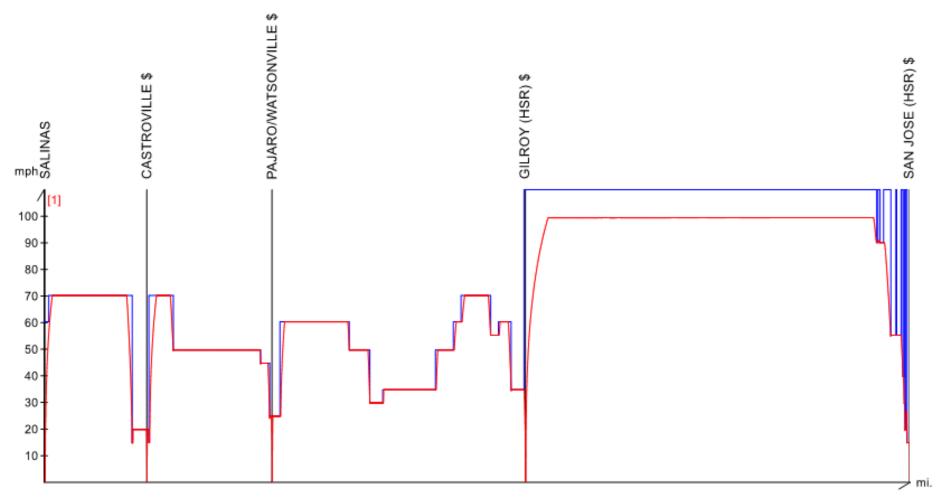




Engine(s): MP36PH-(ST) 3C, 80.15688 mph, Train weight: 392, Total length: 202.6, Brake: P, Braking = 134%

Train Performance Phased/Vision Service to Salinas





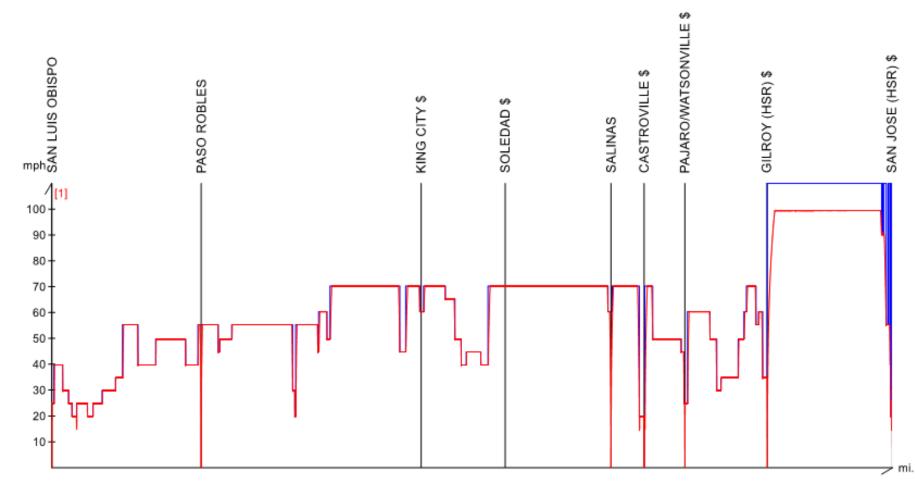
Engine(s): Flirt-BMU-E 4c2e, 99.41939 mph, Train weight: 0, Total length: 81.1, Brake: R, Braking = 147%

Max Authorized Speed Train Performance

Train Performance Phased/Vision Service to SLO

Max Authorized Speed Train Performance



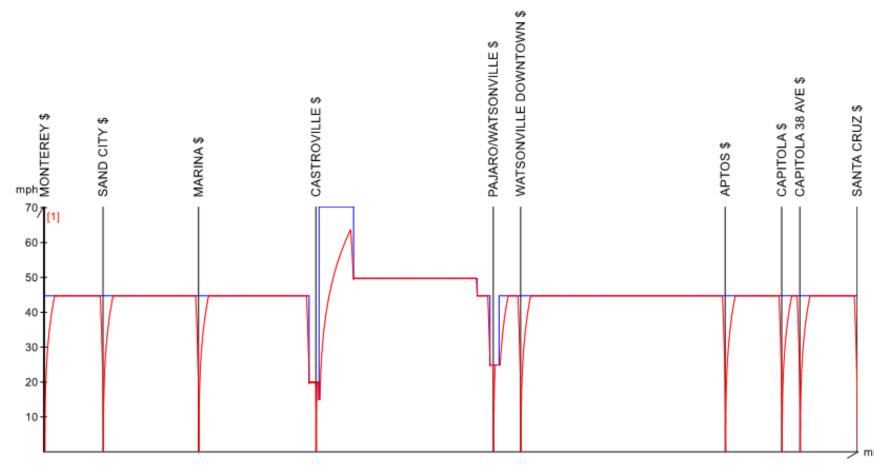


Engine(s): Flirt-BMU-E 4c2e, 99.41939 mph, Train weight: 0, Total length: 81.1, Brake: R, Braking = 147%

Train Performance Regional Service

Max Authorized Speed Train Performance





Engine(s): Flirt-DMU 4c2e, 86.99197 mph, Train weight: 0, Total length: 81.1, Brake: R, Braking = 151%

