

# TAMC Monterey Bay Area Regional Rail Network Integration Service Planning and Network Design

The Service Planning and Network Design process is designed to facilitate TAMC's development of an implementable, technically sound vision for a future Monterey Bay Area regional rail network that accomplishes stakeholder service goals and provides technical inputs for implementation planning. The process works through four defined phases and will produce recommended service plans and phasing to serve as a technical resource and guide for implementation planning and benefits assessments.

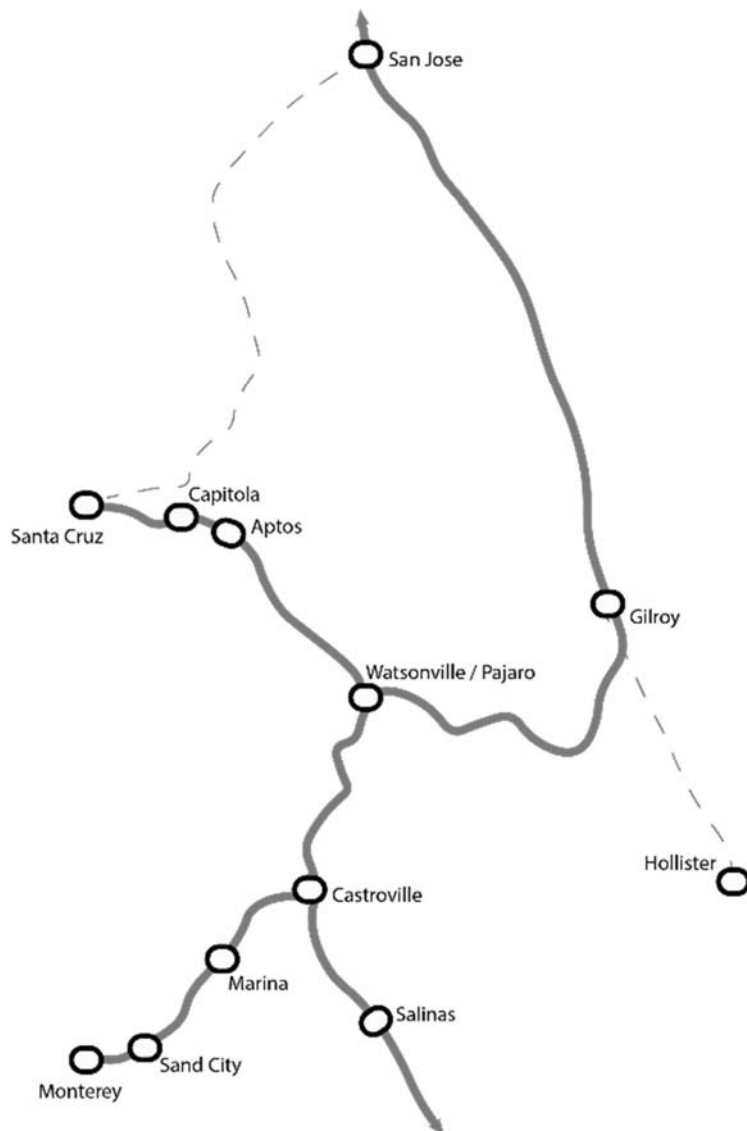
The process is currently in the concept refinement stage, moving toward recommended service plan concepts to comprise the future Integrated Network.

## Development of Planning Parameters

The design process is led through a technical working group which identifies planning parameters to set boundary conditions for service, operations, and infrastructure, within which the service concepts are developed. The initial meetings of the working group defined a set of conditions to bound the service concepts. Identifying which of these parameters reflect hard constraints and which can be subject to further analysis is integral to this exercise.

