

CALIFORNIA HIGH-SPEED RAIL: CENTRAL VALLEY PROGRESS UPDATE

Brian Kelly
Chief Executive Officer



CENTRAL VALLEY UPDATE

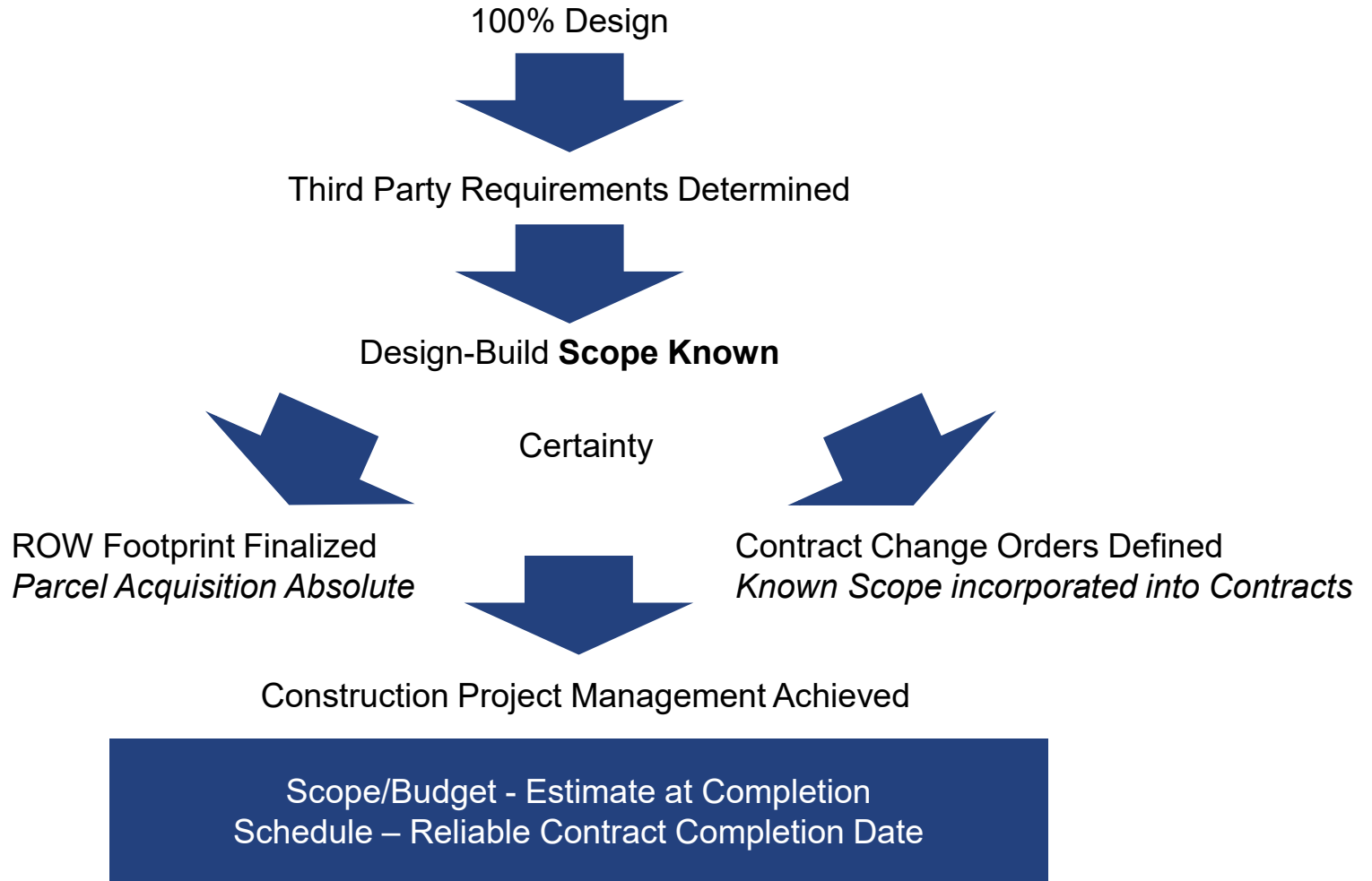
WHERE WE ARE NOW & WHERE WE ARE GOING

- STRIVING TOWARD FULL PROJECT DEFINITION
- ADVANCING RIGHT-OF-WAY (ROW) ACQUISITIONS
- UPDATING DESIGN AND CONSTRUCTION ACTIVITIES
- EXPANDING CENTRAL VALLEY REGIONAL WORK
- PROGRESSING STATION PLANNING