Agenda





Stringlines

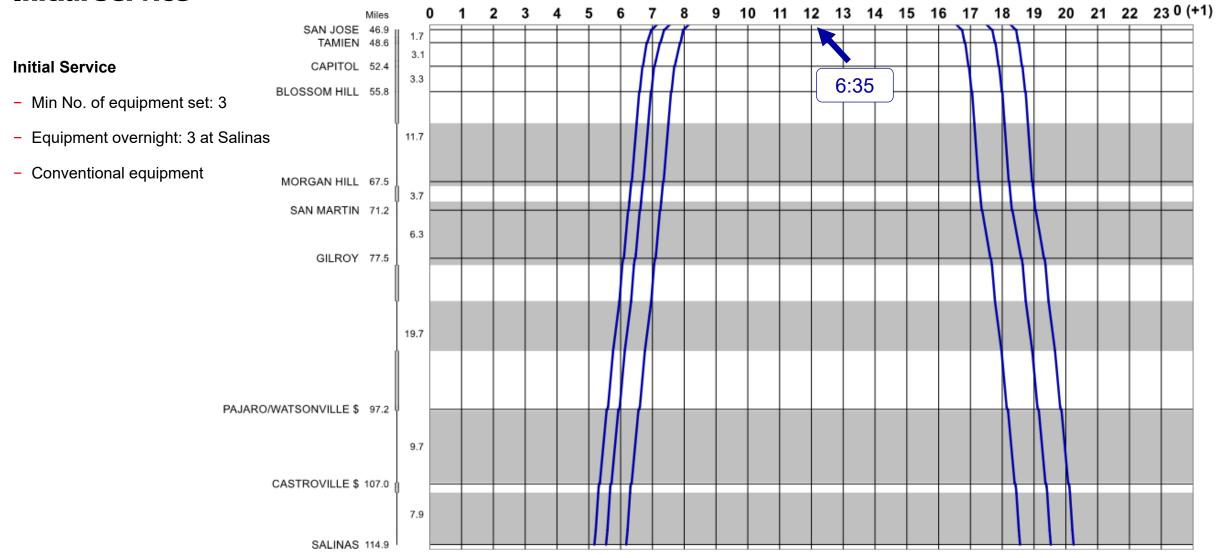
Train Performance Calculations

Minimum Equipment Requirements

Minimum Infrastructure Requirements

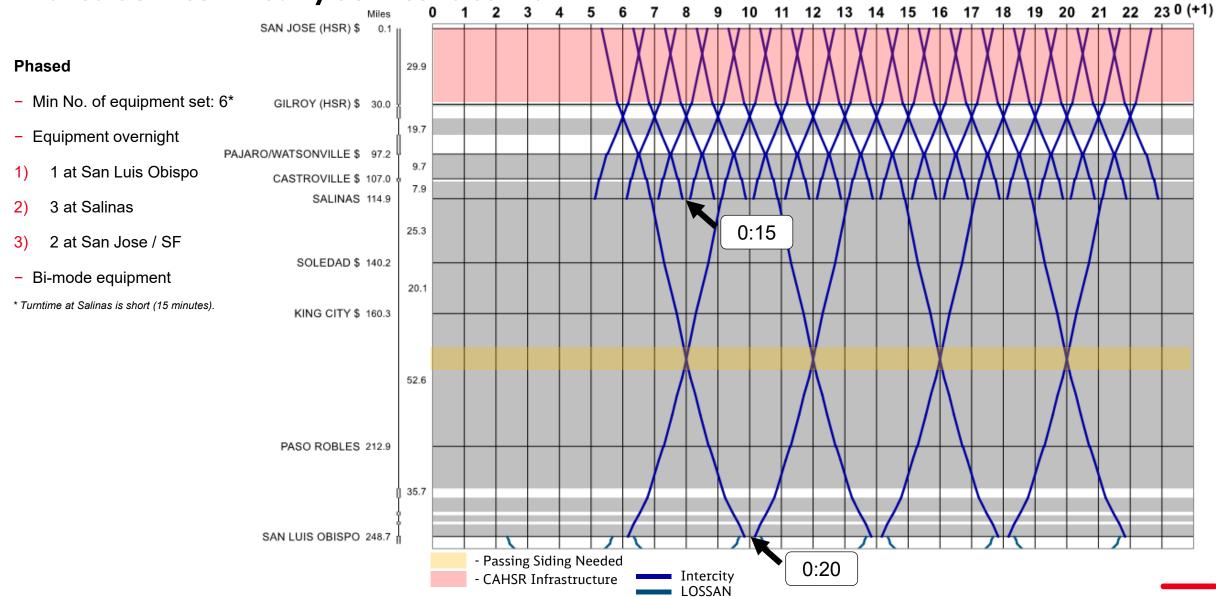
Minimum Equipment Requirements Initial Service





