



### LOSSAN RAIL CORRIDOR AGENCY TECHNICAL ADVISORY COMMITTEE

**Thursday, September 3, 2020**  
**12:30 P.M. - 2:30 P.M**

Any person with a disability who requires a modification, accommodation or agenda materials in an alternative format in order to participate in the meeting should contact the Los Angeles – San Diego – San Luis Obispo (LOSSAN) Clerk of the Board, telephone 714-560-5676, no less than two (2) business days prior to this meeting to enable LOSSAN to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at [www.lossan.org](http://www.lossan.org).

#### **Guidance for Public Access to the TAC Committee Meeting**

On March 12, 2020 and March 18, 2020, Governor Gavin Newsom enacted Executive Orders N-25-20 and N-29-20 authorizing a local legislative body to hold public meetings via teleconferencing and make public meetings accessible telephonically or electronically to all members of the public to promote social distancing due to the state and local State of Emergency resulting from the threat of Novel Coronavirus (COVID-19).

In accordance with Executive Order N-29-20, and in order to ensure the safety of the Orange County Transportation Authority (OCTA) Board of Directors (Board) and staff and for the purposes of limiting the risk of COVID-19, in-person public participation at public meetings of the OCTA will not be allowed during the time period covered by the above-referenced Executive Orders.

Instead, members of the public can listen to AUDIO live streaming of the TAC Committee meetings with TEAMS by clicking the below link:

[\*\*TAC Meeting Live Stream\*\*](#)

Public comments may be submitted for the upcoming Committee meetings by emailing them to [boardofdirectors@octa.net](mailto:boardofdirectors@octa.net).



## TECHNICAL ADVISORY COMMITTEE AGENDA

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### **Guidance for Public Access to TAC Committee Meeting (Continued)**

If you wish to comment on a specific agenda Item, please identify the Item number in your email. All public comments that are timely received will be part of the public record and distributed to the Committee. Public comments will be made available to the public upon request.

In order to ensure that staff has the ability to provide comments to the TAC Committee Members in a timely manner, please submit your public comments 30 minutes prior to the start time of the Committee meeting date.

# TECHNICAL ADVISORY COMMITTEE AGENDA

## 2020 TECHNICAL ADVISORY COMMITTEE Technical Advisory Committee - Membership Roster

	Member Agencies	Appointee	Alternate
North	San Luis Obispo Council of Governments	Anna Devers	Tim Gillham
	Santa Barbara County Association of Governments	Scott Spaulding	Lauren Bianchi Klemann
	Ventura County Transportation Commission	Claire Grasty	Martin Erickson
Central	Los Angeles County Metropolitan Transportation Authority	Jay Fuhrman	Jeanet Owens
South Central	Orange County Transportation Authority	Megan LeMaster	Alexis Murillo Felix
	Riverside County Transportation Commission	Sheldon Peterson	Vacant
South	San Diego Metropolitan Transit System	Brent Boyd	Julia Tuer
	North County Transit District	Damon Blythe	Michael Johnson
	San Diego Association of Governments	Danny Veeh	Linda Culp

## Call to Order

### 1. Public Comments

At this time, members of the public may address the Technical Advisory Committee regarding any items within the subject matter jurisdiction of the Technical Advisory Committee, but no action may be taken on off-agenda items unless authorized by law. Comments shall be limited to three (3) minutes per speaker unless different time limits are set by the Chairman subject to the approval of the Technical Advisory Committee.

## Consent Calendar

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

### 2. Approval of Minutes

James D. Campbell

#### Overview

Approval of minutes of the LOSSAN Technical Advisory Committee meetings for July 2020.

#### Recommendation

Receive and file as an information item.

## Regular Calendar

### 3. Proposed 2021 Board of Directors and Committee Meetings Schedule

James D. Campbell

#### Overview

The Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency staff has developed a proposed Board of Directors and Committee meetings schedule for calendar year 2021, reflects prior informal direction from the Board of Directors, and is consistent with the development of key deliverables and actions for calendar year 2021.

#### Recommendation(s)

Recommend that the 2021 Board of Directors and Committee meetings schedule for the Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency be submitted for approval by the Board of Directors.



## Discussion Calendar

### 4. **Fiscal Year 2020-21 Annual Business Plan Update**

Roger M. Lopez/Jason Jewell

#### **Overview**

Staff will provide an update on the Fiscal Year 2020-21 Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency business plan

### 5. **Update on Capital Programs and Projects along the Los Angeles - San Diego - San Luis Obispo Rail Corridor between Los Angeles and San Luis Obispo**

James D. Campbell

#### **Overview**

An overview of the programs and projects ongoing along the Los Angeles - San Diego - San Luis Obispo Rail Corridor north of Los Angeles, including the Link Union Station project, will be presented by staff from the Los Angeles County Metropolitan Transportation Authority, Metrolink, and the Union Pacific Railroad.

### 6. **Los Angeles - San Diego - San Luis Obispo Rail Corridor Optimization Study Update and Preliminary Recommendations**

James D. Campbell

#### **Overview**

An update and preliminary recommendations will be presented on the Los Angeles - San Diego - San Luis Obispo Rail Corridor Optimization Study.

### 7. **Upcoming Agenda Items**

James D. Campbell

#### **Overview**

An overview of upcoming agenda items for the Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency Board of Directors meeting on September 21, 2020.

### 8. **Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency Update**

### 9. **Technical Advisory Committee Members' Report**

## Adjournment

The regularly scheduled meeting of this Committee will be held:

Thursday, November 5, 2020



# Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency **TECHNICAL ADVISORY COMMITTEE**

## **JULY 21, 2020 MEETING MINUTES**

The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor Agency (Agency) Technical Advisory Committee (TAC) met on July 21, 2020, at 12:30 p.m. via TEAMS conference call.

### **Committee members in attendance:**

#### *Via Teleconference:*

Anna Devers, SLOCOG  
Heather Miller, VCTC  
Martin Erickson, VCTC  
Jay Fuhrman, LA Metro  
Megan LeMaster, OCTA  
Alexis Murillo-Felix, OCTA  
Sheldon Peterson, RCTC  
Damon Blythe, NCTD  
Danny Veeh, SANDAG  
Brent Boyd, MTS  
Steven Fox, SCAG  
Todd McIntyre, SCRRA  
Tamara Noel, BNSF  
Cynthia Stone, BNSF  
Anthony Serna, CALTRANS  
Scott Spaulding, SBCAG  
Victor Stone, UPRR

### **Welcome and Introductions**

The July 21, 2020, LOSSAN Agency TAC meeting was called to order by Mr. James Campbell, LOSSAN Program Manager, who welcomed the LOSSAN TAC to the TEAMS conference call. Mr. Campbell asked the participants over the teleconference line for introductions.

#### **1. Public Comments**

*There were no Public Comments.*

### **CONSENT CALENDAR**

#### **2. Approval of Minutes**

*The Committee approved the May 2020 meeting minutes.*

#### **3. Approval of Minutes**

*The Committee approved the June 2020 meeting minutes.*

## REGULAR CALENDAR

*There were no Regular Calendar matters.*

## DISCUSSION ITEMS

### 4. Fiscal Year 2020-21 Budget Update

Mr. Jason Jewel (LOSSAN) provided an overview of the Fiscal Year 2020-21 Budget. The California State Transportation Agency approved the administrative and marketing funding, which was based on the approved business plan submitted back on May 1, 2020. The operations funding has not been approved yet, due to a pending revised Amtrak forecast operating budget. A brief explanation on current grants and bills was given as well.

*A brief discussion ensued regarding concerns on dipping into the emergency funds, if needed. Mr. Jewell confirmed he sees no concerns to utilize emergency funds, due to rollover funds from other areas and federal CARES Act funding. There is an anticipation of federal funding also being provided in the next fiscal year. There was no further discussion.*

### 5. Pacific Surfliner Thruway Bus Services Performance and Possible Operational Adjustments

Mr. Roger Lopez (LOSSAN) provided an update on the performance of the Pacific Surfliner thruway bus routes and discussed their performance within the past three fiscal years. Mr. Lopez also shared ridership numbers prior to COVID-19, as well as proposed service adjustments on different routes as a potential measure to reduce overall operating costs to help mitigate the loss in revenue due to the significant impact to ridership caused by the pandemic.

*A brief discussion ensued regarding more clarification on the ridership and revenue.*

*Another discussion ensued regarding the cost doubling within the past three fiscal years on certain routes. Mr. Lopez explained there hasn't been an adequate answer, but LOSSAN is pushing for a response and looking into cost-saving measures, as well as getting a better handle on the costs, if possible.*

*Mr. Alan Miller, Caltrans, shared some more information on the history of different routes and their financial impacts.*

*A discussion ensued on other routes and possible elimination of certain stops as a way to help reduce overall operating costs.*

**6. Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency Update  
Transit and Intercity Rail Capital Program Update**

Mr. Campbell (LOSSAN) informed the committee that the LOSSAN Agency received notification on July 9<sup>th</sup> from Union Pacific that the agreement to design and construct Capital Improvements along the Santa Barbara subdivision had been fully executed and that the projects identified in the agreement were now moving forward.

Mr. Campbell shared there was a 3-day virtual design workshop for the Central Coast Layover Facility project in San Luis Obispo. The meeting was to obtain input from the major stakeholders on a preferred layout and configuration of the facility and that the consultant could move forward with into preliminary engineering.

Mr. Campbell also mentioned that staff participated in the LOSSAN regional rail corridor working group in San Diego County, created by California Secretary of Transportation David Kim for the purpose of examining climate change, resiliency issues, and developing future plans for the LOSSAN rail corridor in San Diego County, specifically the Del Mar Bluffs, which have experienced and continue to be vulnerable to major erosion, which threatens the stability of the overall corridor.

**7. Technical Advisory Committee Member's Report**

Mr. Brent Boyd, MTS, mentioned they are now at 98 percent of rail service and additional service in September to help with social distancing.

Mr. Danny Veeh, SANDAG, mentioned they opened 2.6 miles of double track in the City of San Diego and now creates a continuous 14 miles of double track from Santa Fe Depot to Miramar Hill.

Mr. Damon Blythe, NCTD, re-mentioned the SANDAG project is finished and will open opportunity to run more trains. COASTER has had a 91 percent ridership loss, which had an estimated 5,000 passengers drop to approximately 500 a day.

Mr. Sheldon Peterson, RCTC, mentioned they are not pursuing the special events training in Indio.

Mr. Jay Fuhrman, LA Metro, mentioned an upcoming meeting with Metrolink and Amtrak to work on integrating the fair reciprocity, so that that when you have a Surfliner ticket, you'll be able to get through the Metro gates for rail system similar to how Metro can get through our gates using the optical reader.

Ms. Heather Miller, VCTC, shared updates on the Rice Avenue Grade Separation project, as well as a Metrolink Saturday service train that will begin in April 2021 that Metro is helping with on the Ventura Line. Ms. Miller also mentioned a transportation emergency preparedness plan that is being coordinated with SBCAG and VCTC.

Mr. Vic Stone, Union Pacific, mentioned they are beginning work on their first bridge project at Narlon. Will keep us posted with updates at the next meeting.

**6. Adjournment**

The next regularly scheduled meeting of this Committee will be held on:

Thursday, September 3, 2020  
12:30 p.m. – 2:30 p.m.



**September 3, 2020**

**To:** Members of the Technical Advisory Committee  
**From:** Donna DeMartino, Managing Director  
**Subject:** Proposed 2021 Board of Directors and Committee Meetings Schedule

### **Overview**

The Los Angeles - San Diego - San Luis Obispo Rail Corridor Agency staff has developed a proposed Board of Directors and Committee meetings schedule for calendar year 2021, reflects prior informal direction from the Board of Directors, and is consistent with the development of key deliverables and actions for calendar year 2021.

### **Recommendation**

Recommend that the 2021 Board of Directors and Committee meetings schedule for the Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency be submitted for approval by the Board of Directors.

### **Background**

Each year, the Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor Agency (Agency) Board of Directors (Board) reviews and approves a proposed meeting schedule for the Board, Executive Committee, and Technical Advisory Committee (TAC) meetings for the following calendar year. A proposed meeting schedule for calendar year 2021 has been developed based on prior, informal discussions with the Board, Executive Committee, and the Technical Advisory Committee (TAC).

### **Discussion**

The proposed schedule for 2021 maintains regular Board meetings, which have historically been and are proposed to continue to be held the third Monday of each month.

To avoid conflicts with federal holidays, the February Board meeting is proposed to be held the fourth Tuesday of the month. No meetings are proposed for the months of January, April, August, and December.

Assuming it is safe to do so and the restrictions in place to limit gatherings in response to the COVID-19 pandemic within the State of California are lifted, Board meetings will rotate between the Los Angeles County Metropolitan Transportation Authority's Board chambers and the Orange County Transportation Authority headquarters, unless otherwise noted. Prior practices have been to hold two of the meetings, one in the southern portion of the corridor and one in the northern portion of the corridor. Staff will request Board Member and member agency feedback in determining the desire to continue with this practice and in selecting the months and locations for these meetings.

Executive Committee meetings are proposed to be held the months of March, May, June, and November. Additional meetings may be added to the schedule as needed.

TAC meetings are proposed to be held the first Thursday during the months of February, March, May, June, July, September, October, and November, prior to scheduled Board meetings.

The Chairman of the Board retains the right to call a Special meeting at any time should unforeseen circumstances arise which warrant a meeting. The complete proposed 2021 LOSSAN Board and Committee meetings calendar is included as Attachment A.

### ***Summary***

Staff has developed a proposed 2021 LOSSAN Board and Committee meetings calendar for the LOSSAN Agency Board's review and approval.

### ***Attachment***

- A. LOSSAN Board of Directors Calendar – 2021 Board and Committee Meetings and Holidays



DRAFT

# LOSSAN BOARD OF DIRECTORS CALENDAR

## 2021 Board and Committee Meetings and Holidays

January						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

February						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	



LOSSAN Board of Directors Regular Meeting  
11:15 a.m. – 12:45 p.m.  
Meetings will take place at OCTA unless otherwise noted



Executive Committee  
TBD



Technical Advisory Committee  
12:30 p.m. – 2:30 p.m.