CENTRAL VALLEY UPDATE

GETTING TO A FULL PROJECT DEFINITION



CENTRAL VALLEY UPDATE

ACHIEVING CONSTRUCTION MANAGEMENT

- 1. Defining all scope and getting it under contract via executing change orders**
- 2. Reforming management and expediting ROW**
- 3. Implementing a more conservative ROW plan to improve schedule forecasting**
- 4. Establishing Third-Party Task force to expedite and complete third-party design approvals**
- 5. Working with Design-Build Contractors to re-sequence work and mitigate schedule impacts**



RIGHT-OF-WAY STATUS UPDATE



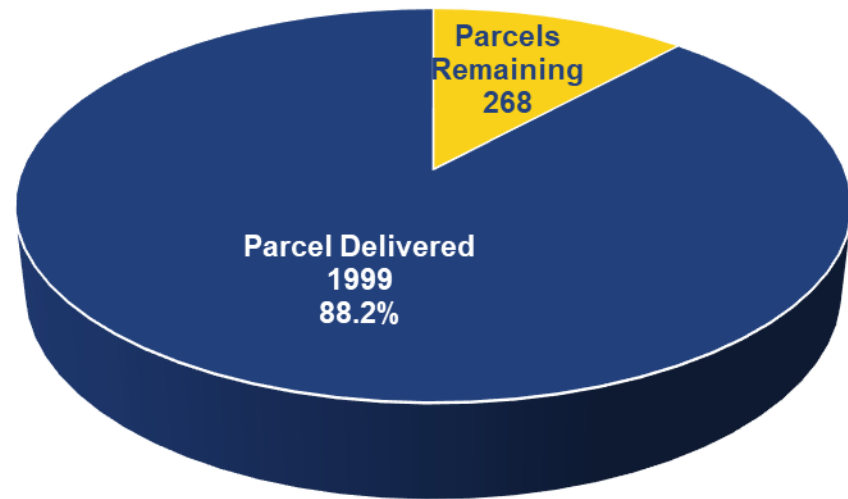
CENTRAL VALLEY UPDATE

RIGHT-OF-WAY

2018 to 2021:

- **618** Parcels Delivered
- **376** Additional parcels added due to refined design