Minimum Equipment Requirements Phased Service – Hourly Service to Salinas



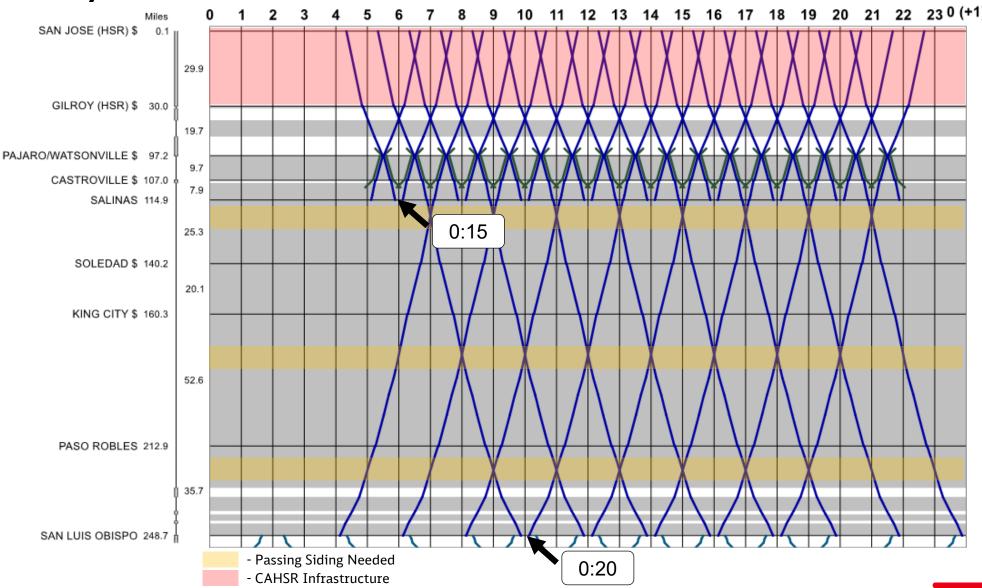


Minimum Equipment Requirements Vision Service - Intercity



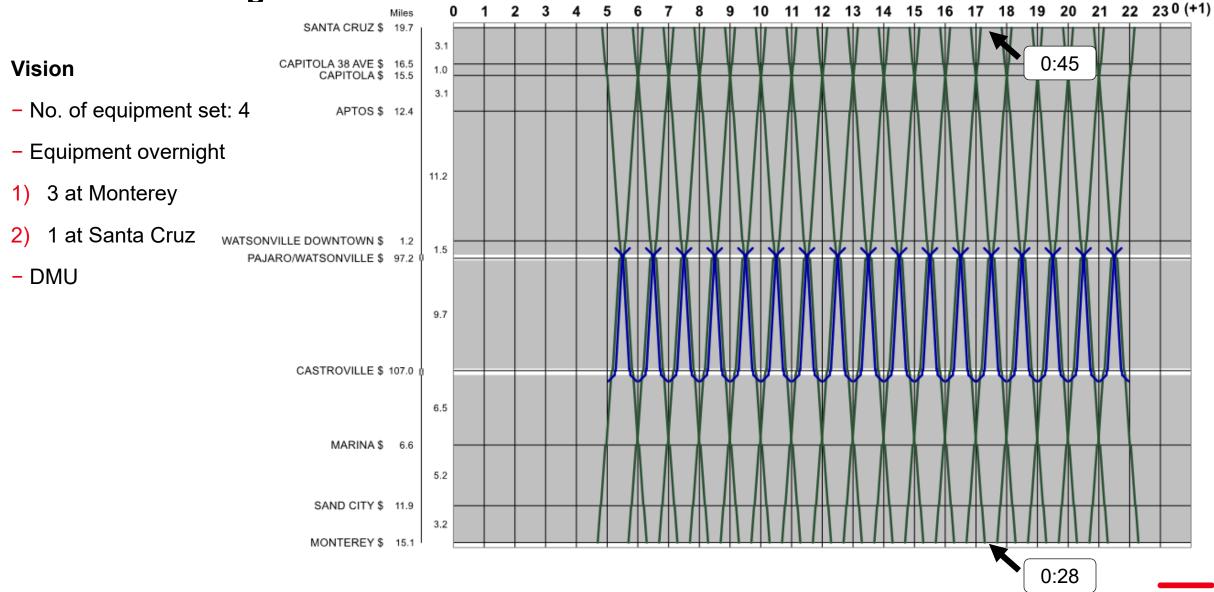
Vision

- No. of equipment set: 7
- Equipment overnight
- 1) 3 at San Luis Obispo
- 2) 1 at Salinas
- 3) 3 at San Jose / SF
- Bi-mode



Minimum Equipment Requirements Vision Service - Regional





Agenda





Stringlines

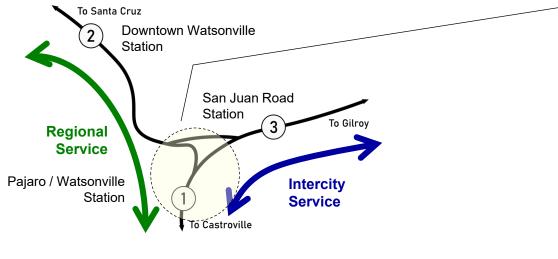
Train Performance Calculations

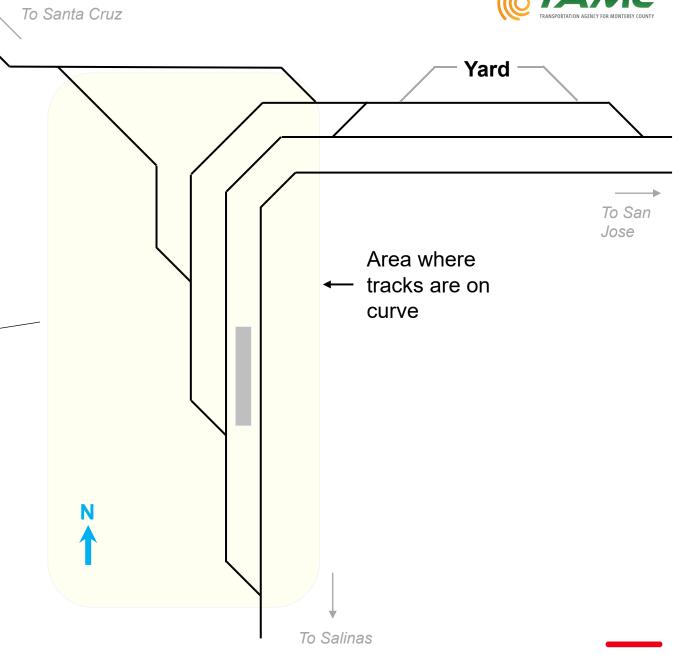
Minimum Equipment Requirements

Minimum Infrastructure Requirements

Pajaro – Initial

- 3 directional service per day
- Island platform avoids relocating Lewis St east of the junction
- Island platform required for connectivity in future service phases