LOSSAN Agency Observed Holidays





# Link US and LOSSAN North LA County Projects

LOSSAN TAC Meeting

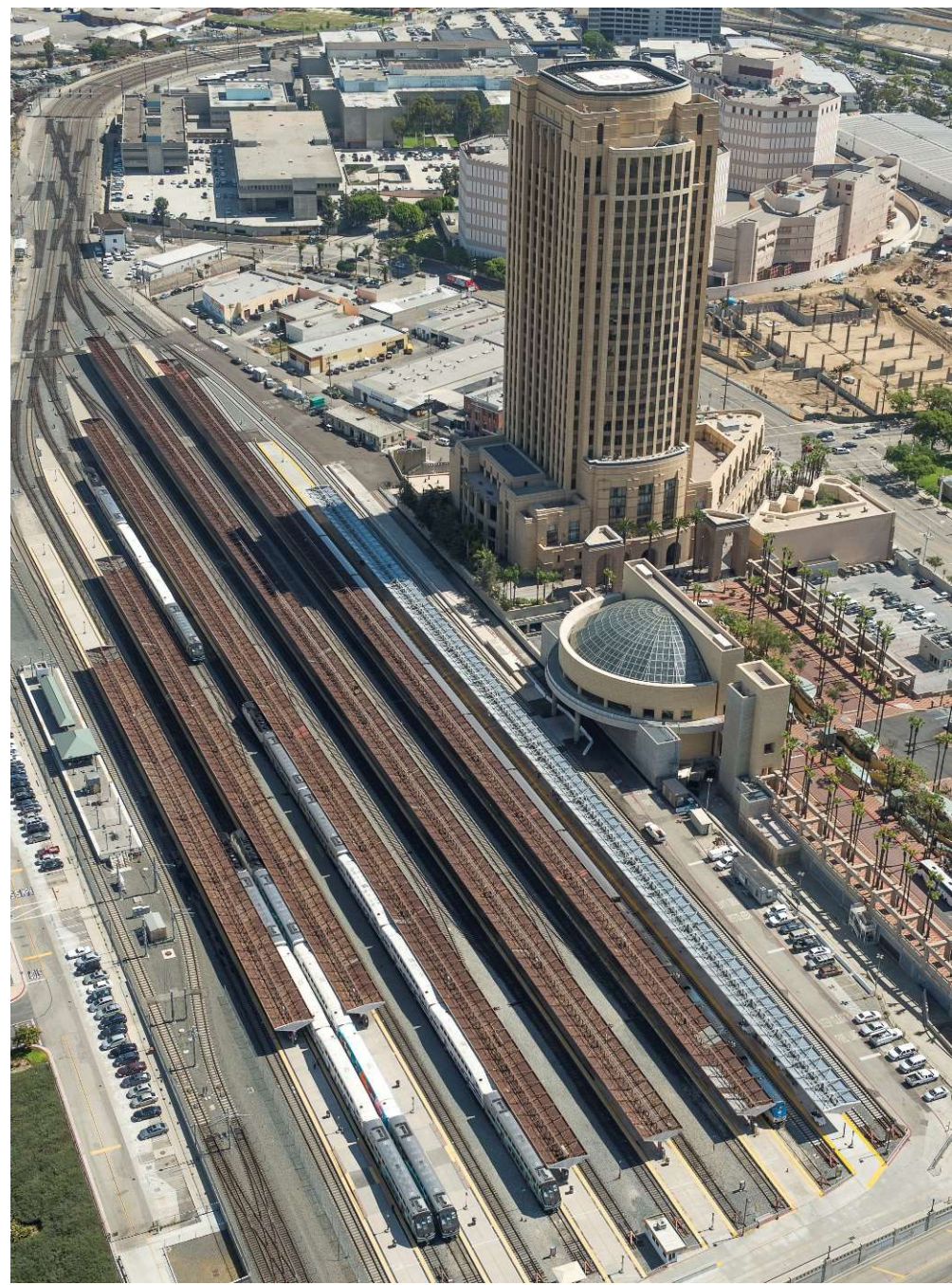
September 3, 2020



# Union Station - The Link to Southern California





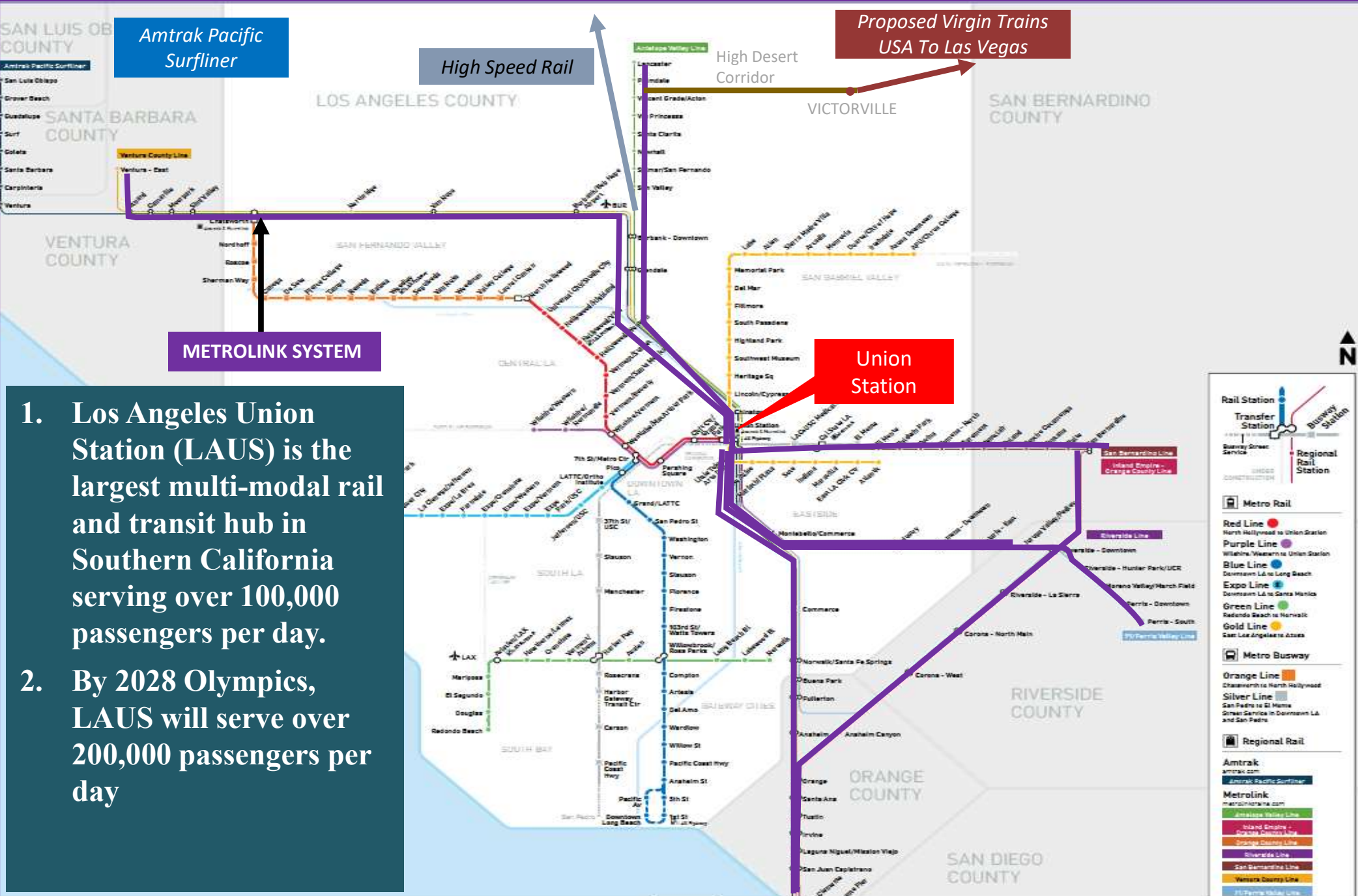


# Los Angeles Union Station Today

Built in 1939 | Largest model hub in Southern California



# Regional Rail Network Integration



1. Los Angeles Union Station (LAUS) is the largest multi-modal rail and transit hub in Southern California serving over 100,000 passengers per day.
2. By 2028 Olympics, LAUS will serve over 200,000 passengers per day

# Link US Project Anticipated Benefits

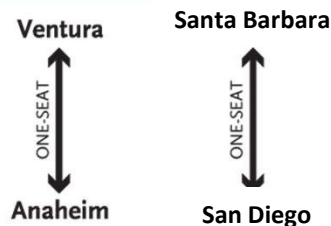
## What will Link US Provide?

### IMPROVE INTRASTATE, INTERCITY & LOCAL TRANSIT CONNECTIVITY



High-speed rail; Metrolink, Amtrak, Metro Rail; Metro and municipal bus systems; ridesharing

### IMPROVE REGIONAL CONNECTIVITY



One-seat rides to key destinations in Southern California

### INCREASE RAIL SERVICE CAPACITY



Accommodate future demand

### REDUCE TRAIN IDLING TIMES



Shorter wait times; fuel savings and emissions reductions per train

### FUTURE DEVELOPMENT



Opportunity for transit-oriented development

### GENERATE NEW JOBS



Estimated 4,500 temporary jobs per year over five-year period; 200+ permanent jobs

### IMPROVE PEDESTRIAN ACCESS



Enhanced mobility options and safety features

### ENHANCE PASSENGER EXPERIENCE



New concourse, retail and other amenities, and new expanded platforms

### IMPROVE US-101 & LOCAL ROADWAYS



Updated design and enhanced safety

# Link US Project Overview

## Regional Rail at Los Angeles Union Station

Carrier	Service	# of Weekday Passengers (2020)	# of Weekday Trains (2020)	Estimated Number of Weekday Trains (2040**)
Metrolink	Riverside	2,600	12	22
	91 / Perris Valley Line	2,288	11	23
	Antelope Valley	4,589	30	48
	Orange County	7,038	23	41
	San Bernardino	7,543	38	48
	Ventura	3,143	33	51
LOSSAN	Pacific Surfliner	5,116	26	38
Amtrak	Southwest Chief; Coast Starlight; Sunset Limited; [2040 includes future Coast Daylight, Coachella Valley]	540	5	9

40% increase

# Link US Project Overview

## One Seat Ride Benefits to LOSSAN

1. Reduce dwell times from 20 minutes (on average) to 10 minutes or less
2. Increased service capacity by 40%
3. Reduce overall running time
4. Improved on-time performance, schedule reliability and recovery from delay





# Link US Project Overview (Phases A & B)



## Phase A - Funded

### SEGMENT 1 – THROAT AREA

1. Rail signal, communications and track work
2. Utility relocation

### SEGMENT 2 – COMMERCIAL & CENTER ST

1. Property acquisition
2. Utility relocation
3. Street and ATP improvements

### SEGMENT 3 – VIADUCT & RUN-THROUGH

1. Viaduct structure over US-101 (full width) and south of US-101 to 1st Street.
2. Two run-through tracks from Union Station Platform 4 to mainline tracks
3. Signal and communication

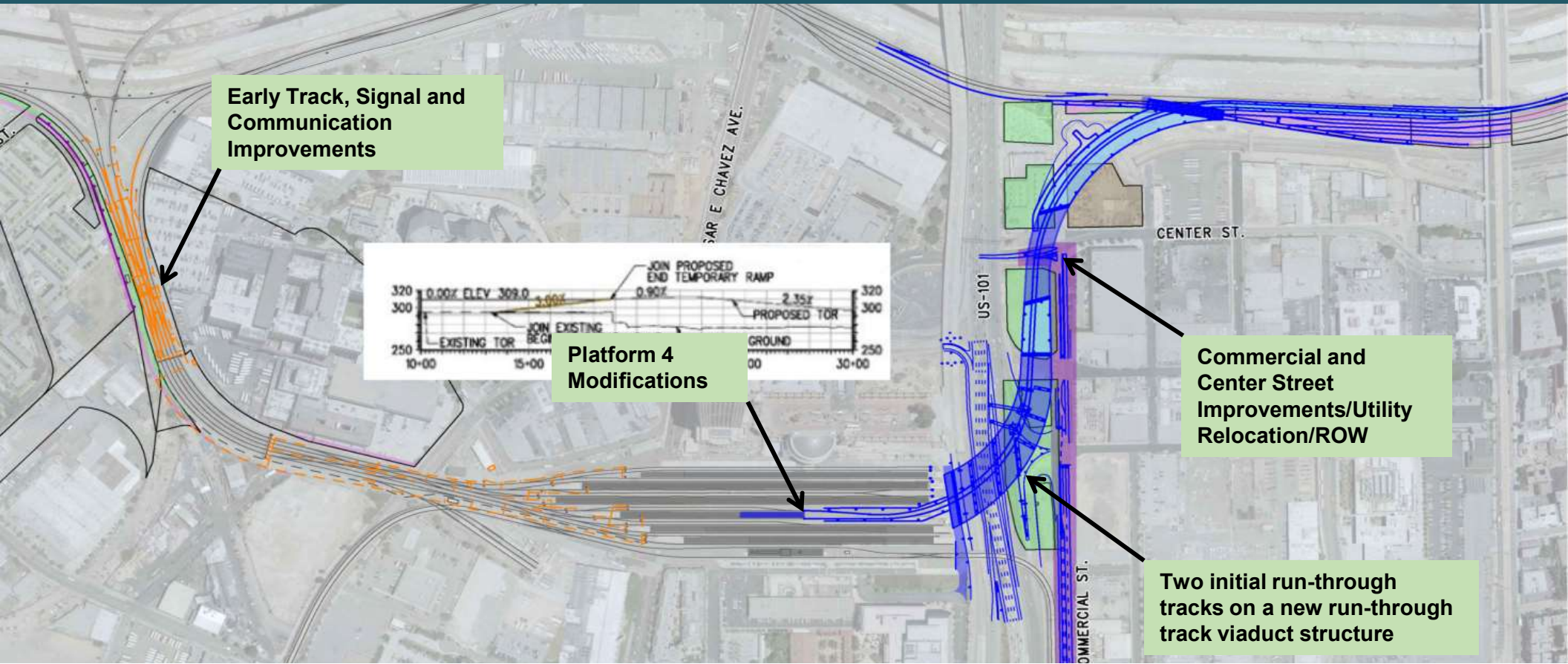
## Phase B - Not Funded

### SEGMENT 4 – RAIL YARD/CONCOURSE AREA

1. Raising of the rail yard, including new platforms and tracks, new stairs, escalators and elevators, and new bridges over Cesar Chavez Avenue and Vignes Street.
2. Proposed modified expanded passageway, including including East and West Plazas
3. Add remaining run-through tracks and new lead track in the throat



# Link US Phase A (Funded)



## Key Project Components

1. New rail communication, signals and early tracks to be performed by Metrolink
2. Utility relocation and street improvements
3. Platform #4 and Viaduct structure over the US 101 freeway



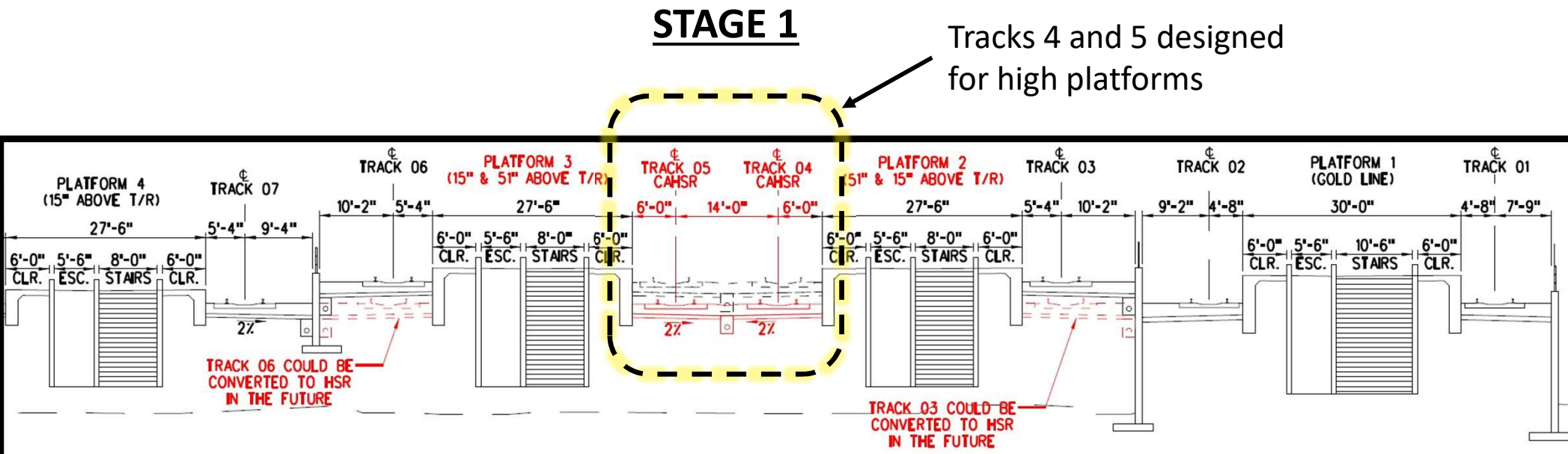
# Link US Phase B (Not Funded)

1. Raising of entire rail yard from the Vignes St Bridge by up to 15 feet
2. New platforms and expanded passageway with retail and passenger amenities including escalators and elevators to all platforms
3. Optimization of the throat with a new lead track
4. Completion of the remaining run-through tracks over US-101 freeway



# Phase B – HSR Accommodation

Concept of future HSR, Metrolink and Amtrak operations at Los Angeles Union Station



Concept Drawings – Subject to Change

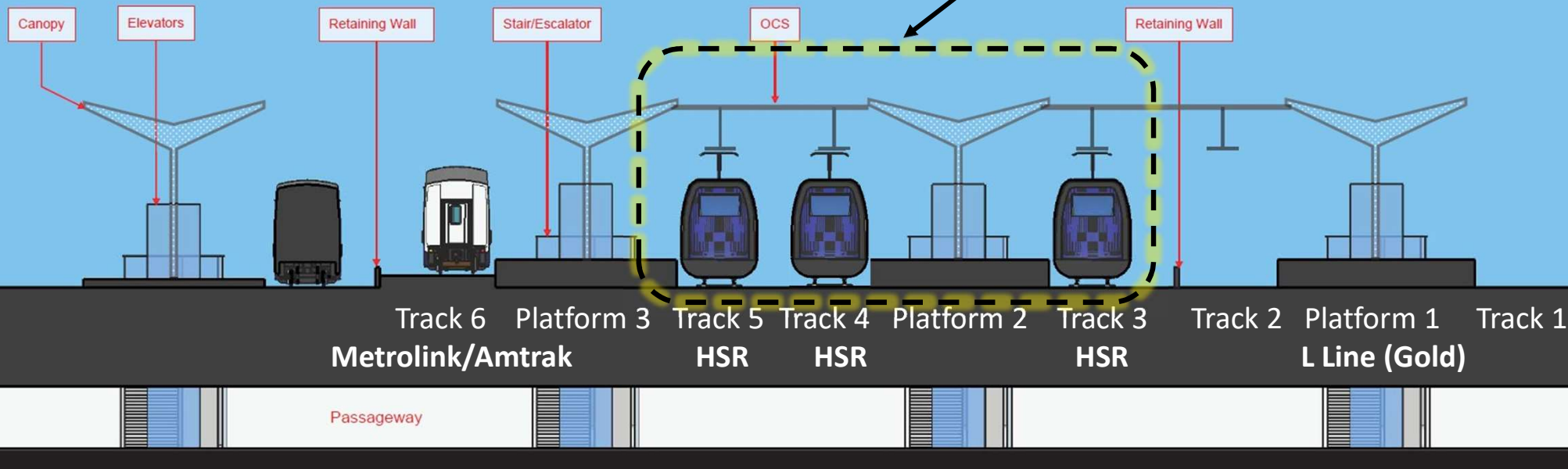
1. HSR trains begin operating on 2 tracks (Tracks 4 and 5), and share Platforms 2 and 3 with Metrolink and Amtrak trains.
2. Metrolink and Amtrak trains with 51-inch floor height could share tracks and platforms with HSR.
3. No modifications to elevators, escalators or stairs are needed in the future to accommodate HSR.

# Phase B - HSR Accommodation

Concept of future HSR, Metrolink and Amtrak operations at Los Angeles Union Station

## STAGE 2

Tracks 3, 4 and 5 designed for high platforms



Concept Renderings – Subject to Change

1. HSR trains operate on 3 tracks (Tracks 3, 4 and 5), uses Platform 2 and share Platform 3 with Metrolink and Amtrak trains.
2. Metrolink and Amtrak trains with 51-inch floor height could share tracks and platforms with HSR.