Parcels Required 2,267

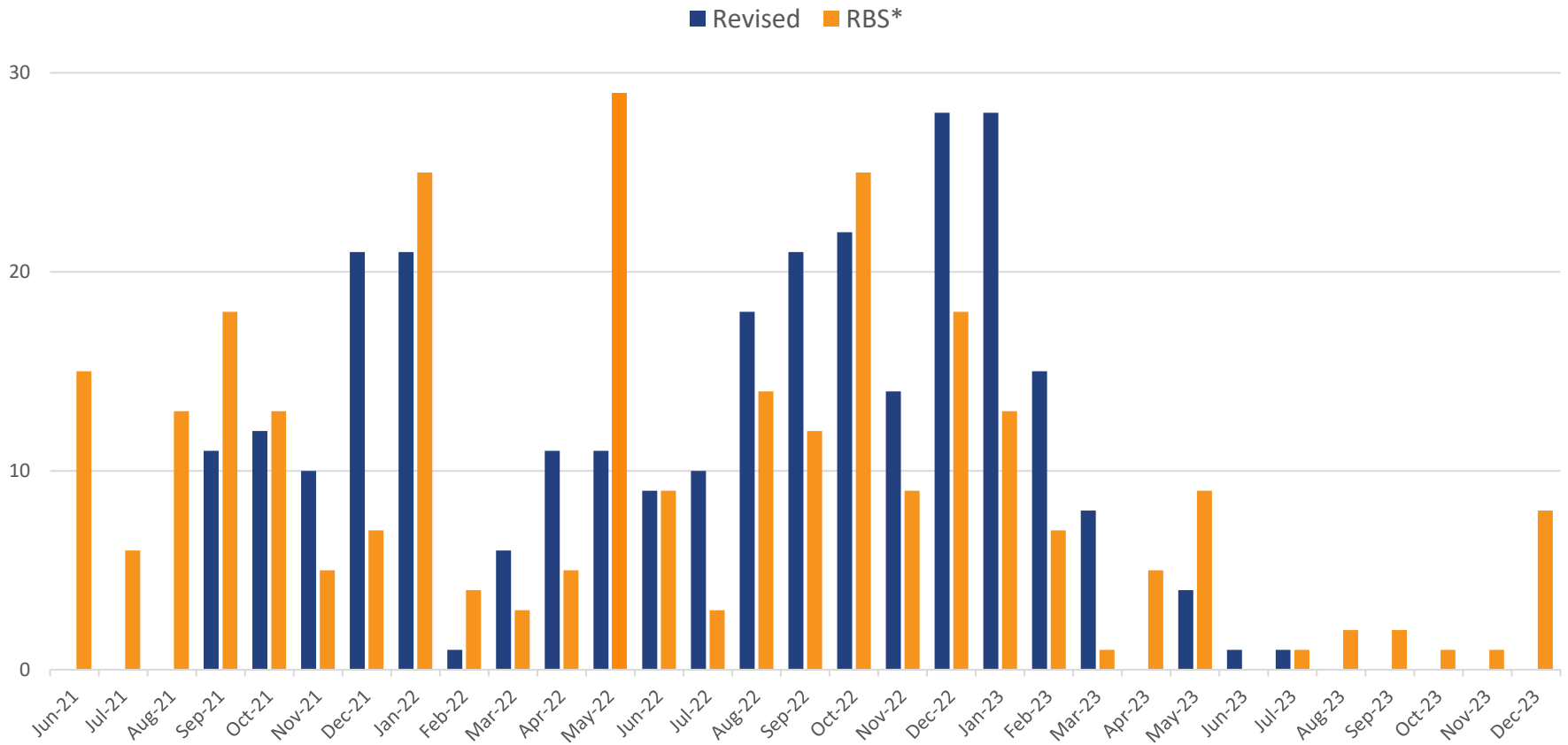


Data Date: 10/31/2021



CENTRAL VALLEY UPDATE

RIGHT-OF-WAY