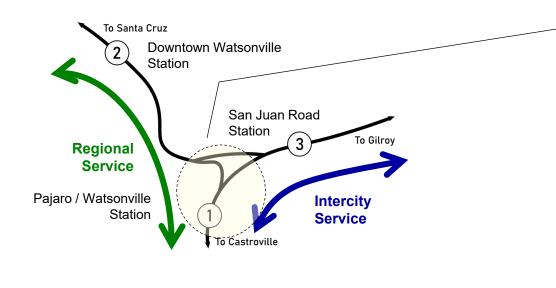


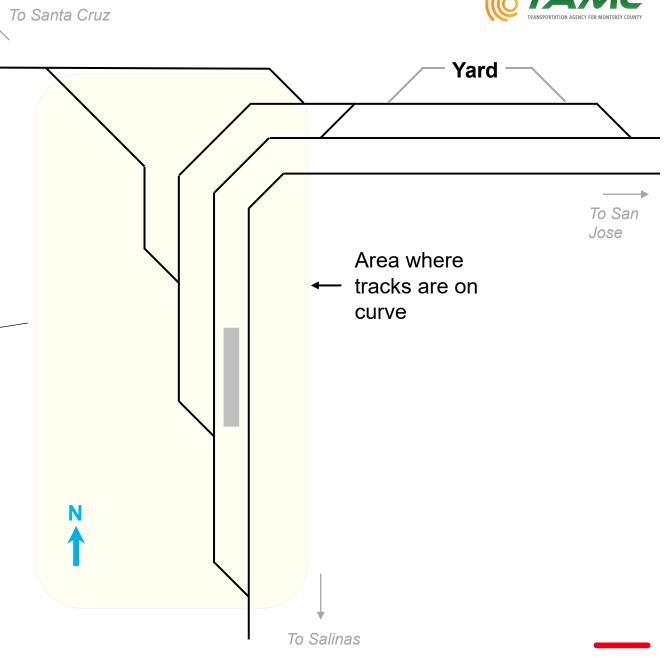


Pajaro/Watsonville – Phased

Service

 Hourly San Jose – Salinas service with one train to San Luis Obispo every four hours

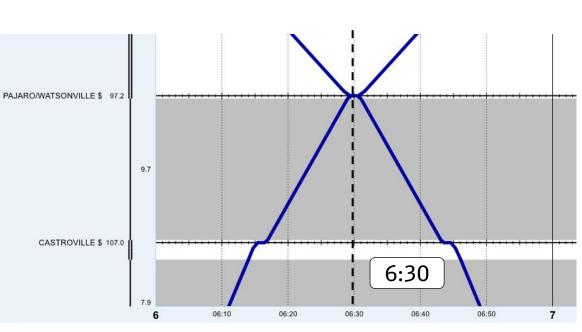


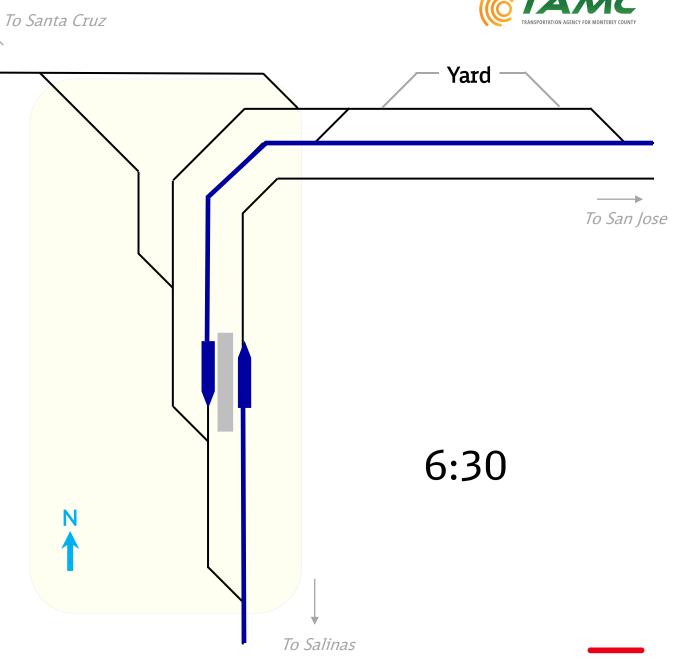


Pajaro – Phased

Service

 Hourly San Jose - Salinas service with one train to San Luis Obispo every four hours

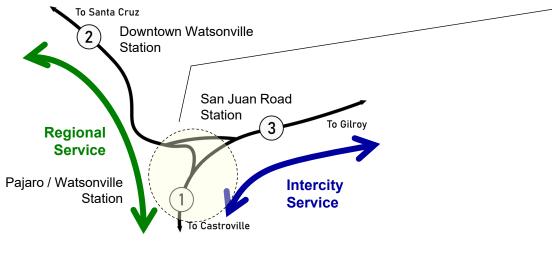


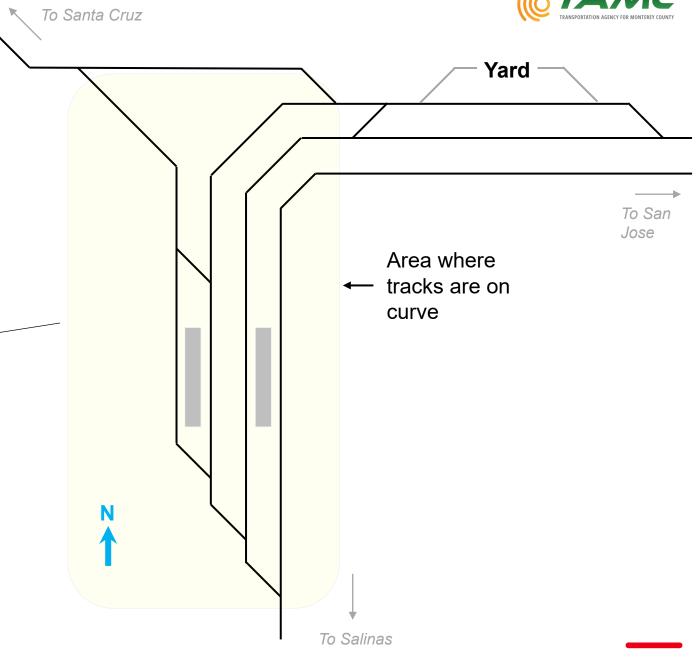


Service

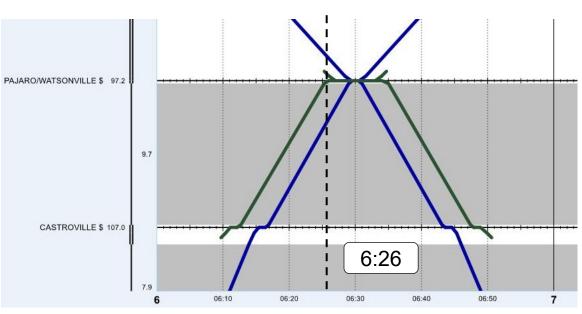
 Hourly San Jose – Salinas service with one train to San Luis Obispo every two hours

