UNION PACIFIC-LOSSAN UPDATE



UP Santa Barbara Sub Review

September 21, 2020



LOSSAN-UP 2020 agreement Add 2 roundtrips on existing route

- LOSSAN has requested to add two new round trips between Moorpark and Santa Barbara (Goleta), one continuing to San Luis Obispo
- UP-LOSSAN cooperative partnership to:
 - Strengthen infrastructure on the Santa Barbara Sub
 - Invest in capacity to accommodate additional roundtrips, protect on-time performance
- Key advantage: Projects agility
 - Where costs go up/down & resources are shared, can adjust scope/timing
- Capacity Enhancements
 - Complete CTC on remaining route Goleta-San Luis Obispo including powering up sidings for meets (except Gaviota, all sidings north of Goleta are manual meet points)
 - Construct capacity project in Santa Barbara-Moorpark bottleneck



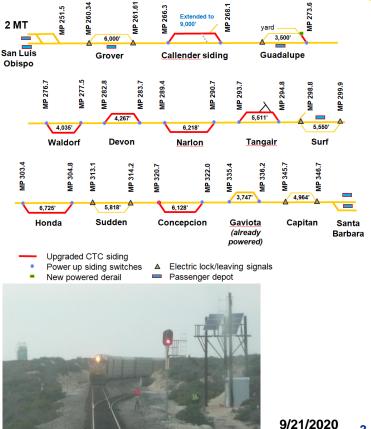
Santa Barbara Sub – Projects Overview

3-pronged approach: Strengthen, targeted new capacity, O&M maintainability

- 1. Infrastructure Renewal/Hardening
 - Replace 2 Bridges
 - Replace older Rail
 - New Ties
 - Ongoing Surfacing, Other M/W new tamper, section gang & welder
 - Corridor Hardening
 - Slope stabilization
 - Communications towers
 - Fencing/safety and Establish Safety Fund

2. Corridor Improvements

- CTC 105 Miles and Power/upgrade sidings: Guadalupe south in 1st half of 2021; Goleta north in remainder of 2021, finish remaining portions 2022
- Capacity Project Moorpark-Santa Barbara for 2nd roundtrip
- Expand Pacific Surfliner layover facilities
- 3. Operating & Maintenance
 - Engineering gang, equipment and dispatching





ENGINEERING PROJECTS

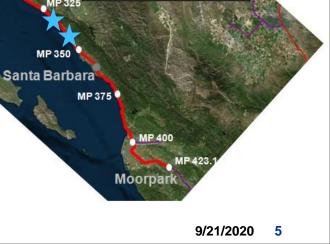






Bridge Upgrades New structures to increase speed from current operations

- **Replacement of large bridges**
 - Current speeds = 25-30, future speed = 40-60 MPH
- Pacific Surfliner trains have been primary user over the past 5-10 years
- Narlon bridge (Los Alamos Creek): MP 291.3
 - In Construction 2020-early 2021
- Honda bridge (Canada Honda Creek): MP 304.9
 - In design for 2020; estimated construction 2022
- Next phase Cementerio Creek, MP 336.5
 - Commitment by LOSSAN to fund as part of next agreement



Current Bridge Replacements

Next Phase Bridges

San Luis Obispo

MP 350

MP 275



Narlon Bridge Location Remote location on Vandenberg AFB

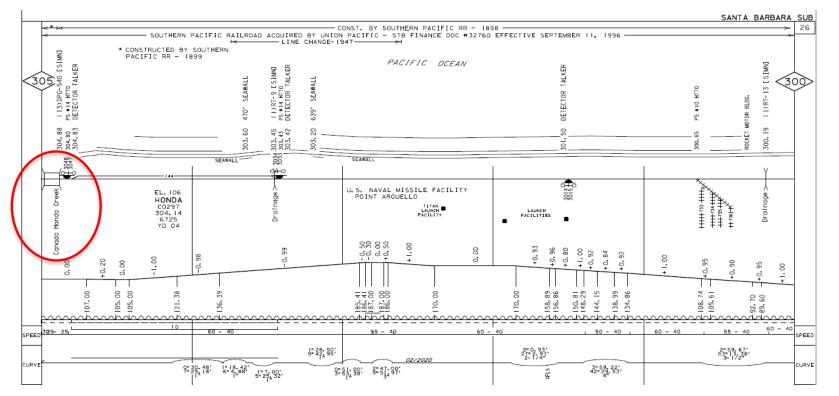




- Permitting: up to 3 years depending on site (Completed)
- Design phase: 6-8 months (Completed)
- Review & pre-construction:
 3-4 months (Completed)
- Bid: 1-2 months (Completed)
- Construction: 4-12 months (in progress)