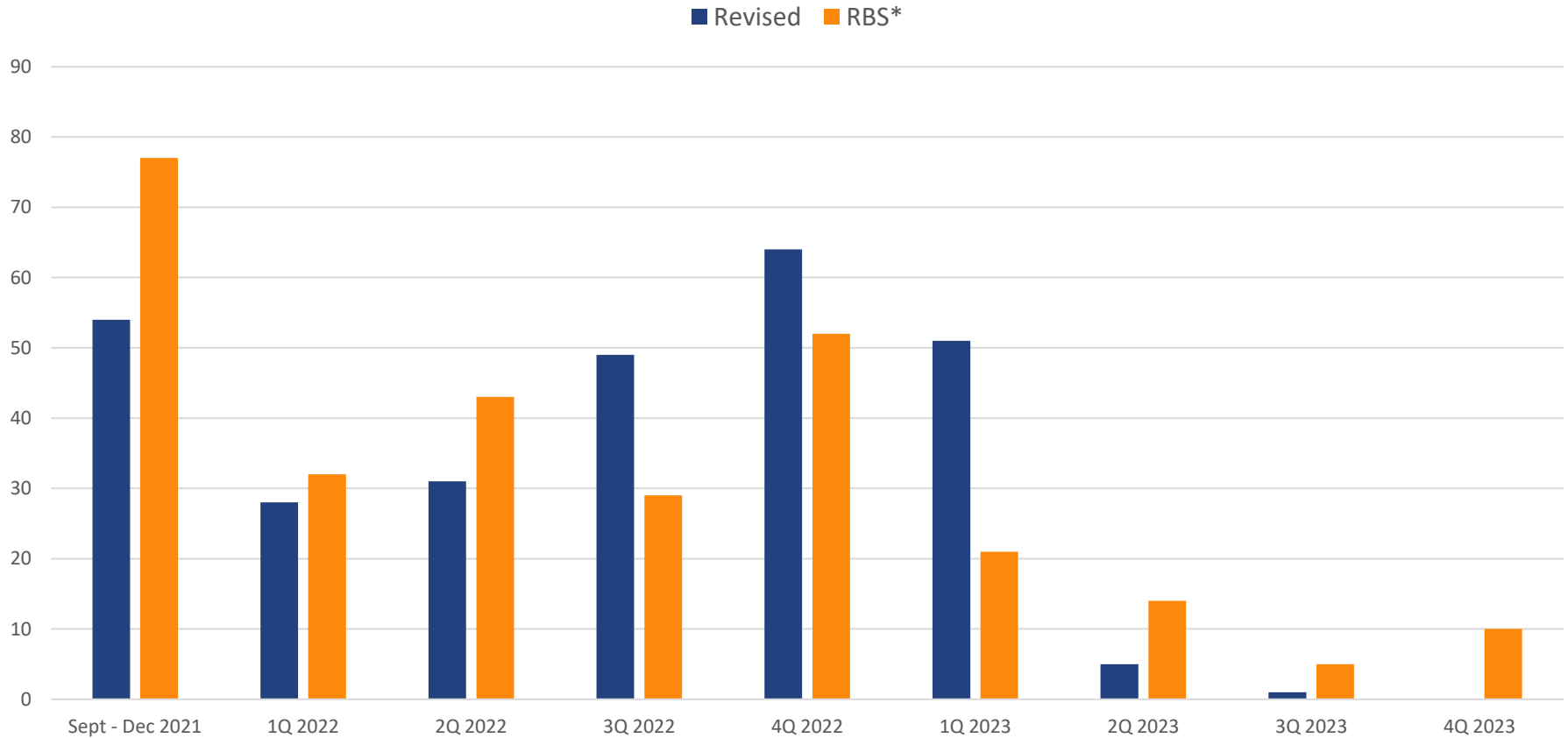
*Reflects the current Revised Baseline Schedule (RBS) Revision 2 for CP1, CP2-3, and CP4