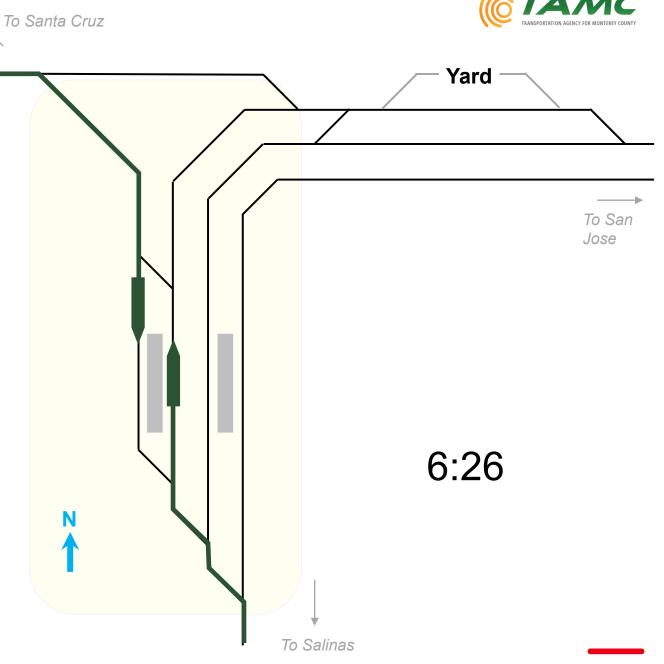
Hourly Monterey – Santa Cruz



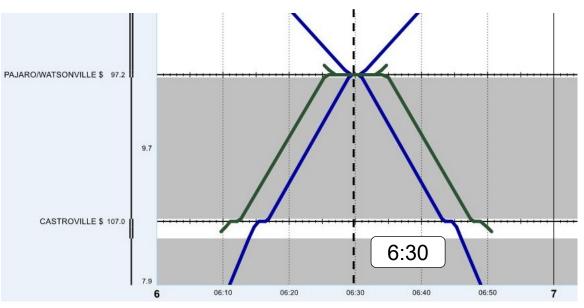


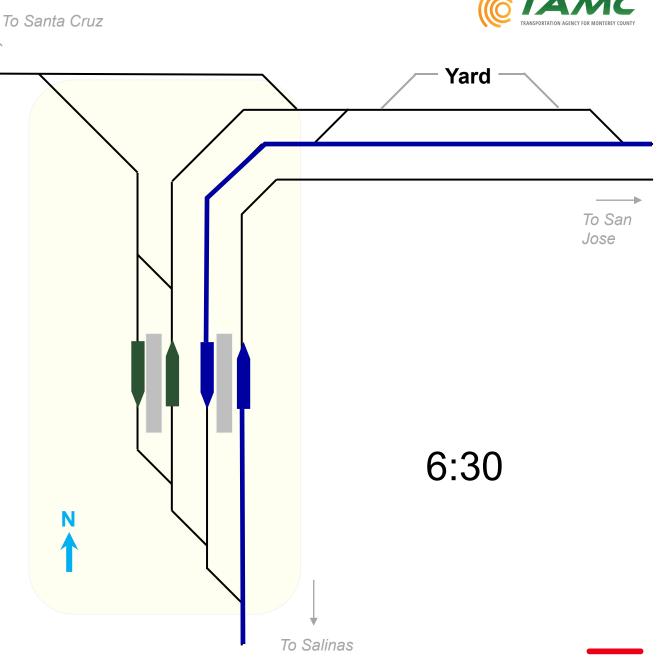
- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Hourly Monterey Santa Cruz
- Pulsed schedule is planned for bidirectional transfer



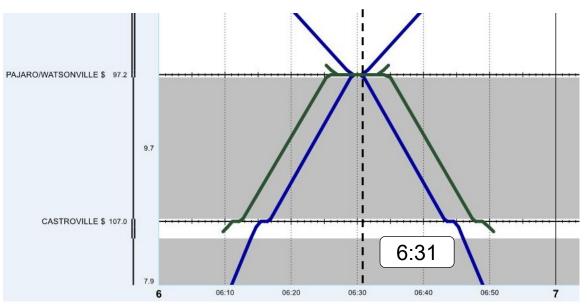


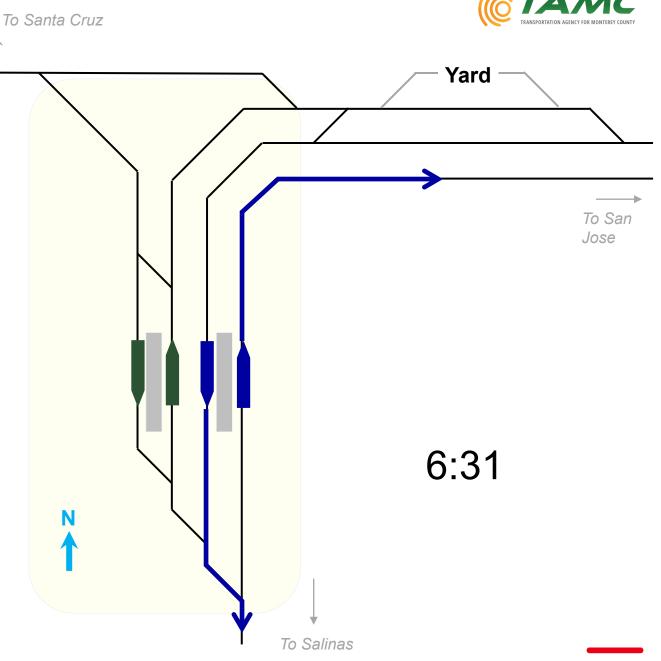
- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Hourly Monterey Santa Cruz