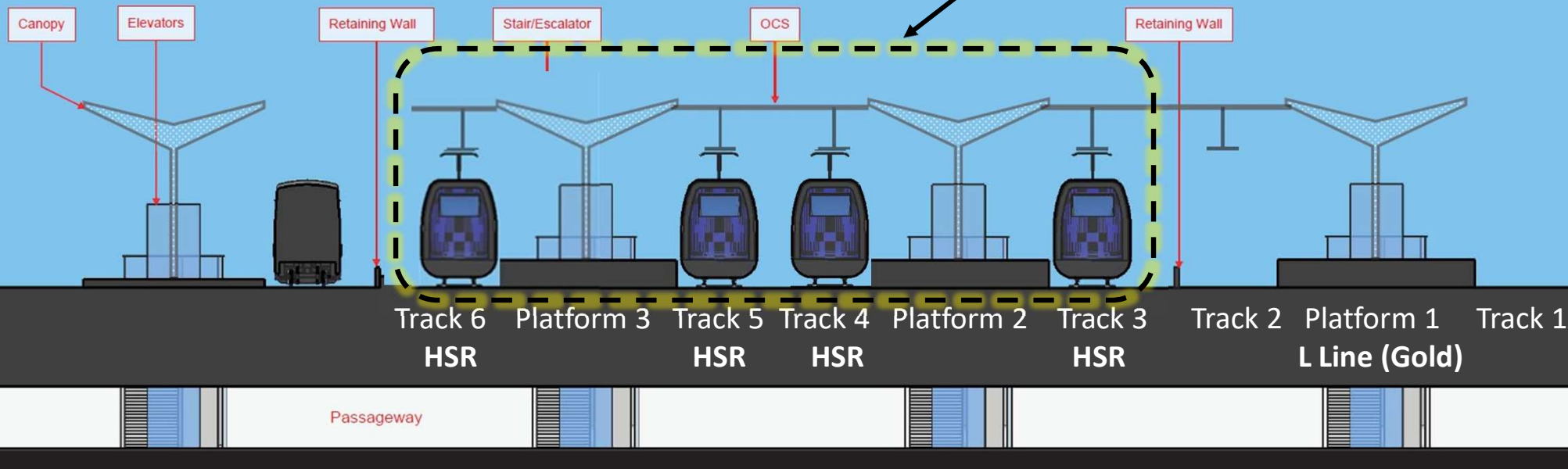


# Phase B - HSR Accommodation

Concept of future HSR, Metrolink and Amtrak operations at Los Angeles Union Station

## STAGE 3

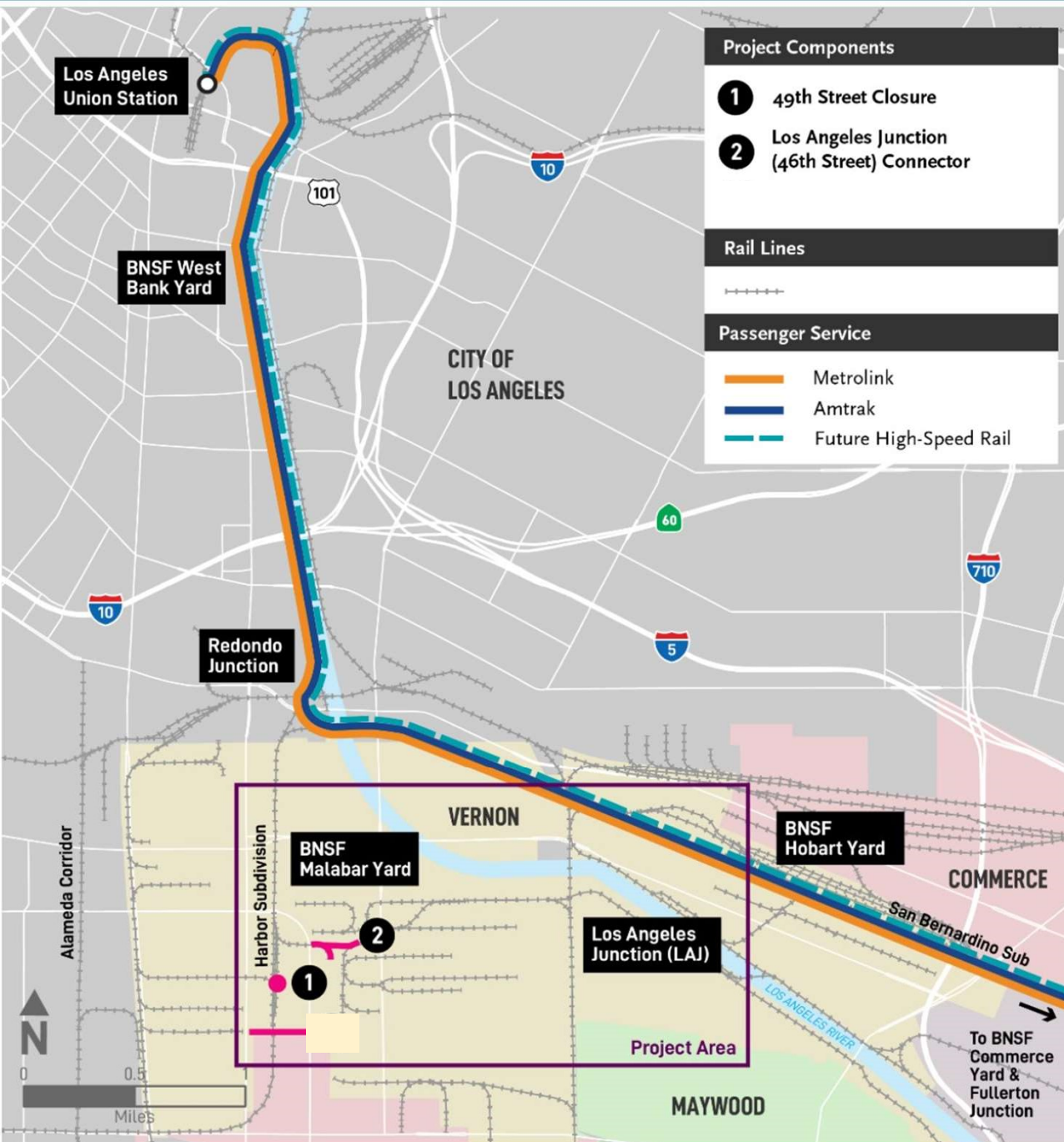
Tracks 3 to 6 designed for high platforms



Concept Renderings – Subject to Change

1. HSR trains operate on 4 tracks (Tracks 3 to 6), use Platforms 2 and 3.
2. Metrolink and Amtrak trains with 51-inch floor height could share tracks and platforms with HSR.

# Link US Project and BNSF Malabar Yard



1. The proposed Link US run-through tracks at **Los Angeles Union Station** will require removal and displacement of a portion of the storage tracks in the **BNSF West Bank Yard** located south of Los Angeles Union Station.
2. The proposed project at the BNSF Malabar Yard is to replace and offset the loss of storage capacity at the BNSF West Bank Yard, including:
  - A. 49<sup>th</sup> Street Closure
  - B. Los Angeles Junction (46<sup>th</sup> Street) Connector
3. The proposed Malabar Yard improvements support the preservation of both regional and local goods movement and related economic activity.

# Link US Environmental Clearance

## Completed Milestones To Date and Schedule for Completion California Environmental Quality Act (CEQA)

1. **Final Environmental Impact Report (EIR): Completed and Certified in June 2019**
2. **CEQA Addendum: in Progress through Spring 2021**
  - A. **Permanent BNSF Storage Track Removal at West Bank Yard**
  - B. **BNSF Malabar Yard Improvements (City of Vernon):**
    - ❖ **Closure of 49<sup>th</sup> Street At-Grade Railroad Crossing**
    - ❖ **New Track Connection along 46<sup>th</sup> Street**

## National Environmental Policy Act (NEPA)

1. **Notice of Intent (NOI) to prepare EIS released in May 2016**
2. **Revised NOI and Scoping Meeting: Summer/Fall 2020**
3. **Draft Environmental Impact Statement (EIS): Spring 2021**
4. **Final EIS/Record of Decision (ROD): Summer 2021**

# Link US Funding Plan (Phase A)

Funding Source	Amount (\$ in millions)
State Proposition 1A/High Speed Rail Bonds	\$423.335
State Transit Intercity Rail Capital Program (TIRCP)	\$337.571
State Transportation Improvement Program (STIP)	\$60.820
Measure R	\$51.672
SCRRA JPA Contribution (Non-Metro)	\$40.000
Other HSR Funds	\$18.726
Measure M	\$13.274
LOSSAN/Amtrak	\$5.000
<b>Total</b>	<b>\$950.398</b>

Metro's funding partners includes CHSRA, CalSTA and SCRRA



# Rail Multiple Unit (RMU) Pilot Program



\*Metrolink's Locomotive Haul Coach trains is better suited for AM/PM peak services, with 840 passengers per train using a blended approach with RMU trains (at 450 passengers) for the mid-day services.

## SCENARIO

**RMU Option \***  
Blended Metrolink + RMU service to Via Princessa

**AVERAGE FREQUENCIES**  
**ANTELOPE VALLEY LINE**

**15-minute**  
**bi-directional**  
**AVL**

**WEEKDAY ROUND TRIPS**

**37 Antelope Valley Line**  
 **16 Ventura County Line**  
 **9 Amtrak**  
 **35 RMU**

**ADDITIONAL IMPROVEMENTS**

1. Station mods at existing stations for RMUs
2. New RMU stations
3. Additional trains
4. North AVL Improvements
5. New RMU maintenance facility
6. Optional third track and station modifications to Glendale and Burbank-Downtown

**CAPITAL COSTS <sup>1</sup>**

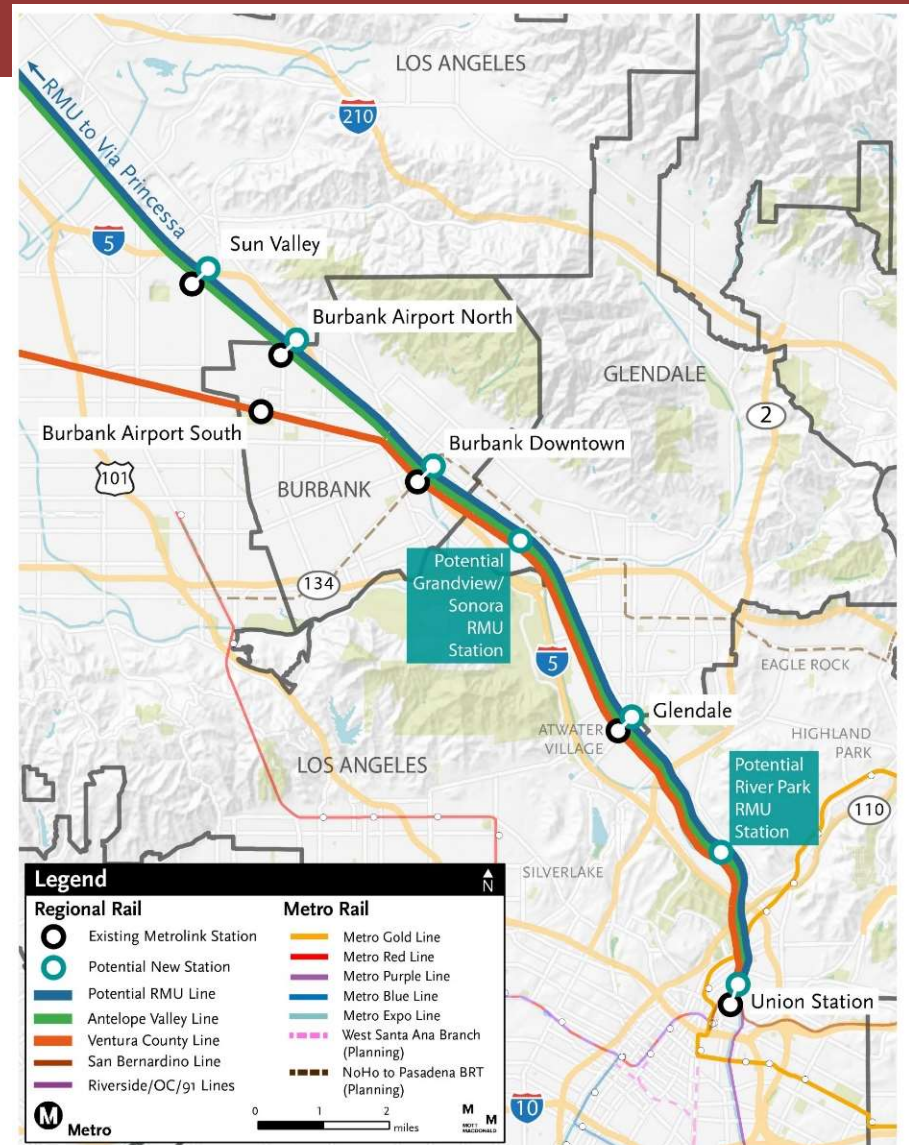
**\$849M**

**ANNUAL O&M COSTS <sup>1</sup>**

**\$30M**

**AVERAGE WEEKDAY BOARDINGS <sup>2</sup>**  
**2028 / 2042**


























**Metrolink and**  
 **RMU**  
**34,900 / 52,400**



<sup>1</sup> Costs reported in 2018 \$

<sup>2</sup> Ridership reflects AVL passengers only

# Metrolink AVL 30 Minute Service Vision

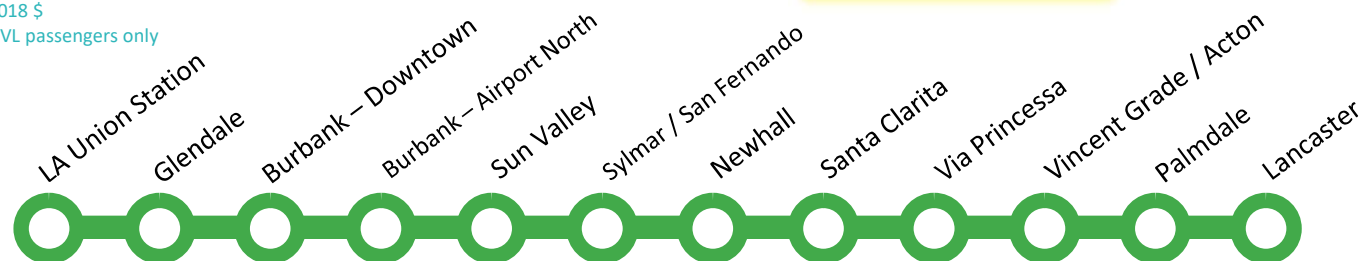
SCENARIO	Existing Conditions	M Option 1 Add 1 Evening Train Friday, Saturday	M Option 60 60-min Bi-directional	M Option 30 30-min Bi-directional	M Option 15 15-min Bi-directional
<b>AVERAGE FREQUENCIES ANTELOPE VALLEY LINE</b>	 Peak Direction 25-55 minutes Off Peak Direction 60-90 minutes	 Peak Direction 25-55 minutes Off Peak Direction 60-90 minutes	 60-minute bi-directional AVL	 30-minute bi-directional AVL	 15-minute bi-directional AVL
<b>WEEKDAY ROUND TRIPS</b>	 15 Antelope Valley Line  16 Ventura County Line  6 Amtrak	 16 Antelope Valley Line  16 Ventura County Line  6 Amtrak	 18 Antelope Valley Line  16 Ventura County Line  9 Amtrak	 36 Antelope Valley Line  16 Ventura County Line  9 Amtrak	 74 Antelope Valley Line  16 Ventura County Line  9 Amtrak
<b>ADDITIONAL IMPROVEMENTS</b>	None	None	1. Double Track near Balboa Tunnel	1. Additional trains 2. North AVL Improvements	1. Additional train 2. North AVL Improvements 3. Optional third track and station modifications to Glendale and Burbank-Downtown
<b>CAPITAL COSTS<sup>1</sup></b>	None	None	\$42M	\$175.2M	\$760 M
<b>ANNUAL O&amp;M COSTS<sup>1</sup></b>	\$34.5M	\$35.4M	\$38.5M	\$45.5M	\$68.8M
<b>AVERAGE WEEKDAY BOARDINGS<sup>2</sup> 2028 / 2042</b>	 Metrolink 16,500 / 36,000	 Metrolink 16,500 / 36,400	 Metrolink 15,600 / 38,100	 Metrolink 22,800 / 41,600	 Metrolink 38,000 / 59,200

<sup>1</sup> Costs reported in 2018 \$

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**Metro**





# SCORE

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Expansion



**SCORE - LOSSAN North Corridor Improvements – September 2020**

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Expansion**

VENTURA  
CO.

LOS ANGELES  
CO.