Data Date: 10/31/2021



CENTRAL VALLEY UPDATE

RIGHT-OF-WAY



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Data Date: 10/31/2021

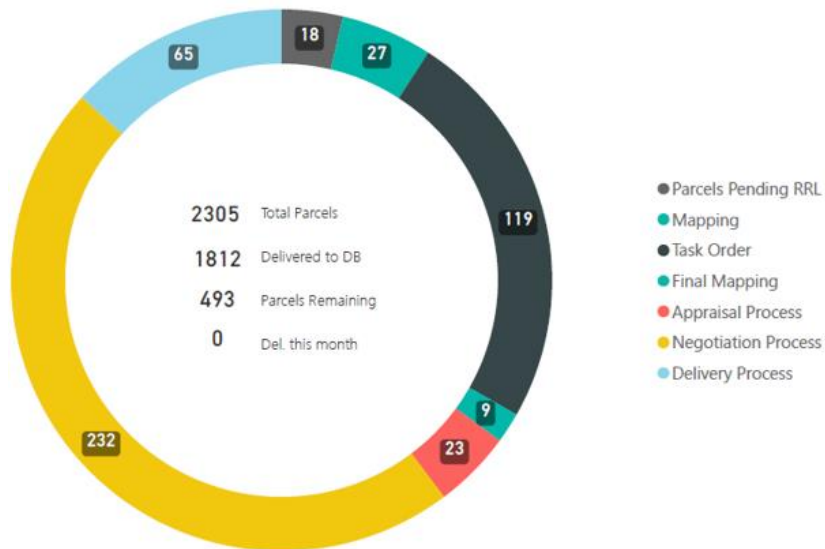


CENTRAL VALLEY UPDATE

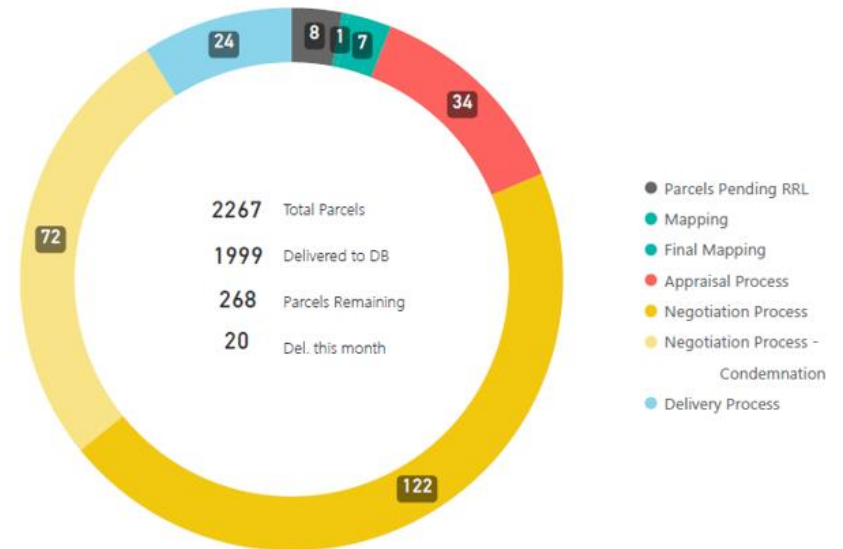
RIGHT-OF-WAY

Right of Way Production Graph

April 1, 2021



October 31, 2021



Data Date: 10/31/2021

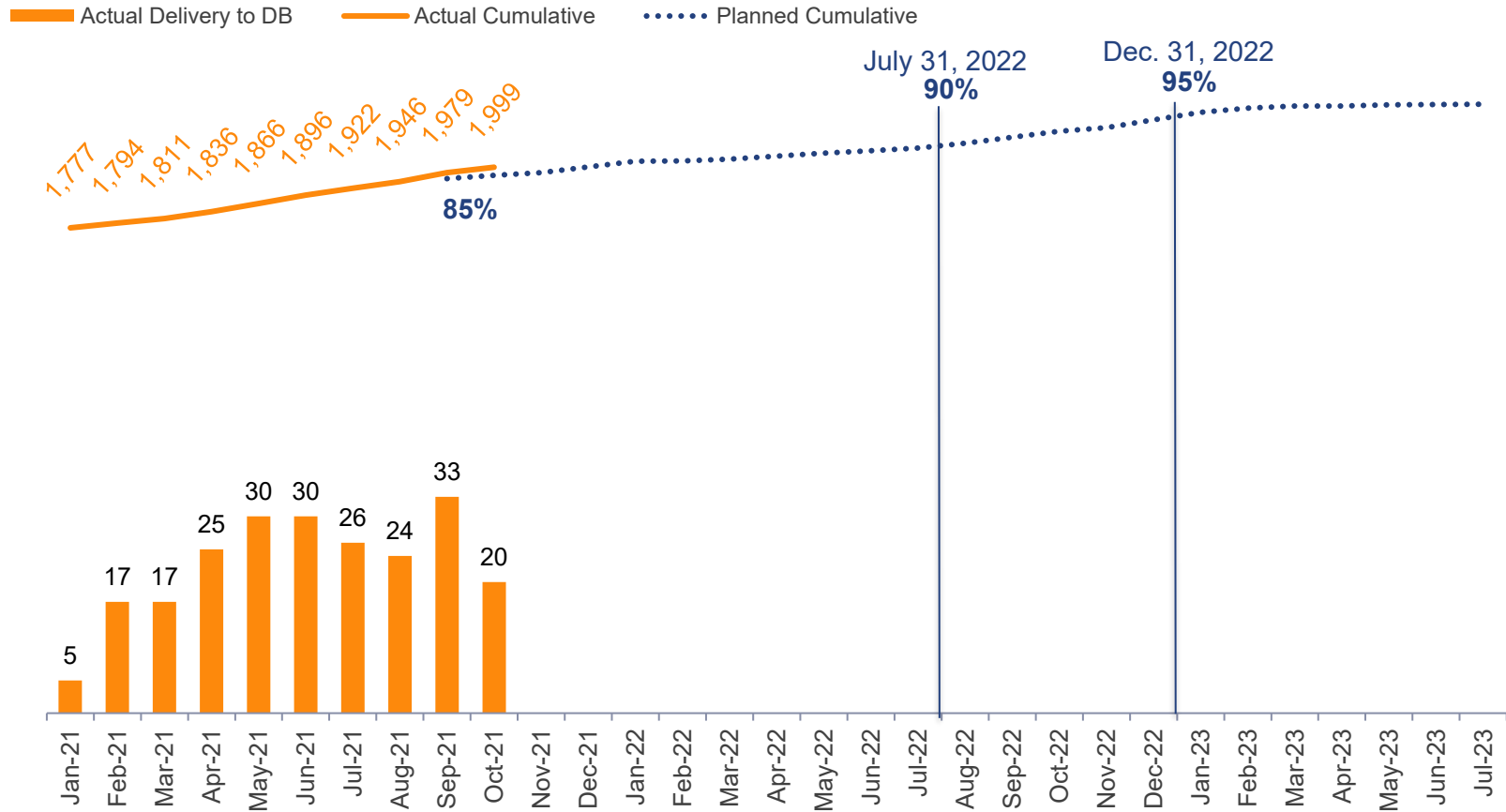
*Reflects preliminary October results subject to change



CENTRAL VALLEY UPDATE

RIGHT-OF-WAY

CP1-4 Parcel Delivery to DB Summary



Data Date: 10/31/2021

1. October Delivered to DB reflects preliminary results subject to change.
2. This reflects actual parcels delivered to the Design-Builder by month compared to the planned delivery schedule which identifies 90% and 95% milestone completion for CP1-4. The 90% and 95% milestone completion does not include parcels that may be added.