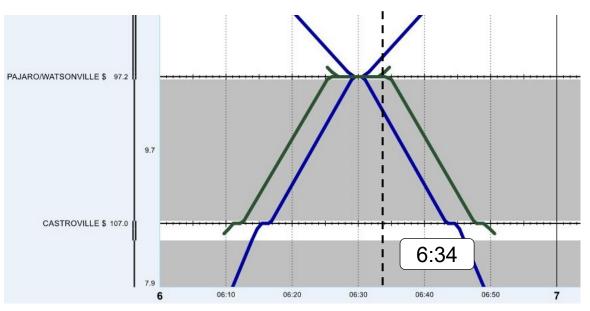


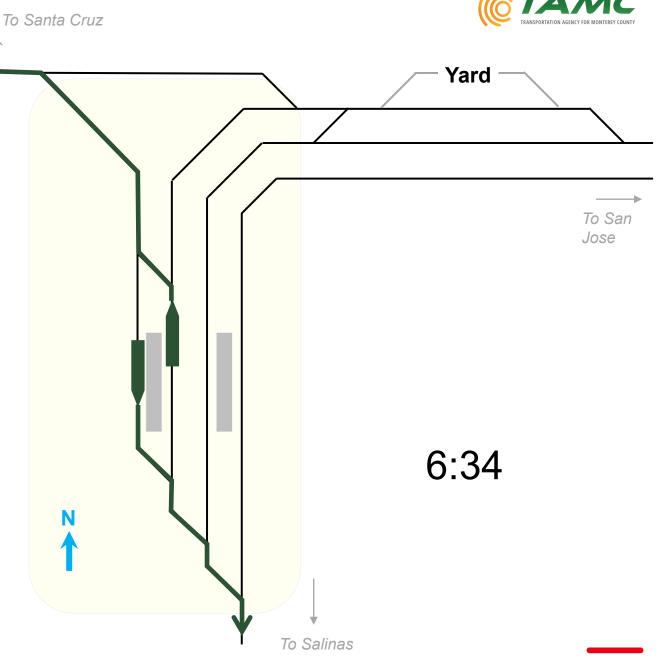
- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Hourly Monterey Santa Cruz



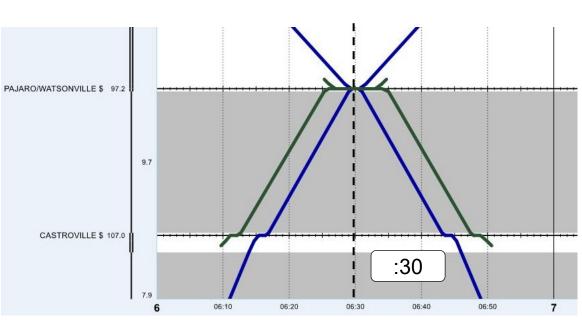


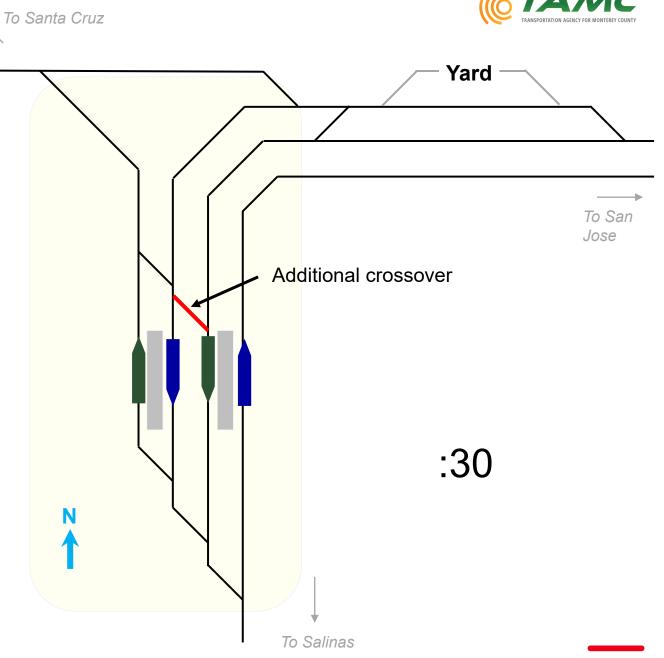
- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Hourly Monterey Santa Cruz





Cross platform transfer is possible with an additional crossover







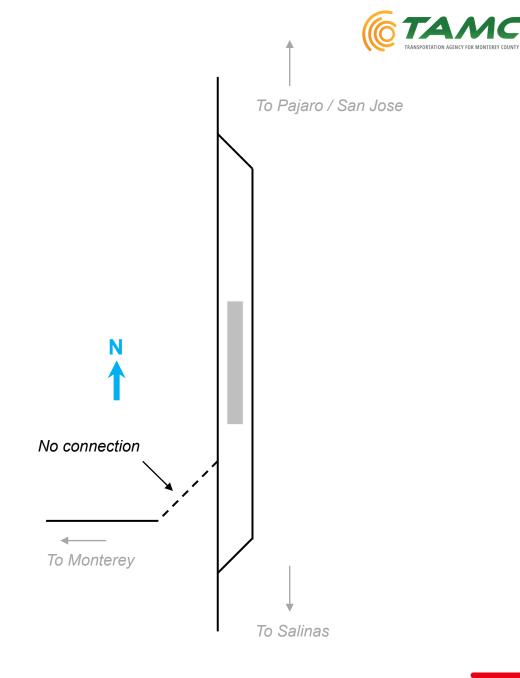
Transfer at Pajaro

| | No additional crossover | With additional crossover |
|--------------------------------|-------------------------|---------------------------|
| Santa Cruz line to San Jose | | |
| San Jose to Santa Cruz line | | |
| Santa Cruz line to Salinas/SLO | | |
| Salinas/SLO to Santa Cruz line | | |
| San Jose to Monterey | | |
| Monterey to San Jose | | |