## Rail Network

- 91/Perris Valley
- Antelope Valley
- Inland Empire-Orange County
- Orange County
- Riverside
- San Bernardino

-  Ventura County
-  Amtrak Pacific Surfliner
-  Redlands Passenger Rail Project (Arrow)
-  SCORE Phase 1 Projects

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MAP NOT TO SCALE

**METROLINK®**

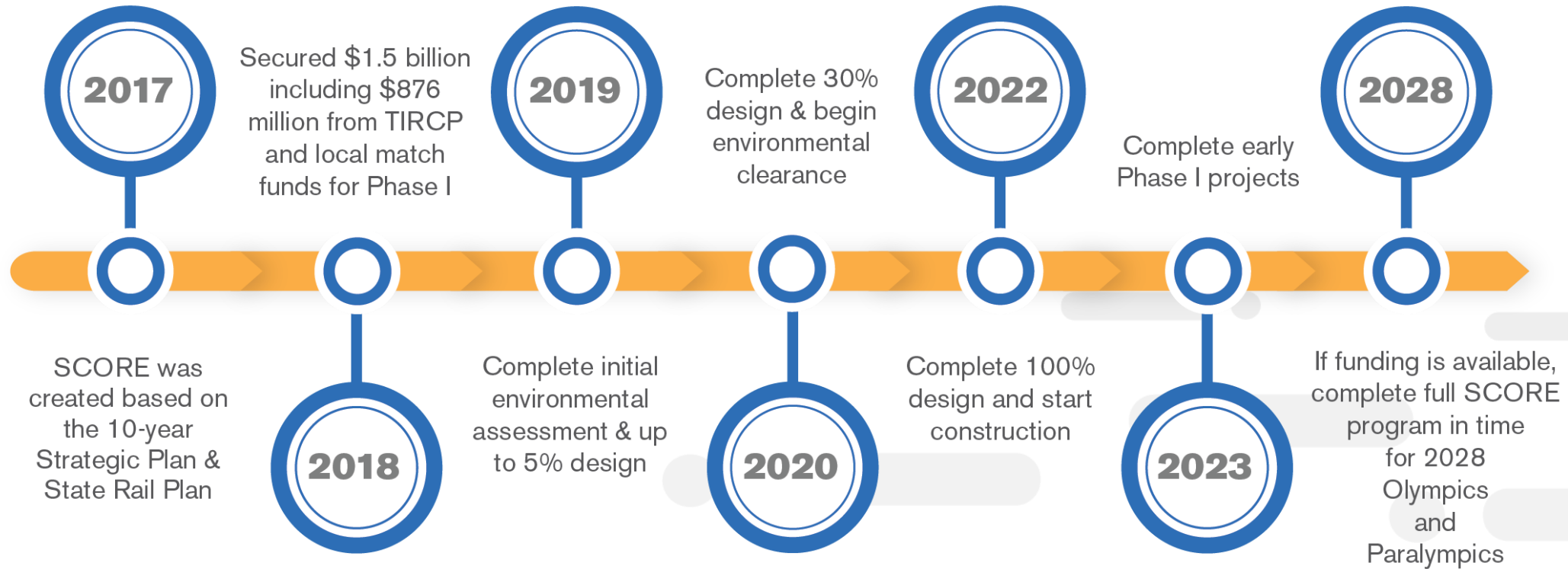




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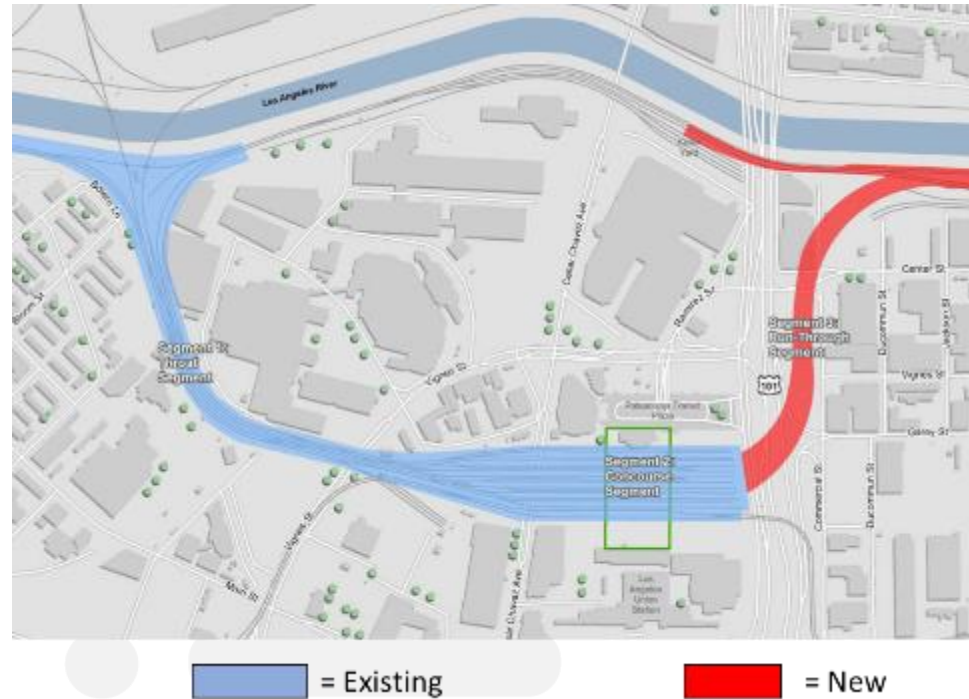
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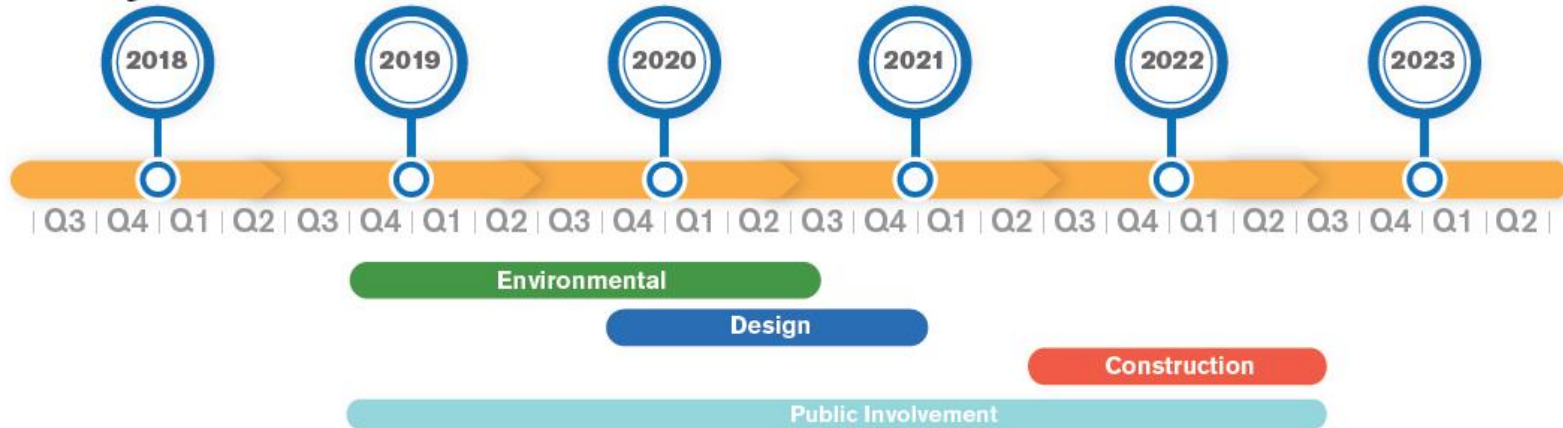


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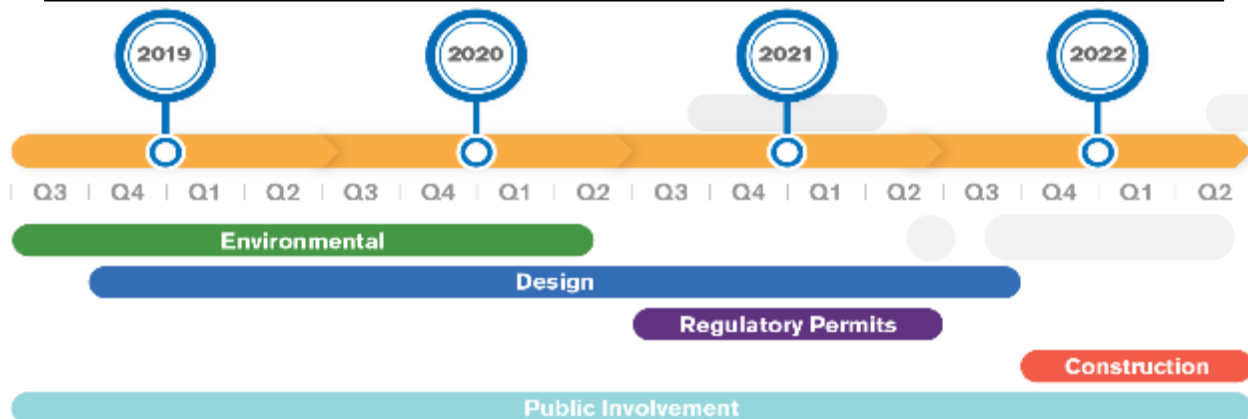
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# THANK YOU

GET MORE WITH SCORE

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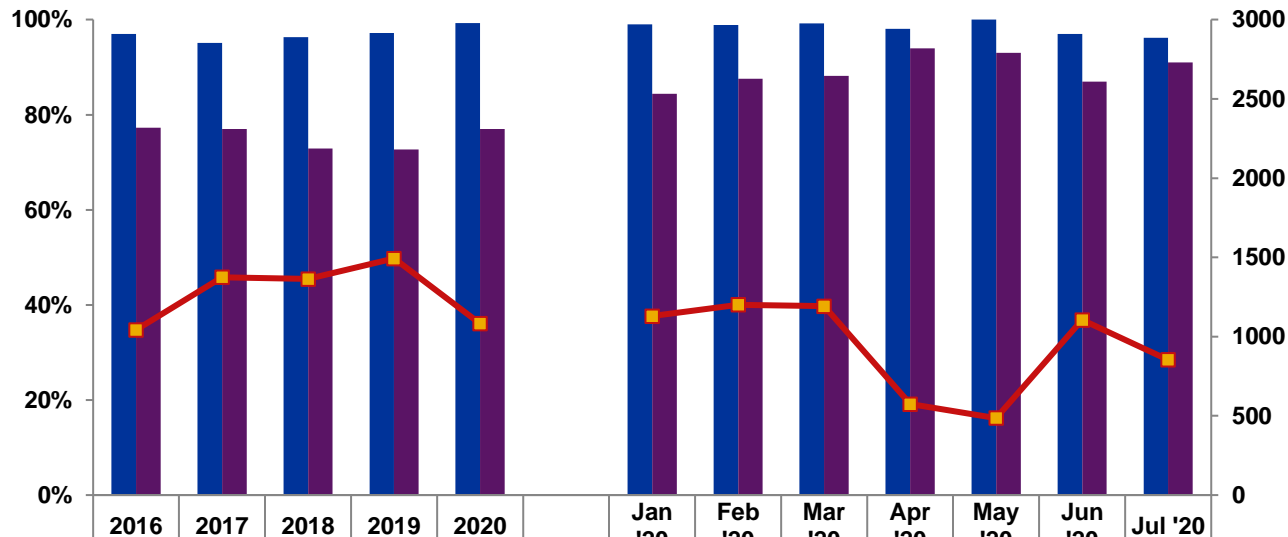
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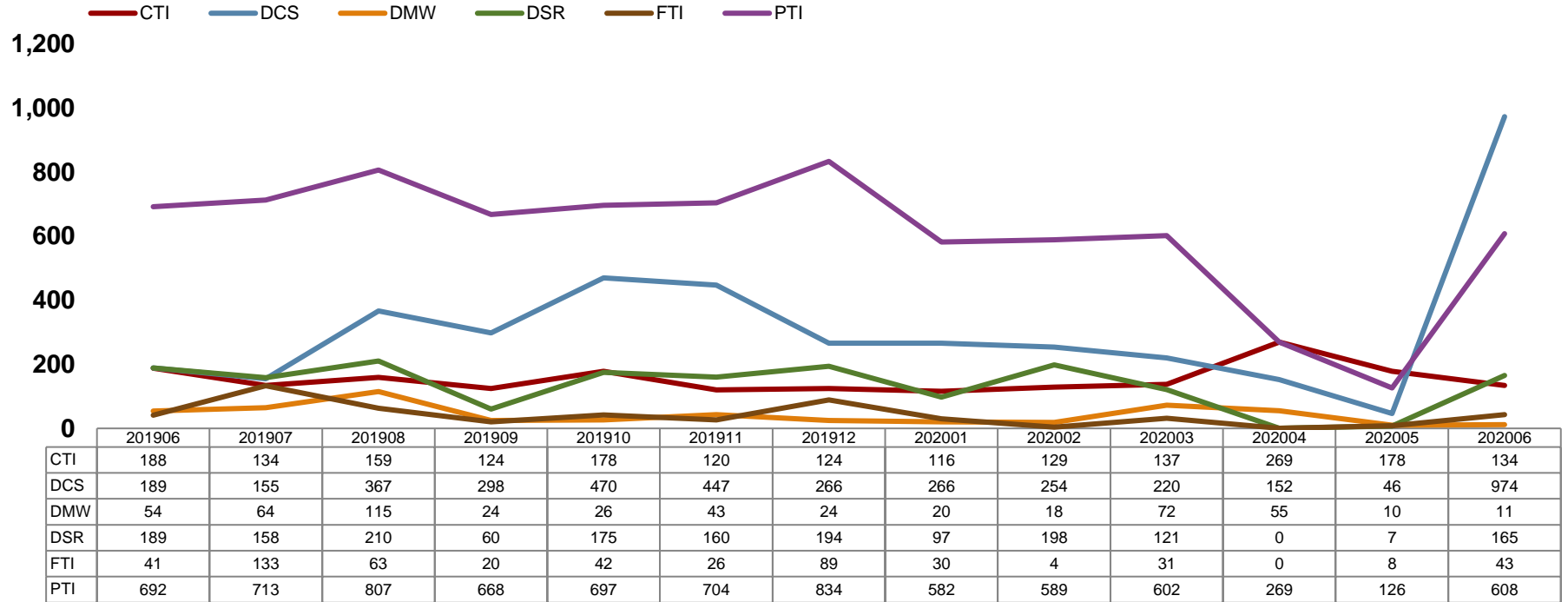
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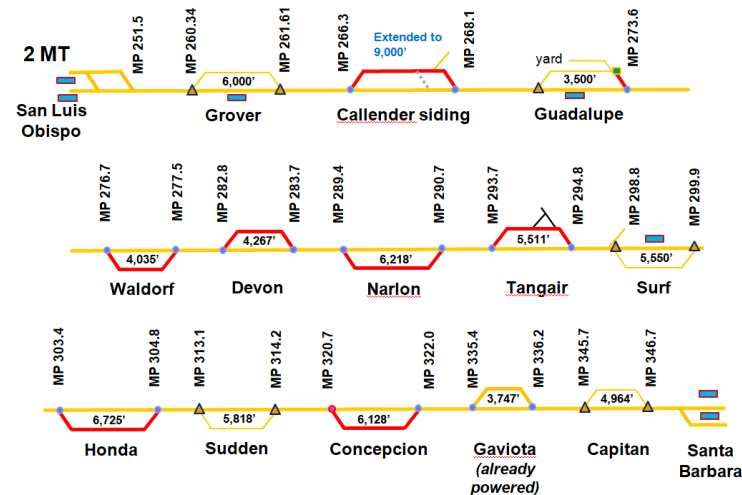
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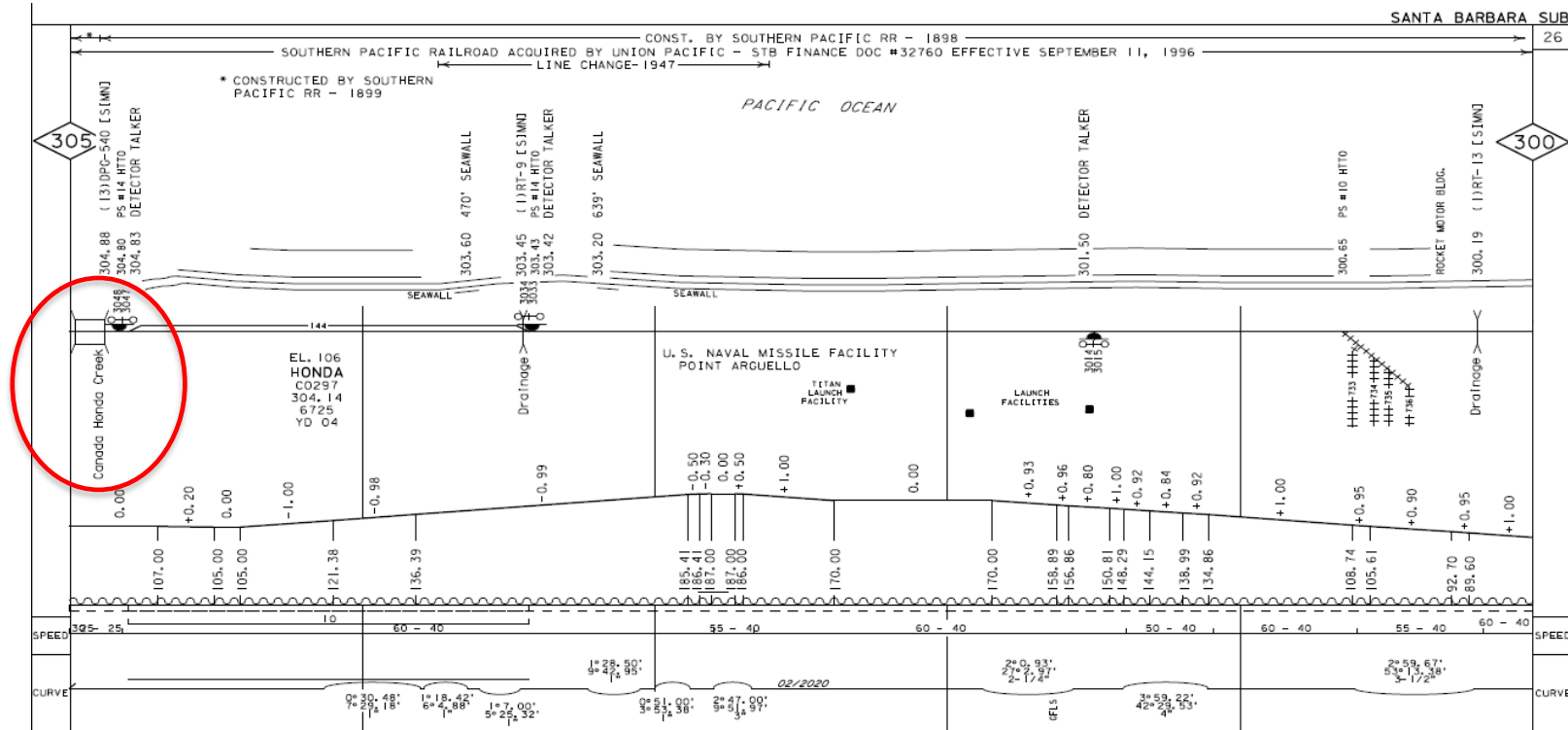


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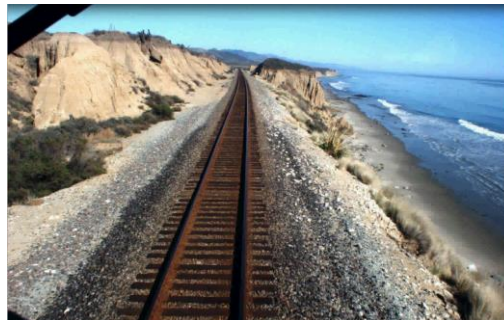