Narlon will have a temporary low-level bridge during construction

Honda Bridge Location Also located on military property



Rail & Ties Renewal

5-yr overall program: \$24M capital + \$5M maintenance

- Replace older rail: \$15.1M
 - 33 miles of new rail
 - Identified as key priority for engineering
 - Relay rail to sidings/other tracks as needed
- Tie replacements (130K): \$9M
 - Multiyear program
- Surfacing, tamper lease, dedicated maintenance gang: \$5M
 - Tamper to set down track & reduce settling slow orders
- Flexibility for program work
 - Schedule work windows in "shadow" of other curfews (i.e. bridge replacement)





Safety Improvements Fencing, Slope stabilization, telecomm

- Fencing: Add safety fencing to frequent trespass areas
 - Work with local authorities to identify locations & needs
- Slope stabilization: Concepcion, MP 320-325
- Telecomm towers
- Fiber optic lines
 - Various locations







Capacity & Infrastructure Projects





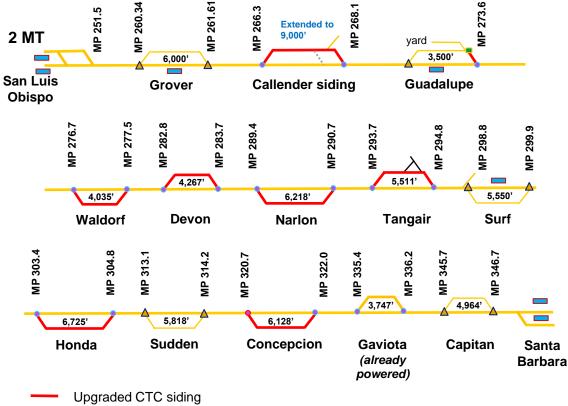




Santa Barbara Sub north – CTC key sidings Retain other sidings for future use



- Power up 7 of 12 sidings
 - Install electric locks/leaving signals on remaining sidings to preserve for future use
- Power up switch & add power derail at south end of Guadalupe yard – clear main track faster
- 3 Phases: Estimated timetable
 - 3-9 months: Design Phases 1-3
 - 4Q2020: Begin construction on Phase 1: Goleta north (current end of CTC). Expected completion: Spring, 2021
 - 1Q2021: Begin construction on Phase 2: Guadalupe south. Expected completion: 2Q2022
 - 4Q2021: Begin construction on Phase 3: San Luis Obispo-Guadalupe



- Power up siding switches
- New powered derail

Electric lock/leaving signals Passenger depot

ase: SB-2019-new sch noF2 Partial CTC, v2 TPC run times only. No meet-pass logic. Time zone displayed: PT Line: Moor Park - San Luis Obispo Train colors: Typ Gaviota-3747 336.26 Capitan-4964 346 72 Elwood-9639 357.67 anta Barbara 367,40 Ortegalproposed 375.80 Seacliff_4960 387.25 entura-1047 Oxnard-5701 405 49 S Leesdale 409.34 amarillo.999i 414.50

Capacity analysis

2 bottleneck areas to resolve: Ventura-Santa Barbara, Moorpark-Oxnard

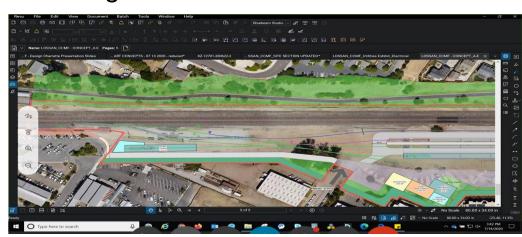
- Ventura north: Longest stretch of single track which constrains the schedule
 - Maintenance windows/track patrols and local operations
- Oxnard south: Most congested part of the line; hampers schedule flexibility and ability to add more trains

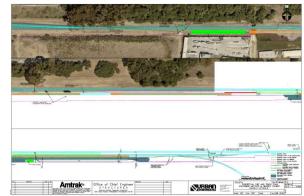


Surfliner Layover Facilities New/expanded facilities to accommodate growth



- Expand San Luis Obispo temporary facility: 6-8 months' construction timeline
 - Accommodate 2nd trainset until permanent facility is constructed
- Permanent maintenance facility at San Luis Obispo
 - Likely on former roundhouse property on west side
 - Build for future expansion
- Goleta facility: Expansion to accommodate 3 trainsets
 - Undergoing track design review





13

Questions?





OUR MISSION

UNION PACIFIC

The men and women of Union Pacific are dedicated to serve.

OUR VALUES

Focus on performance Ensure high ethical standards Work as a team



Thanks for your time today!