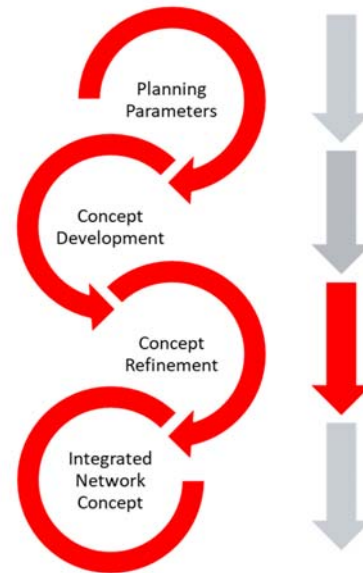
Planning parameters include:

- Service Levels
- Operations
- Equipment
- Infrastructure



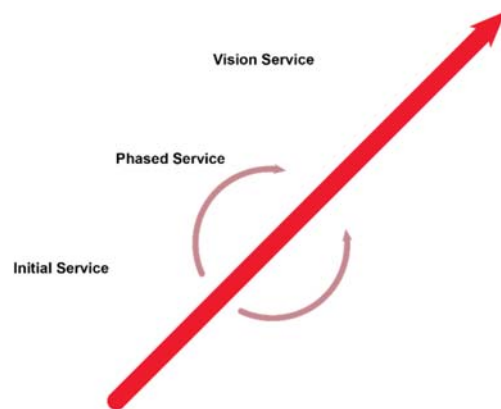
## Service Concept Development and Refinement

The service concept development and refinement phases use an open, iterative process to develop a set of stopping patterns and frequencies that meet the identified service goals. Utilizing Viriato technical software, concepts are designed to be free of operating conflicts and illustrated with stringlines (time vs. distance diagrams of trains operating on a line over a given service period) and netgraphs (diagrammatic maps of a rail network providing a graphical representation of the timetable) for discussion and review with the working group. This is the key phase and is highly iterative with multiple interactions with the working group during development. As tradeoffs among service, operations, equipment, and infrastructure are identified during the planning process, they are discussed within the working group.



Two key areas of interaction and input/feedback from the working group are critical: (1) acceptability or adjustments needed as service design is refined to fit within the operation and infrastructure constraints; and (2) the feasibility of potential infrastructure changes to reflect the needs of the service and operation plan.

- Initial Service Scenario
  - Directional service (Salinas – San Jose/ San Francisco)
  - Extension of existing service from Gilroy
- Phased Service Scenario
  - Hourly service (Salinas – San Jose/ San Francisco)
  - 4-hourly through service to San Luis Obispo
- Vision Service Scenario
  - Hourly service (Salinas – San Jose/ San Francisco)
  - Hourly regional service (Monterey – Santa Cruz)



## Important takeaways

By carefully designing and refining service plans through its iterative process, the Technical Working Group was able to determine:

- Frequent main line service is possible without major infrastructure intervention  
Service on the main line between Salinas and San Jose has been planned in such a way as to provide high-frequency hourly service on the largely single-track existing corridor without requiring major infrastructure intervention like new double-track sections, bridges, or tunnels.
- Frequent branch line service is possible without double-tracking lines  
Hourly service on the Monterey and Santa Cruz branch lines (“Wharf-to-Wharf Service”) is also possible on single-track corridors with passing tracks required only at specific stations.
- Tradeoffs require strategic choices in optimizing connectivity on branch line services  
Branch line (Monterey – Santa Cruz) and main line (Salinas – San Jose/ San Francisco) trains are designed to run in tight succession through the shared alignment between Pajaro and Castroville to ensure short transfers for passengers. Connectivity for transfers between Monterey and San Jose / San Francisco and trips between Santa Cruz and Salinas are optimized to ensure competitive trip times aligned with travel demand.
- Frequent main line and branch service can accommodate the Coast Starlight and provides operating windows for freight traffic  
The Vision Service Scenario, while highly frequent, was designed such that it can provide operating slots for the Coast Starlight and can provide defined operating windows for the limited freight traffic to move through the corridor without disrupting or being disrupted by the passenger service schedule.

## Next Steps:

By the end of January, the technical working group will present recommended service concepts, phased network development, and technical analysis to the Network Advisory Committee for their review and feedback. The service concepts will continue to be iterative in nature but will serve as a solid technical foundation for further implementation planning, benefits assessments, and an ultimate recommendation for developing the Monterey Bay Area integrated regional rail network.