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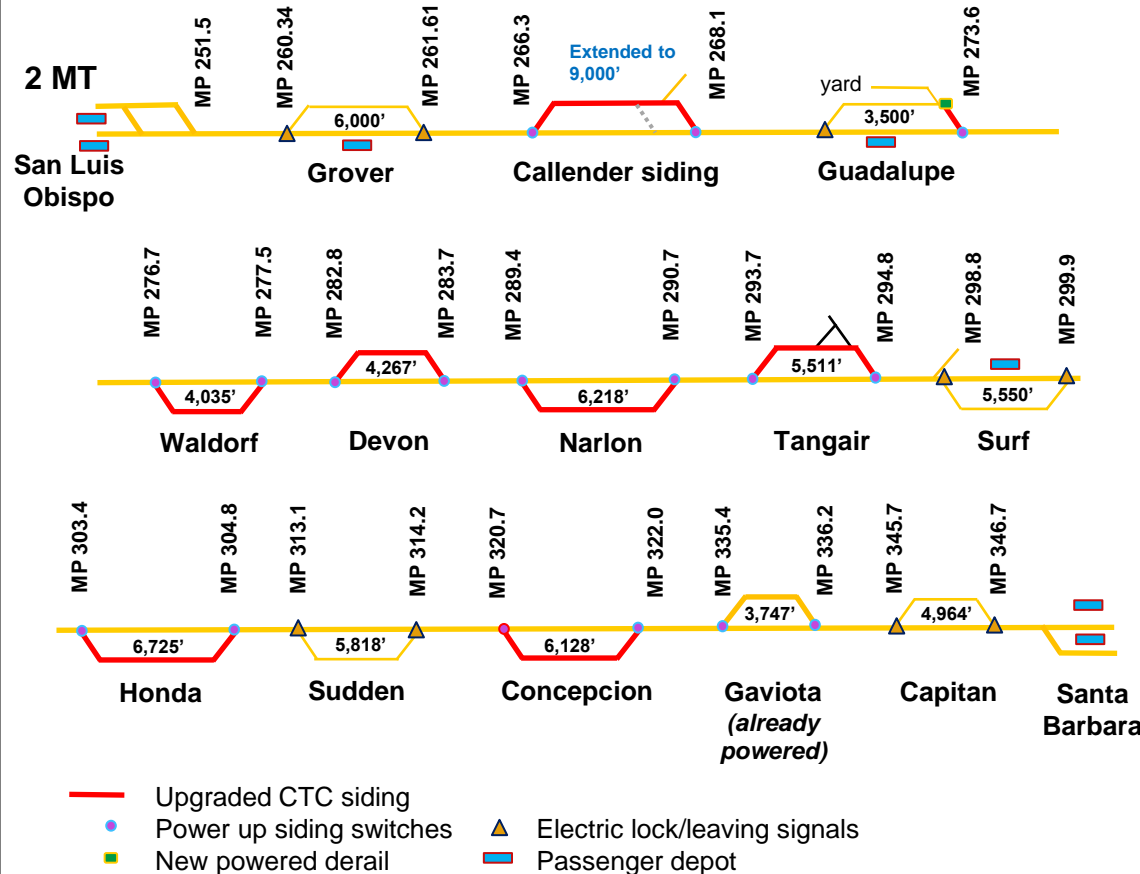
# Capacity & Infrastructure Projects





# Santa Barbara Sub north – CTC key sidings

Retain other sidings for future use



- Power up 7 of 12 sidings
  - Key Passenger train meet locations (Waldorf, Devon, Tangair)
  - Longer sidings for freight train meets (Honda, Narlon, Concepcion)
  - 1 additional siding (Callender) to break up long 25-mile stretch between San Luis Obispo & first CTC siding. Power up far south switch on lead and siding becomes 9,000'
- Power up switch & add power derail at south end of Guadalupe yard – clear main track faster
- Install electric locks/leaving signals on remaining sidings to preserve for future use

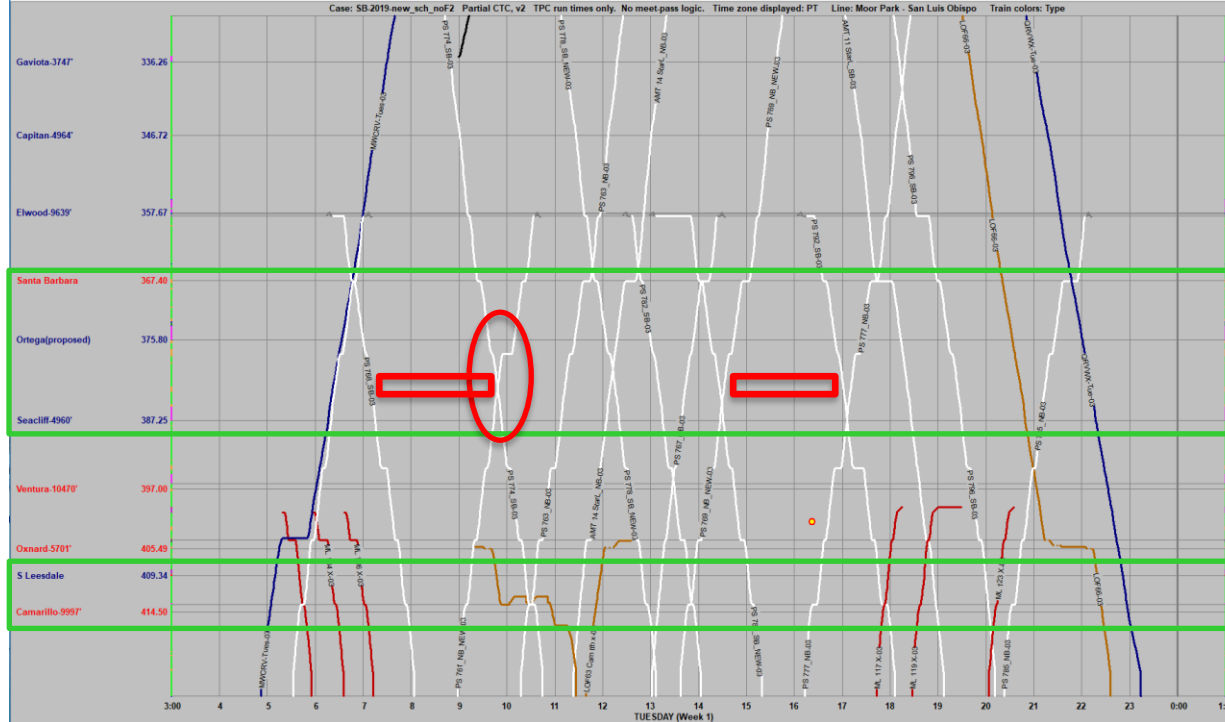


## Retire “mid-siding” crossover

- Create ~9,000' clear siding by renewing south end (currently a lead track) and incorporating into siding
- Allows for long train meets (>8,000') where none exist now. Approximate midpoint between San Luis Obispo terminal and next siding >6,000'
- Retire crossover which currently serves as end of siding

# Bottleneck analysis

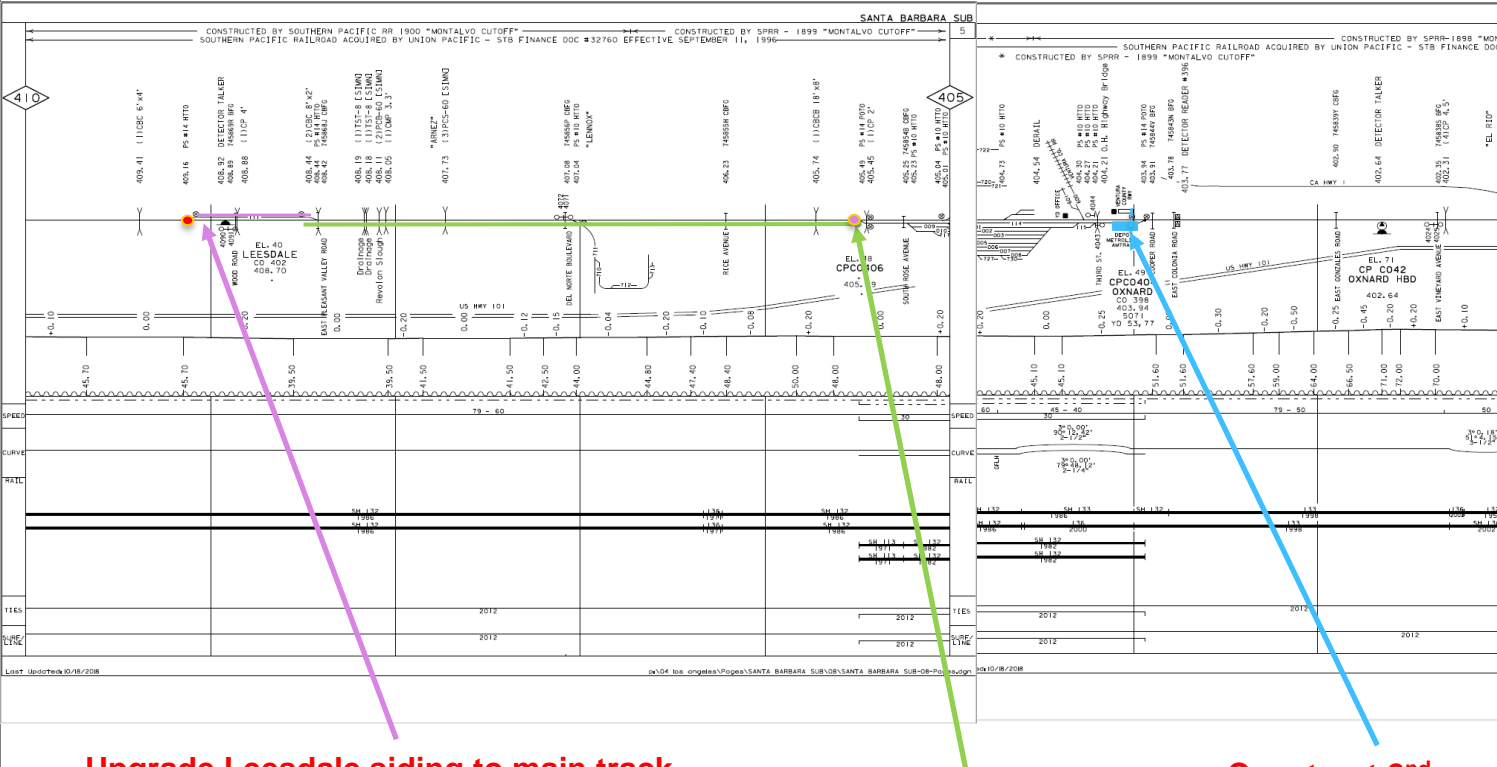
2 areas to resolve: Ventura-Santa Barbara, Moorpark-Oxnard



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



# Oxnard-Leesdale 2MT and 2<sup>nd</sup> platform

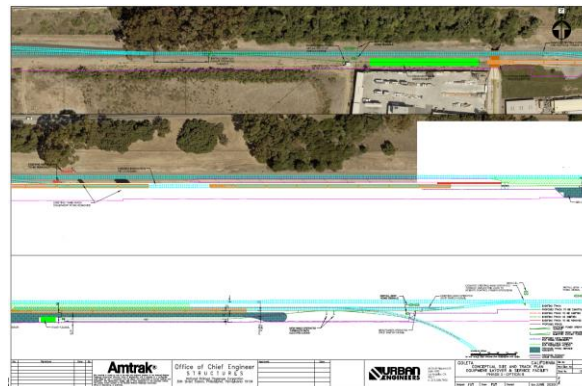
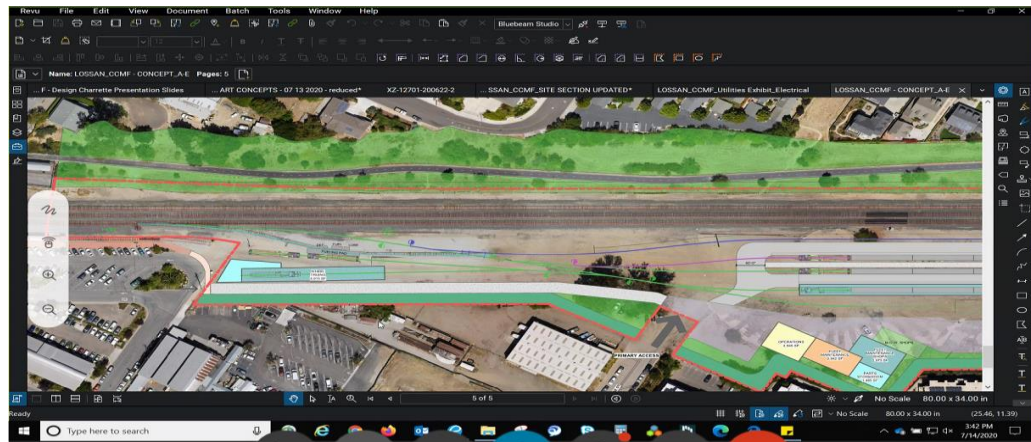


# Surfliner Layover Facilities

*New/expanded facilities to accommodate growth*



- Expand San Luis Obispo temporary facility: 6-8 months' timeline
  - Accommodate 2<sup>nd</sup> 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



# Questions?

A photograph of three Union Pacific employees standing together. On the left is a man wearing an orange hard hat, safety glasses, and an orange safety vest over a grey shirt. In the center is a woman with her arms crossed, wearing a red top and grey pants. On the right is a man wearing a white hard hat, safety glasses, and a black t-shirt. A small Union Pacific logo is in the top right corner of this section.

**OUR MISSION**  
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!



# SCORE

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**SCORE - LOSSAN North Corridor Improvements – September 2020**