DESIGN AND CONSTRUCTION UPDATE



CENTRAL VALLEY UPDATE

119-MILES OF CONSTRUCTION

- **CONSTRUCTION PACKAGE 1**

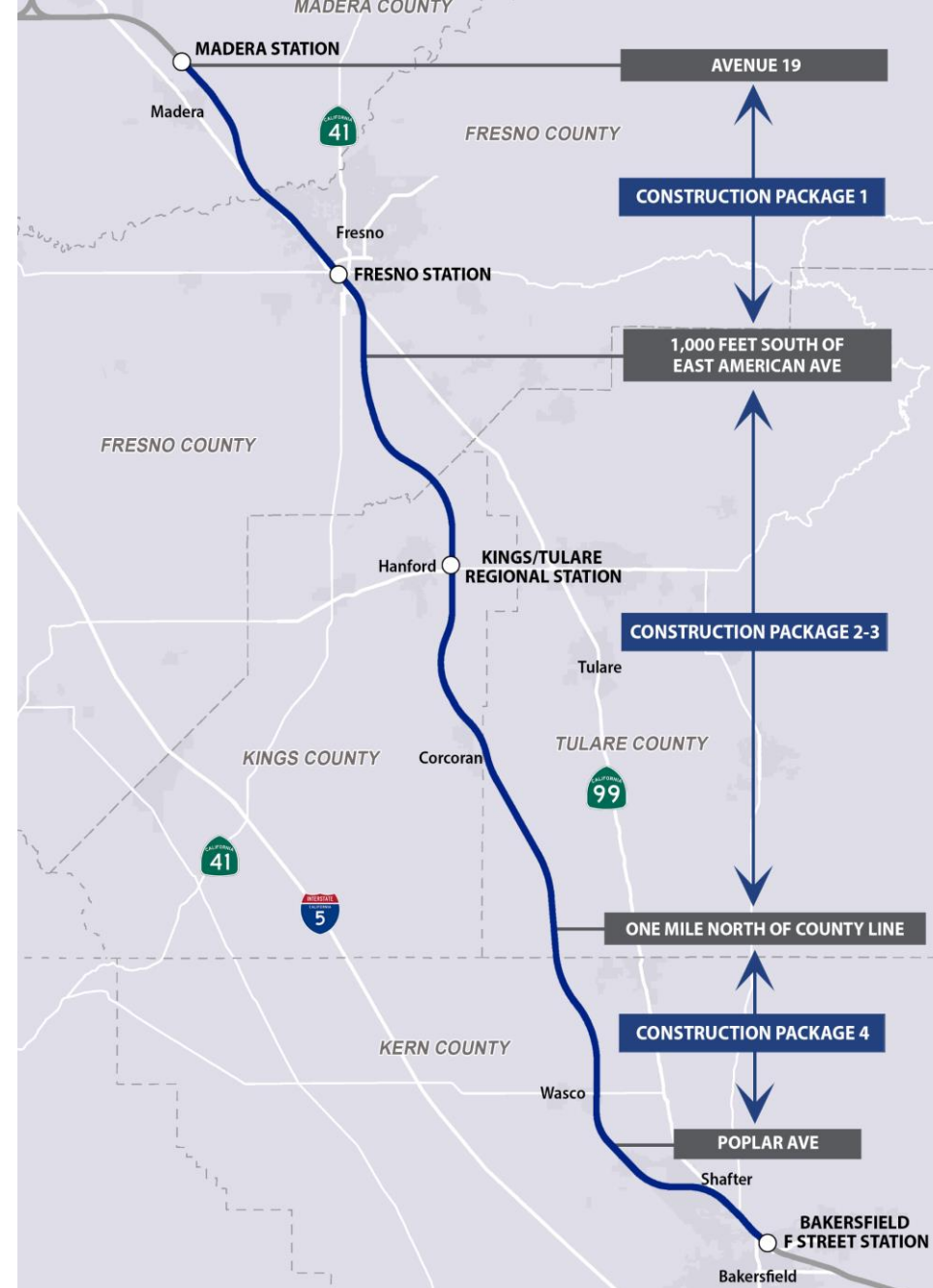
- » 32 Miles
- » Avenue 19 in Madera County to just South of American Avenue in Fresno County