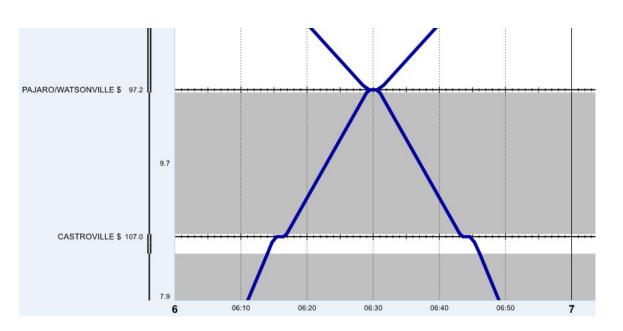
Castroville - Initial

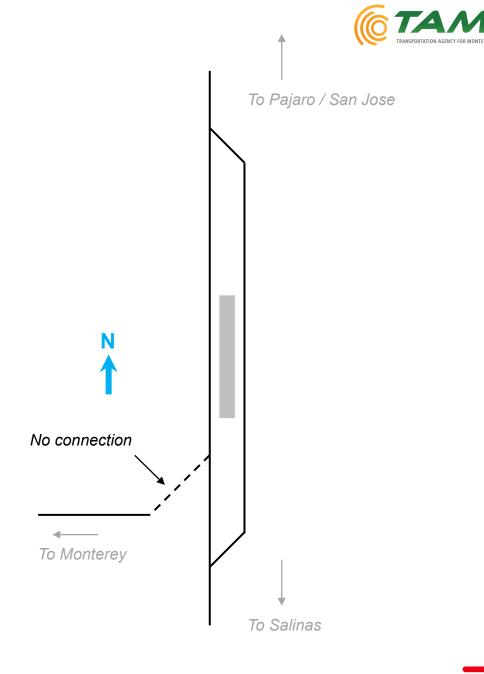
- 3 directional service per day
- Single platform would be required



Castroville – Phased

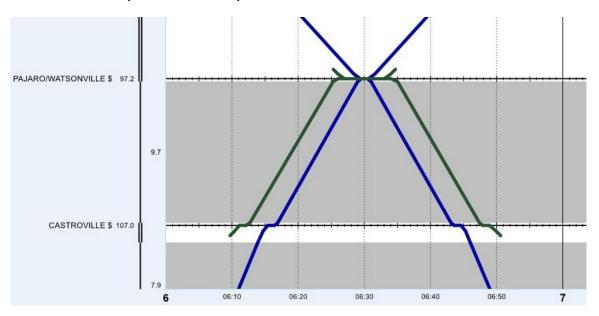
- Hourly San Jose Salinas service with one train to San Luis Obispo every four hours
- No new infrastructure required from Initial Stage since no train meet at Castroville

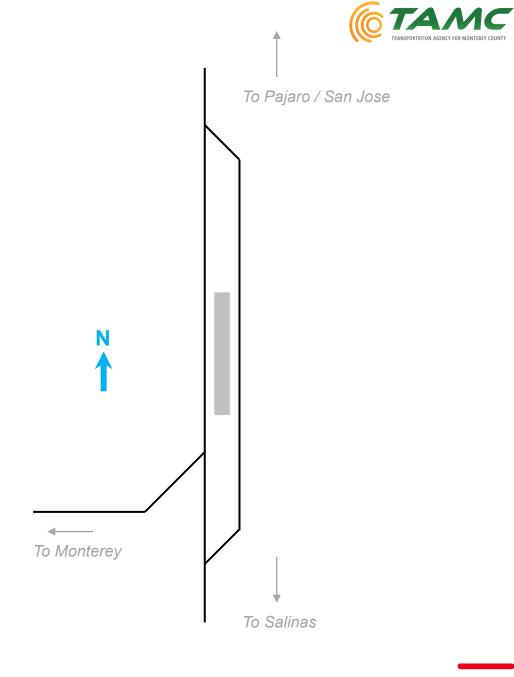




Castroville - Vision

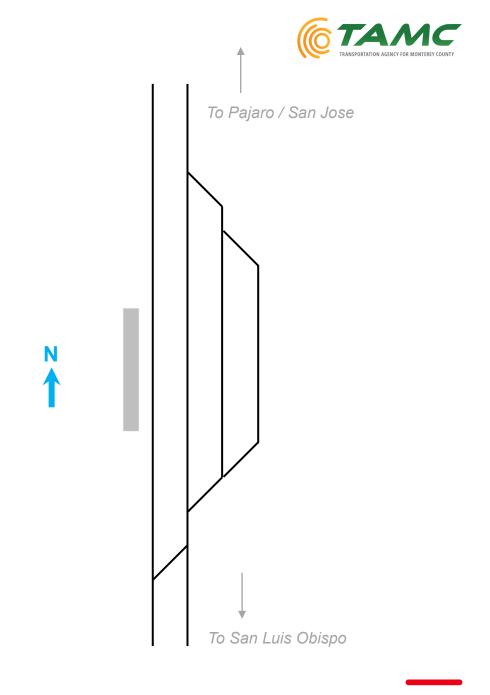
- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Hourly Monterey Santa Cruz
- Connection track, branch line reactivation to Monterey would be required
- No new platform required