# SCORE

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## PHASE I

### SCORE: Funded Projects

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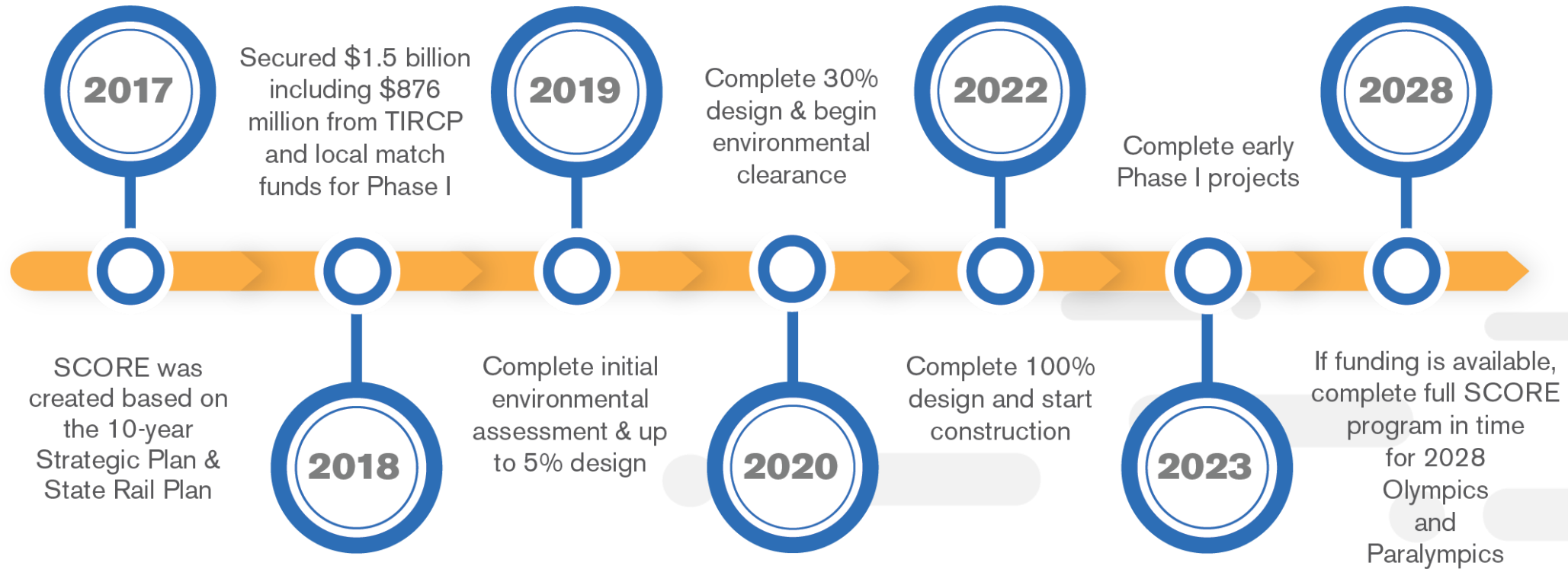
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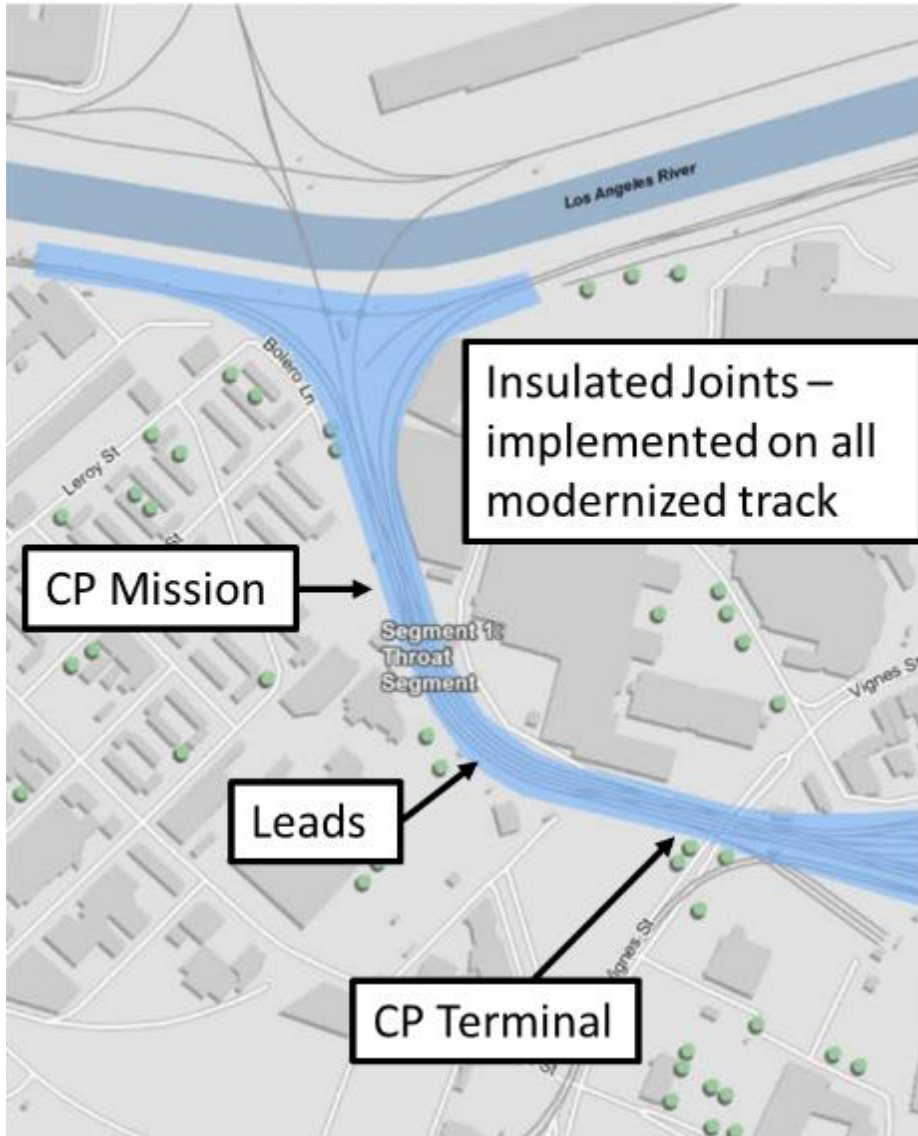
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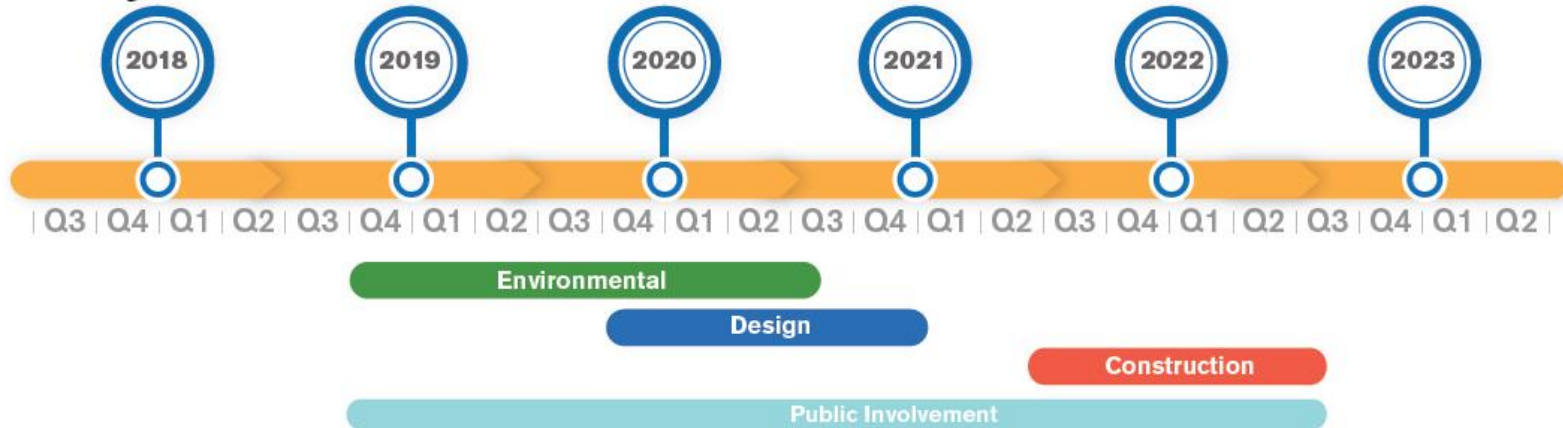
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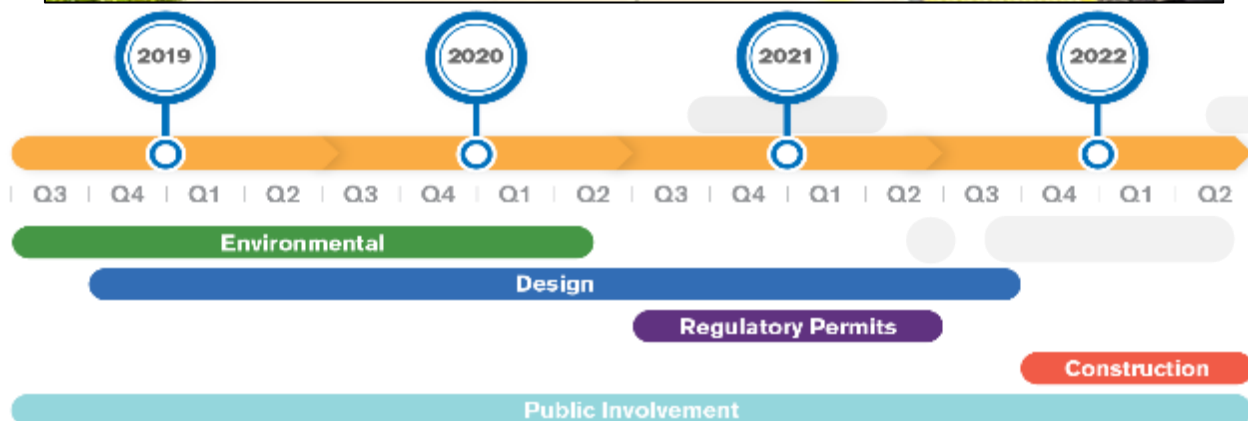
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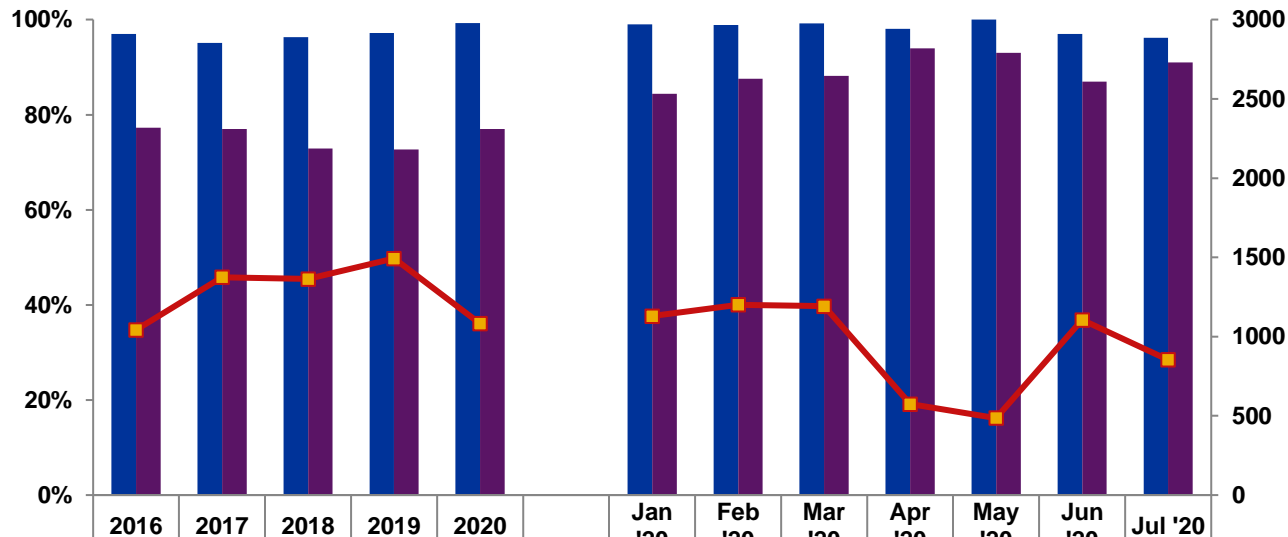
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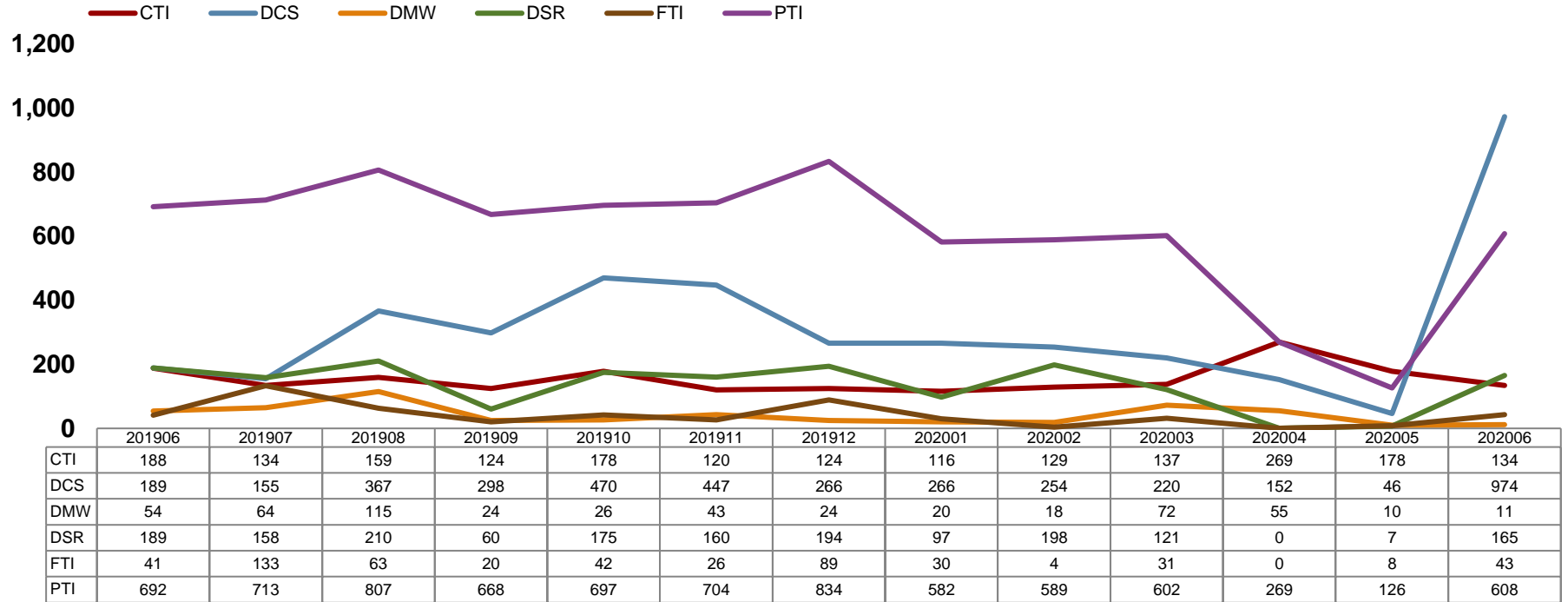
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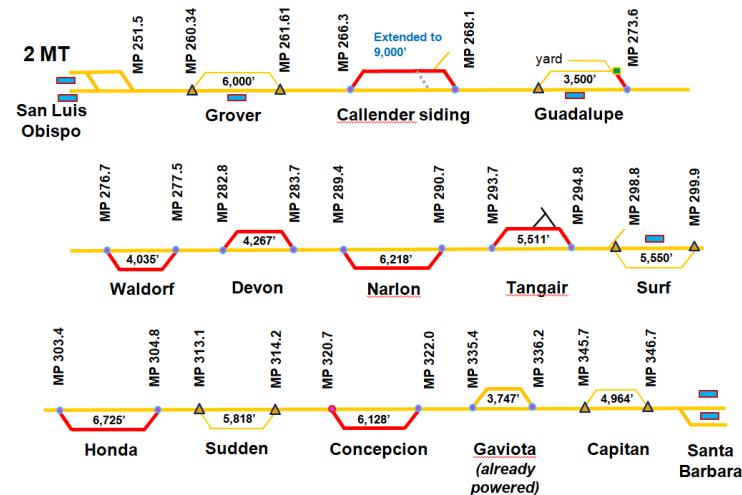
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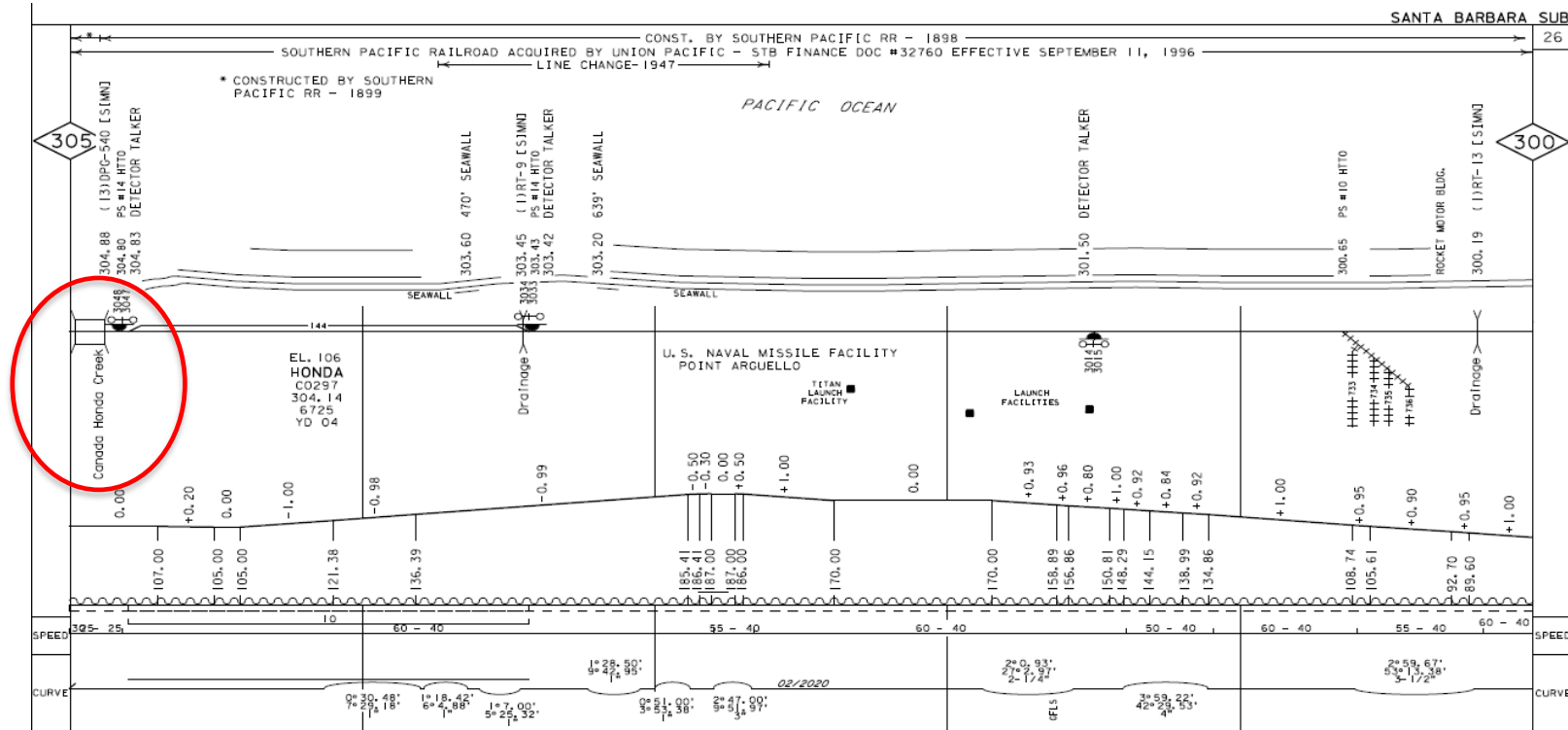


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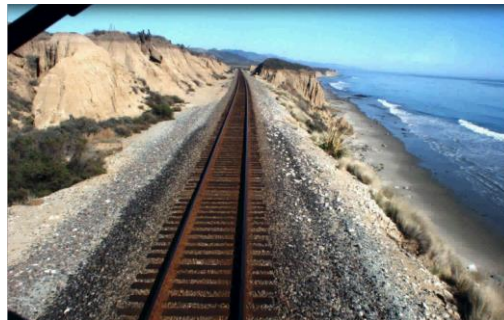


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- **Fiber optic lines**
  - Various locations