- **CONSTRUCTION PACKAGE 2-3**

- » 65 Miles
- » Just south of Fresno to 1 Mile North of the Tulare/Kern County Line

- **CONSTRUCTION PACKAGE 4**

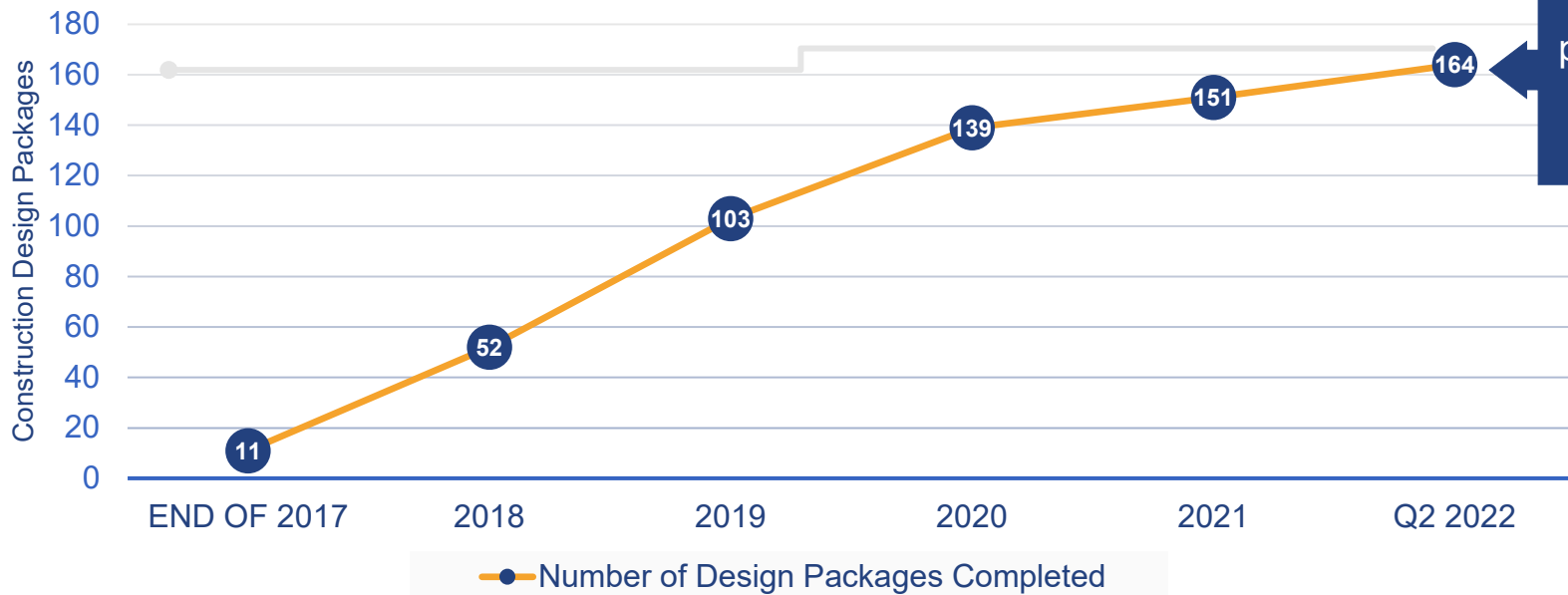
- » 22 Miles
- » Tulare/Kern County Line to Poplar Avenue