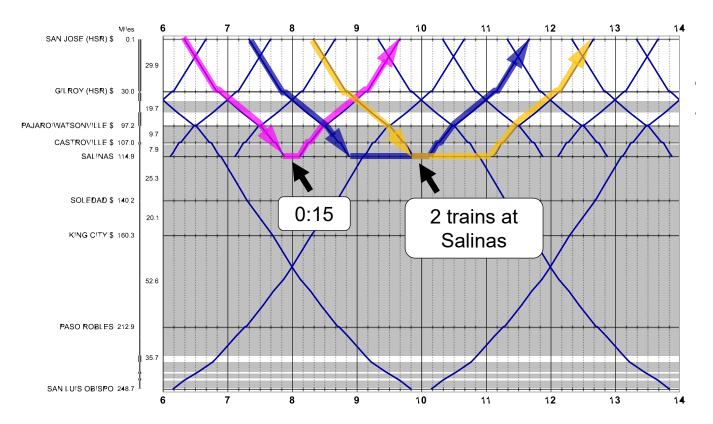
Salinas – Initial

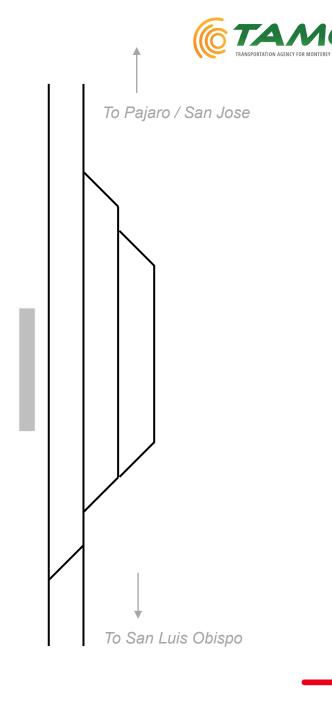
- 3 directional services per day
- Need to accommodate three equipment sets staying overnight



Salinas - Phased

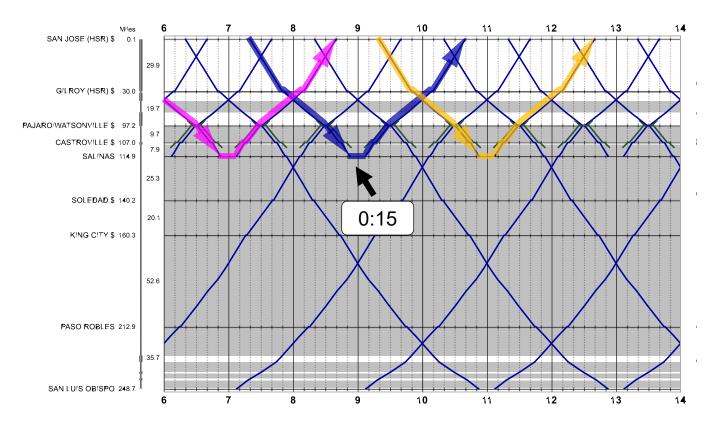
- Hourly San Jose Salinas service with one train to San Luis Obispo every four hours
- Need to use three tracks to store trains as there would be two trains at Salinas at the same time during operation, three at night

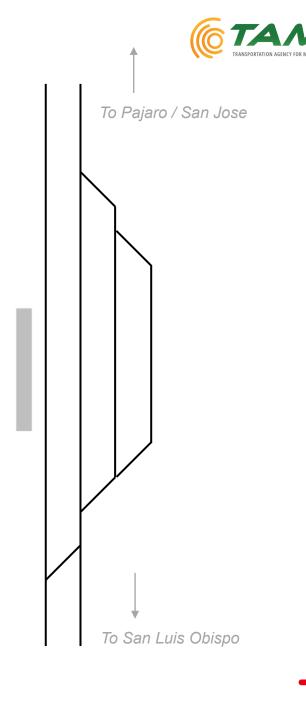




Salinas – Vision

- Hourly San Jose Salinas service with one train to San Luis Obispo every two hours
- Trains turn at Salinas for 15 minutes every two hours

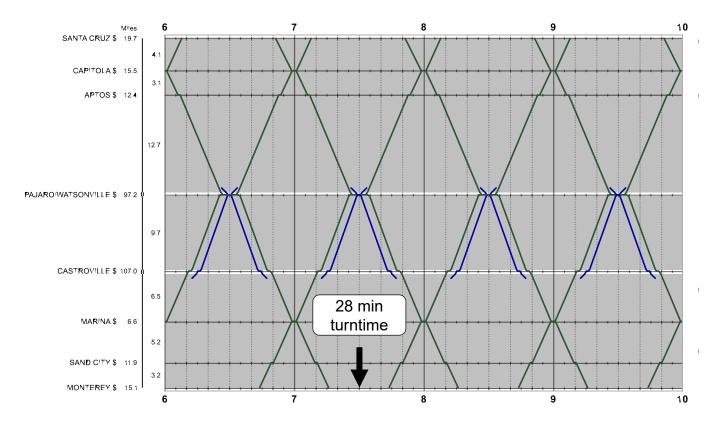




Monterey – Vision



- Hourly Monterey Santa Cruz
- Single track / single platform required
- Need storage tracks for three trains overnight



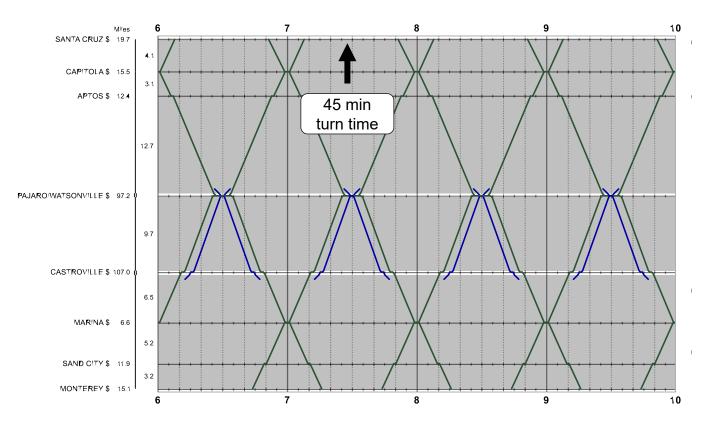


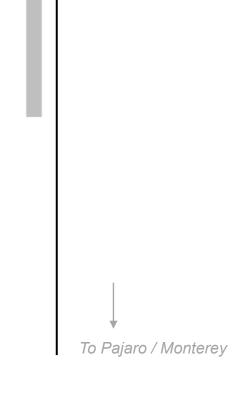


Santa Cruz – Vision



- Hourly Monterey Santa Cruz
- Single track / single platform required
- One train stays overnight at Santa Cruz





Marina / Capitola – Vision



- Hourly Monterey Santa Cruz
- A siding and an island platform required for train meets