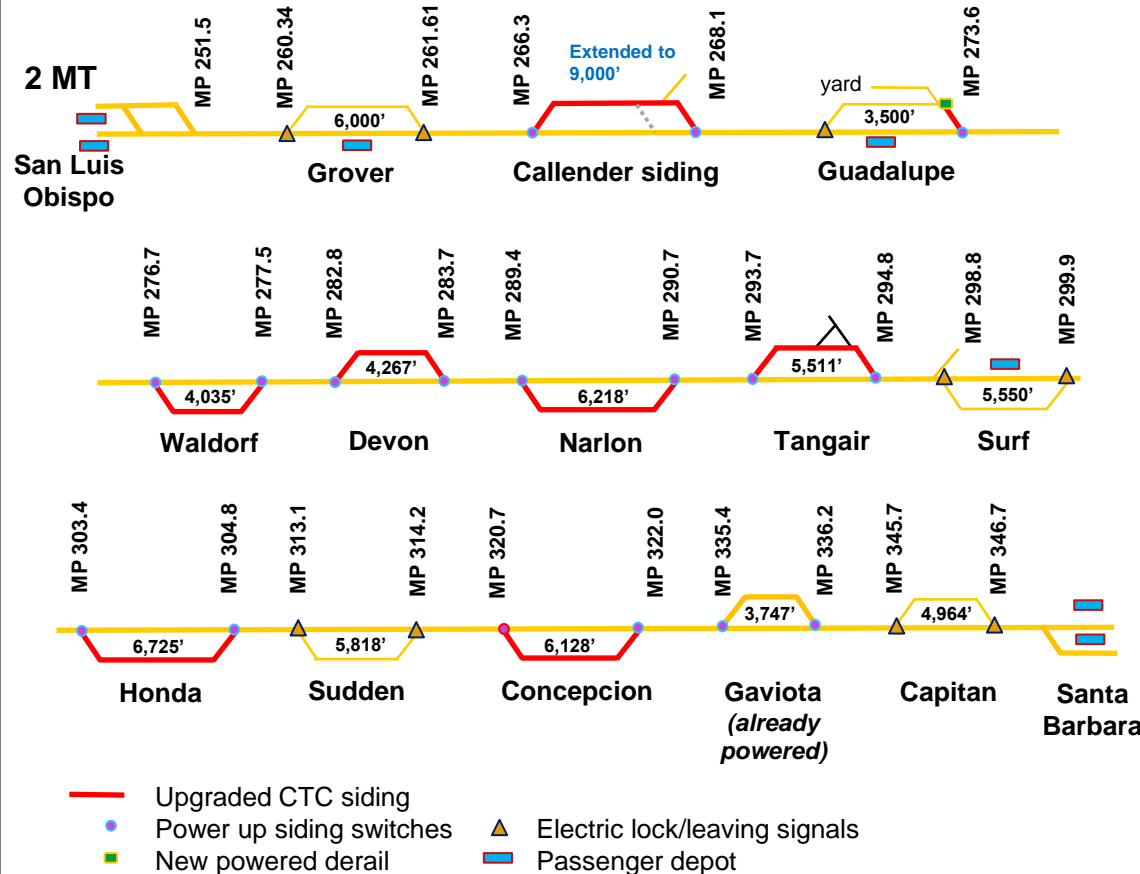


# Capacity & Infrastructure Projects



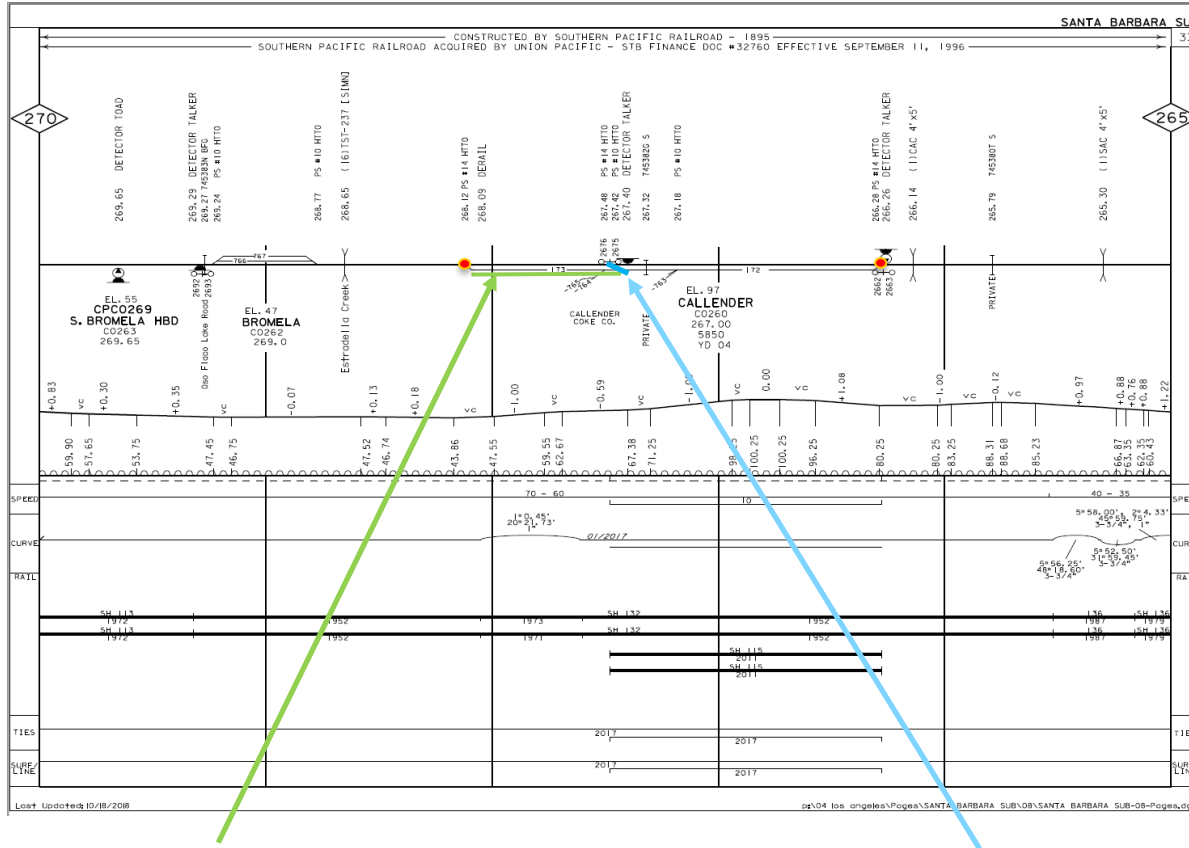
# Santa Barbara Sub north – CTC key sidings

Retain other sidings for future use



- Power up 7 of 12 sidings
  - Key Passenger train meet locations (Waldorf, Devon, Tangair)
  - Longer sidings for freight train meets (Honda, Narlon, Concepcion)
  - 1 additional siding (Callender) to break up long 25-mile stretch between San Luis Obispo & first CTC siding. Power up far south switch on lead and siding becomes 9,000'
- Power up switch & add power derail at south end of Guadalupe yard – clear main track faster
- Install electric locks/leaving signals on remaining sidings to preserve for future use

# Callender siding extension and power-up



- Create ~9,000' clear siding by renewing south end (currently a lead track) and incorporating into siding
- Allows for long train meets (>8,000') where none exist now. Approximate midpoint between San Luis Obispo terminal and next siding >6,000'
- Retire crossover which currently serves as end of siding

Convert lead into extended siding

Retire "mid-siding" crossover

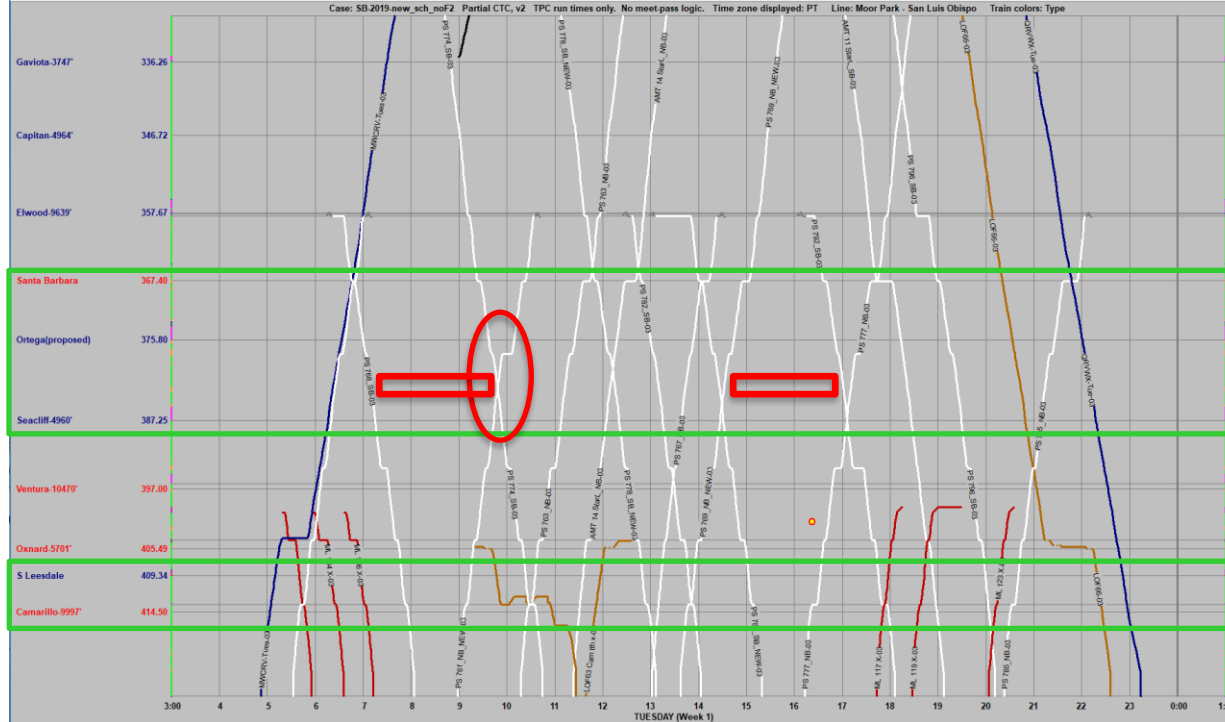
9/3/2020

14



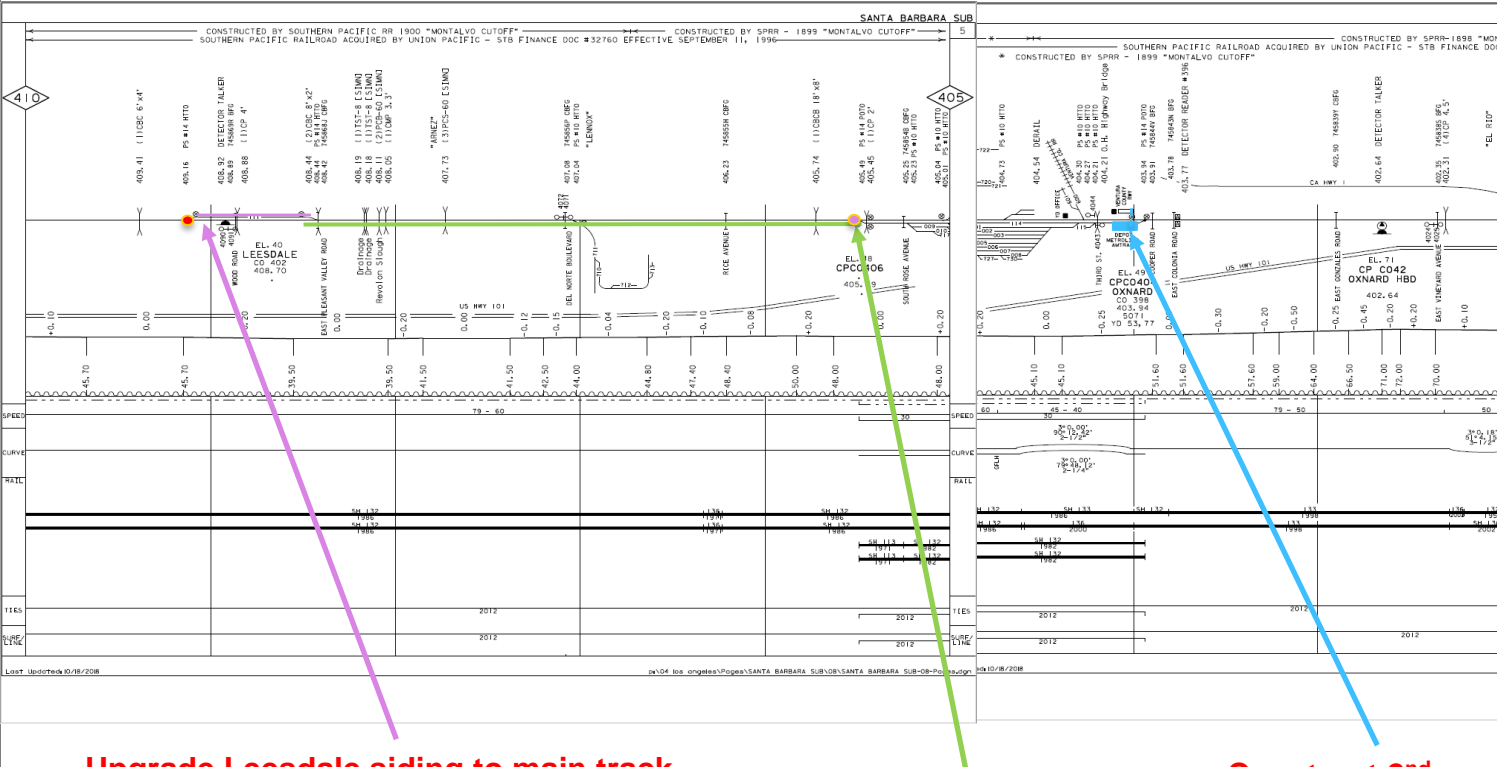
# Bottleneck analysis

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



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

# Oxnard-Leesdale 2MT and 2<sup>nd</sup> platform

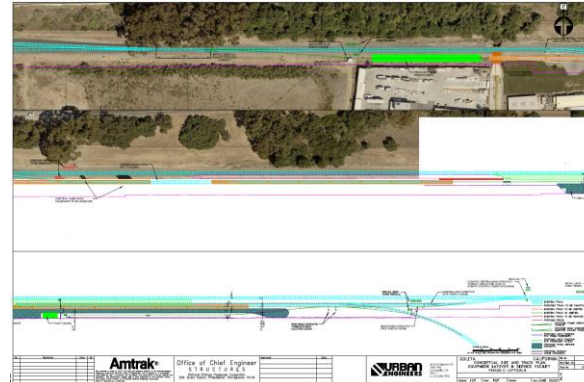
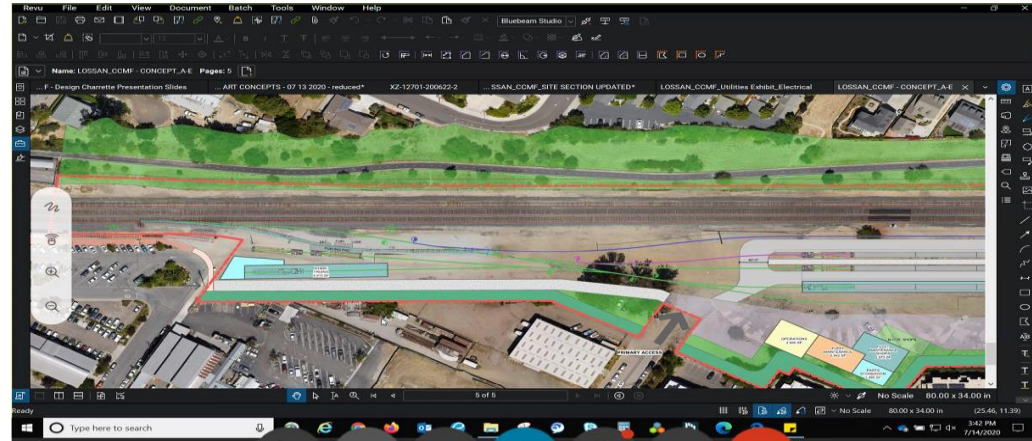


# Surfliner Layover Facilities

*New/expanded facilities to accommodate growth*



- Expand San Luis Obispo temporary facility: 6-8 months' timeline
  - Accommodate 2<sup>nd</sup> 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



# Questions?



A photograph of three Union Pacific employees standing together. On the left is a man wearing an orange hard hat, safety glasses, and an orange safety vest over a grey shirt. In the center is a woman with her arms crossed, wearing a red top and grey pants. On the right is a man wearing a white hard hat, safety glasses, and a black t-shirt. A small Union Pacific logo is in the top right corner of the image.

**OUR MISSION**  
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!





# The LOSSAN Optimization Study

Update and material preview to TAC members

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LOSSAN Rail Corridor Agency | September 3<sup>rd</sup>, 2020

# Management Summary



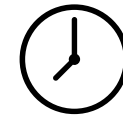
- The LOSSAN Optimization Study leads the way to a premier, customer-focused and integrated passenger rail system
- The Study has developed a roadmap of optimized and integrated service plans through 5 tasks
- New schedules will deliver services that are simple to market, easier to operate and which drive transparent investment needs
- Operators can access new markets through a system that offers anywhere-to-anywhere travel
- Train slot regularization provides connections-by-design at transfer stations on the LOSSAN Corridor
- Agencies will have a catalog of train paths that can be activated to tailor supply to demand
- Identified infrastructure investments are linked to service outcomes and are prioritized on operating needs
- Proposed recommendations will transform passenger rail in Southern California through three phases
- In the long-term, the study leverages regional plans to meet 2018 State Rail Plan Goals
- In the mid-term, the study recommends prioritizing key projects to support service growth
- To implement the study's near-term service improvements, agencies must plan and agree on a day-to-day operating plans collectively



# The LOSSAN Optimization Study leads the way to a premier, customer-focused and integrated passenger rail system



## Passenger services are restructuring:



Peak-focused with gaps



Frequent all-day



Irregular, duplicated



Regular-repeating



Corridor focused



Network connected



Uncoordinated planning



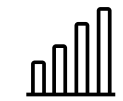
Joint planning



Frequent schedule changes



Consistent schedules with rare changes











Uncertain incremental growth



Step change expansion

Map tiles by Carto under CC BY 3.0. Data by OpenStreetMap, under ODbL.

# The LOSSAN Optimization Study has developed a roadmap of optimized and integrated service plans through 5 tasks

Task	Activities			Status	
1		Review and document current operations	»	Reviewed prior initiatives, current infrastructure and operating state to inform the study	 Complete
2		Engage our stakeholders	»	Hold operator meetings with Amtrak, BNSF, Metrolink, NCTD and UPRR at project milestones	 Final operator meeting in Sept
3		Develop optimized and integrated service and operating scenarios	»	3 concepts were developed iteratively to expand service to 2028 (see subsequent slides)	 Final review
4		Capital project review & Plan development	»	Necessary capital projects have been identified and prioritized	 Documentation
5		Cost and revenue options	»	A report on cost and revenue sharing for passenger rail services operating on the LOSSAN rail corridor is available	 Complete



# New schedules will deliver services that are simple to market, easier to operate and which drive transparent investment needs



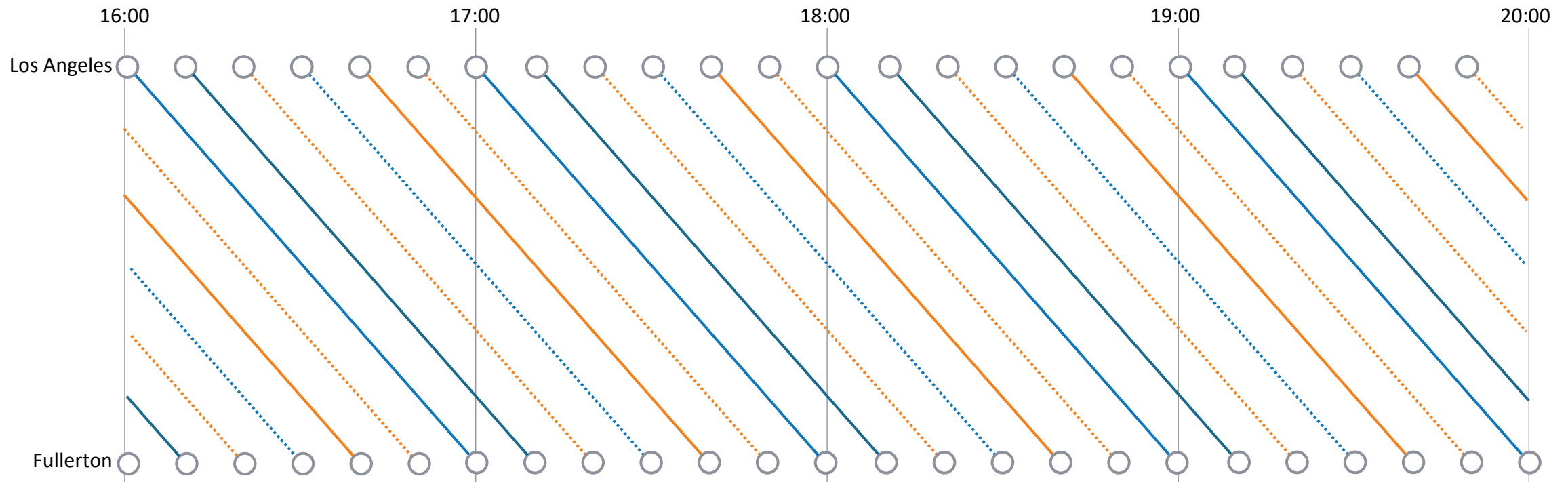
## Benefits of pulse schedules

<b>Service</b>	<b>Anywhere to anywhere connectivity</b>		<ul style="list-style-type: none"><li>– Simple to market</li><li>– Attracts diverse types</li><li>– Leads to increased revenue</li></ul>
<b>Operations</b>	<b>Repetitive, consistent operations</b>		<ul style="list-style-type: none"><li>– Increased equipment productivity</li><li>– Increased crew productivity</li><li>– Easier to operate and dispatch</li></ul>
<b>Infrastructure</b>	<b>Service driven investments</b>		<ul style="list-style-type: none"><li>– Provides schedule consistency</li><li>– Improved recovery from disruptions</li><li>– Investments linked to operating needs</li></ul>

# Agencies will have a catalog of train paths that can be activated to tailor supply to demand

Illustrative

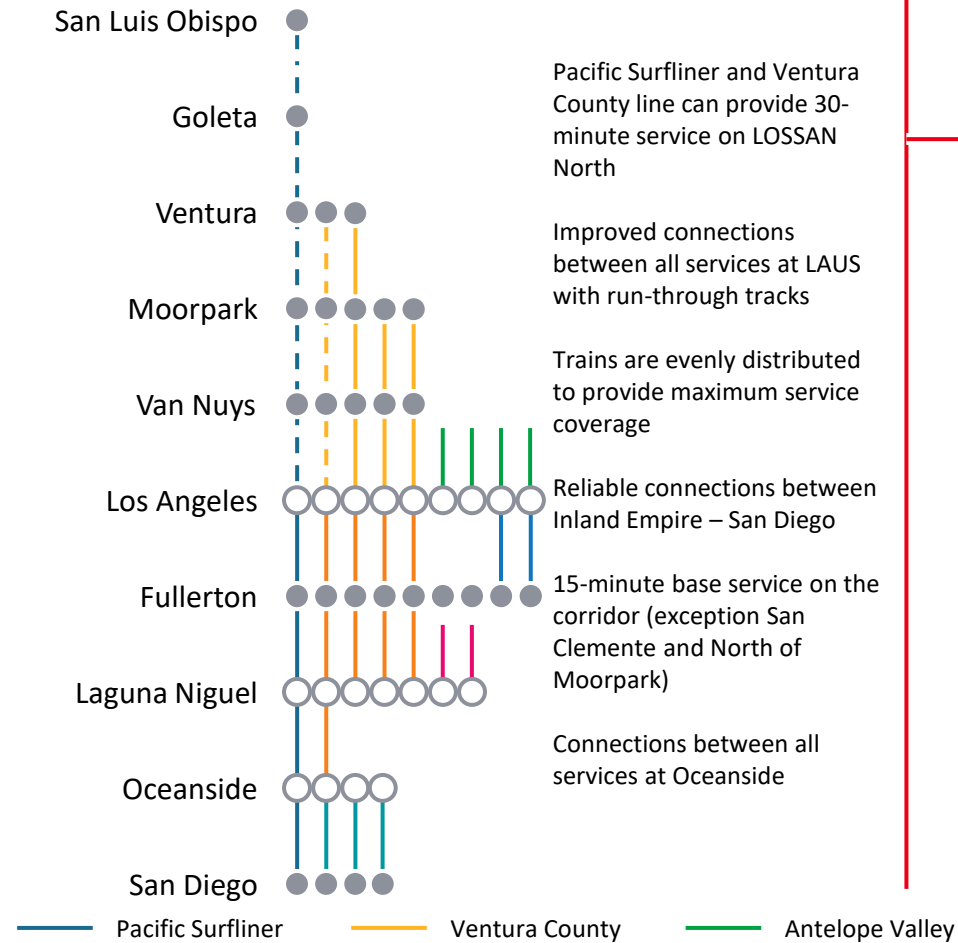
Train slot activation enables the base timetable structure to be retained



Pacific Surfliner    Orange County    91 Line/ Perris    Base slot    Peak slot

# Proposed recommendations will transform passenger rail in Southern California through three phases

## Corridor services



## Planning horizons



## Proposed implementation results

- Build services to meet 2027 CSRP objectives
- Support the 2028 Olympics by increasing service frequencies
- Leverage early HSR investments and completion of regional infrastructure project plans

# In the long-term, the LOSSAN Optimization study leverages regional plans to meet 2018 State Rail Plan Goals



## Programs reflected in the LOSSAN Optimization Study

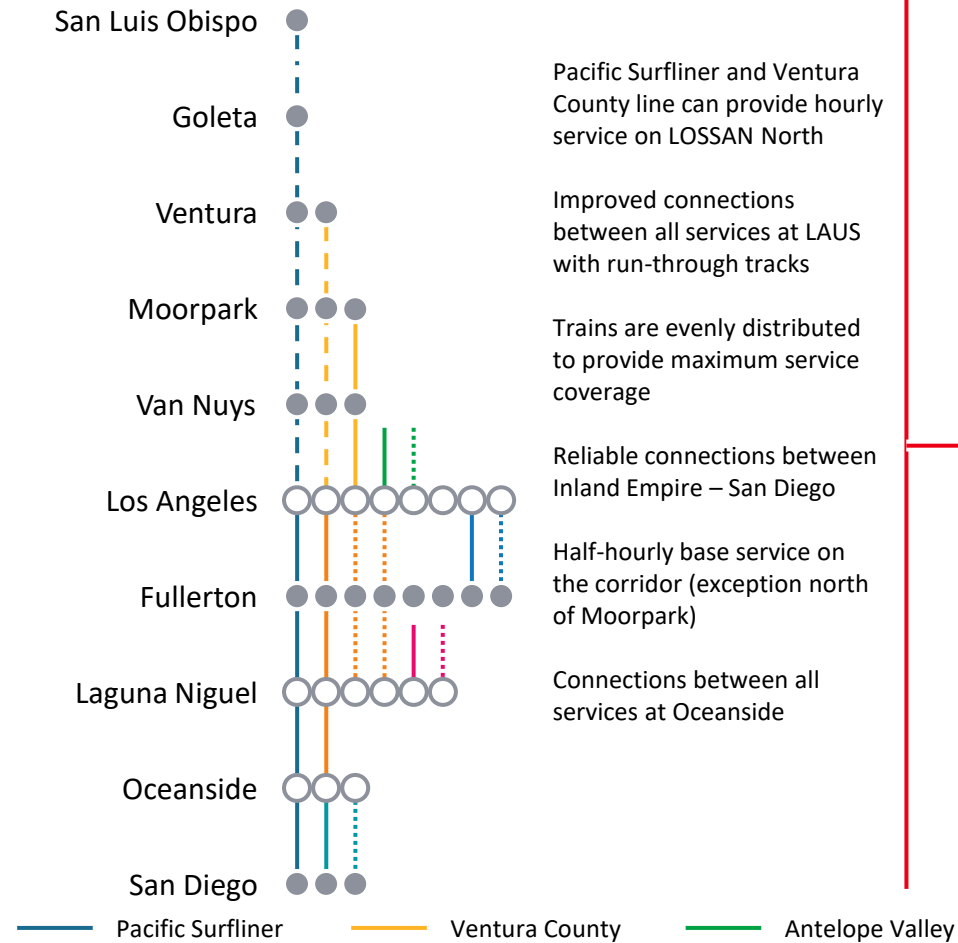
- ❶ Santa Barbara Subdivision upgrades
- ❷ Four through-track platforms at LA Union station
- ❸ Early HSR investments on the San Bernardino Subdivision
- ❹ Metrolink's SCORE program
- ❺ San Diego's Corridor Infrastructure Development Plan

Map tiles by Carto under CC BY 3.0. Data by OpenStreetMap, under ODbL.

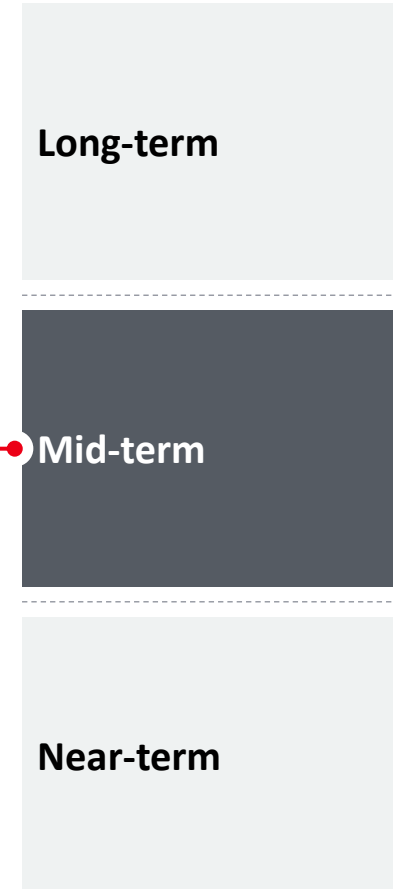


# Proposed recommendations will transform passenger rail in Southern California through three phases

## Corridor services



## Planning horizons



## Proposed implementation results

- Build services to meet 2027 CSRP objectives
  - Support the 2028 Olympics by increasing service frequencies
  - Leverage early HSR investments and completion of regional infrastructure project plans
- 
- Fill in service gaps
  - Utilize through-tracks at LA Union Station
  - Prioritize key projects from Metrolink SCORE and SANDAG's Infrastructure Development Plan
-

# In the mid-term, the LOSSAN Optimization study recommends prioritizing 8 key projects to support service growth



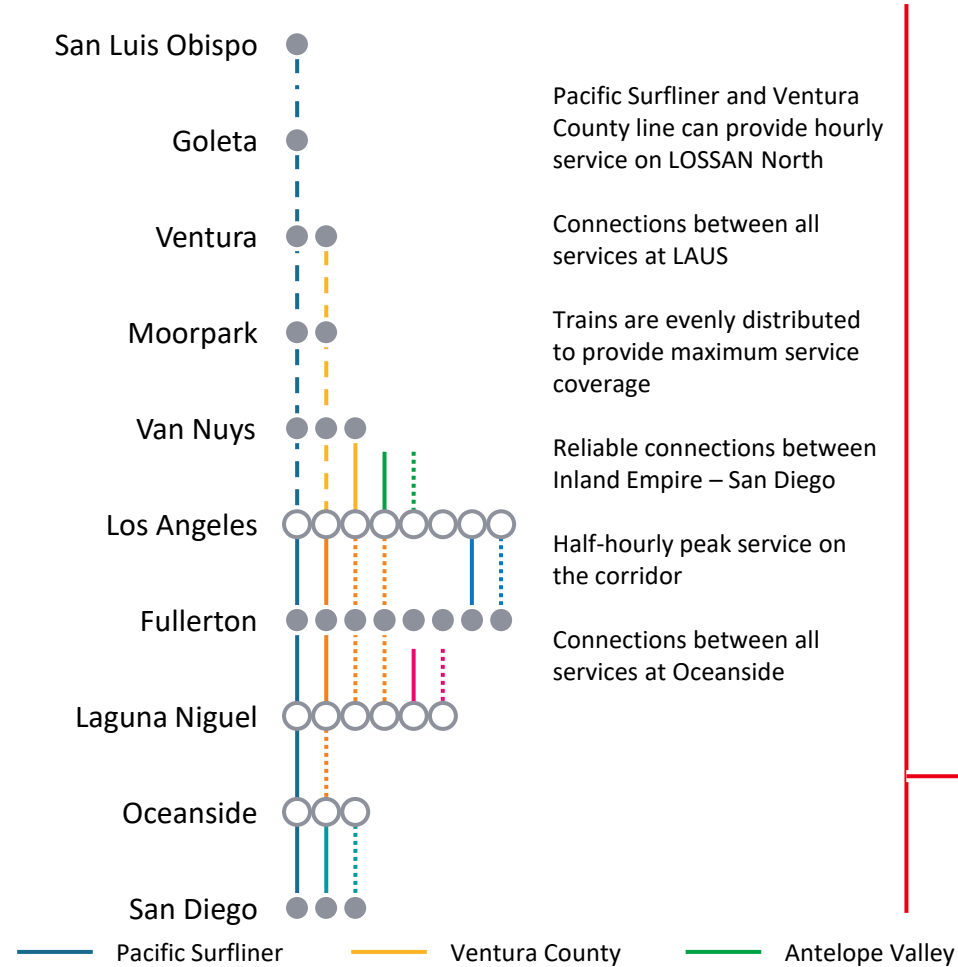
## Recommended projects for prioritization

- 1 Santa Barbara siding extensions, maintenance and CTC
- 2 Travel time savings between Santa Barbara and Moorpark
  - Dwell reduction program and /or line speed increases and/or consist performance improvement OR
  - Seacliff siding extension OR
  - double-tracking south of Santa Barbara
- 3 Carpinteria and Oxnard stations improve schedule robustness
- 4 Simi Valley Station double tracking project
- 5 Holdout rules at Chatsworth and Moorpark to be removed
- 6 Serra siding extensions and CP Songs relocation
- 7 San Dieguito and Batiquitos Lagoon projects
- 8 Dwell reduction program OR Carlsbad Village project

Map tiles by Carto under CC BY 3.0. Data by OpenStreetMap, under ODbL.

# Proposed recommendations will transform passenger rail in Southern California through three phases

## Corridor services



## Planning horizons

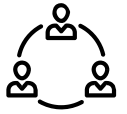


## Proposed implementation results

- Build services to meet 2027 CSRP objectives
- Support the 2028 Olympics by increasing service frequencies
- Leverage early HSR investments and completion of regional infrastructure project plans
- Fill in service gaps
- Utilize through-tracks at LA Union Station
- Prioritize key projects from Metrolink SCORE and SANDAG's Infrastructure Development Plan
- Restructure services using pulse schedules
- Deliver consistent frequencies and connections-by-design ("anywhere to anywhere travel")
- Provide a basis to grow service from depressed COVID levels with improved reliability

# To implement the study's near-term service improvements, agencies must plan and agree on a day-to-day operating plans collectively

## Four themes to build upon



Joint planning



Design services to cater to all travel needs



Coordinate services



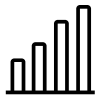
Improve corridor efficiencies by removing duplicate service



Monitor schedule performance



Refine schedules and processes based on observed data within timetable structure



Rebuild service



Activate further train slots as demand recovers and capital projects come online



# Thank you!

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**LOSSAN RAIL CORRIDOR AGENCY**

# **Upcoming Agenda Items**

**Supplemental Information**



**Los Angeles – San Diego – San Luis Obispo  
Rail Corridor Agency**

**DRAFT  
Upcoming Agenda Items  
Board of Directors Meeting  
September 21, 2020**

- Proposed 2021 Board of Directors and Committee Meetings Schedule
- Approval of Option Term for Pacific Surfliner Creative Services
- Approval of Option Term for Pacific Surfliner Videographer and Photographer Services
- Amendment to Cooperative Agreement No. L-9-0005 for the Rail 2 Rail Program with the Southern California Regional Rail Authority and the National Railroad Passenger Corporation
- Amendment to Cooperative Agreement No. L-8-0013 for the Rail 2 Rail Program with the North County Transit District and National Railroad Passenger Corporation
- Amendment to Agreement L-0-0006 with Union Pacific Railroad
- Fiscal Year 2020-21 Annual Business Plan Update
- Marketing Update
- Update on Capital Projects Along the Los Angeles – San Diego - San Luis Obispo Rail Corridor between Los Angeles and San Luis Obispo