Wasco Viaduct

DESIGN PROGRESS - ALL CONSTRUCTION PACKAGES THROUGH SEPTEMBER 2021 READY FOR CONSTRUCTION (RFC) DESIGN PACKAGES



CONSTRUCTION PACKAGE 4



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4


Peterson Road Bridge

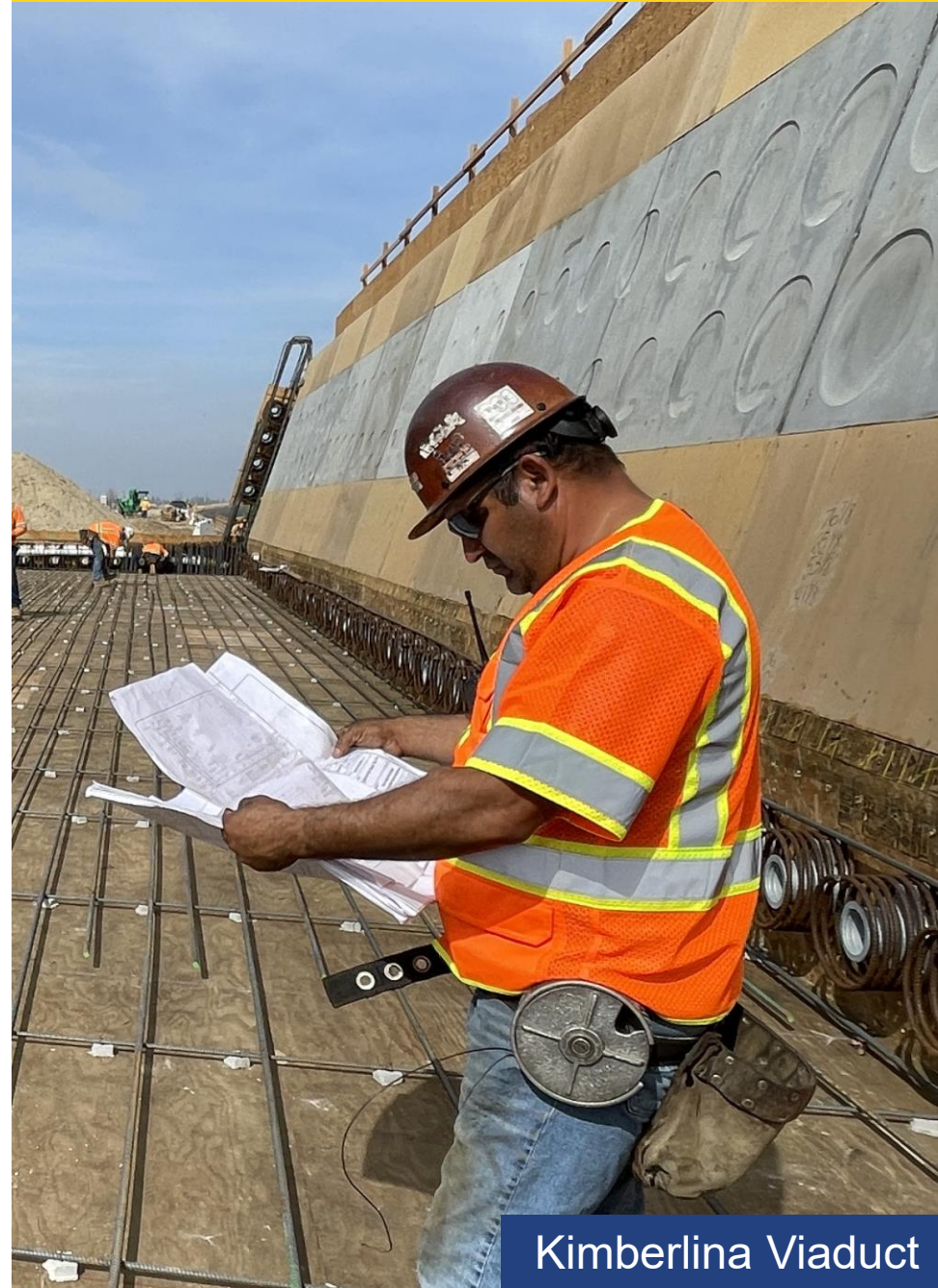


- Construction Package 4 (CP 4) is the third significant construction contract executed on the Initial Operating Section
- 22-mile stretch bounded by a point approximately one mile north of the Tulare/Kern County Line at the terminus of Construction Package 2-3 and Poplar Avenue to the south
- Will include construction of at-grade, retained fill and aerial sections of the high-speed rail alignment.
- **Estimated Completion: Under Enhanced Risk Review**

CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4

		CP 4
	Design Completed	100%
	Right-Of-Way Parcels Delivered to DB	81.8%
	Utility Relocation	83.7%
	Structures Complete/In Progress	91.7%
	Miles of Guideway Complete/In Progress	97.5%
	Overall Contract	73.2%



Kimberlina Viaduct



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4



Design Packages Ready
for Construction (of 14)

2018

0

vs.

2021

14

100% Designed

Complete

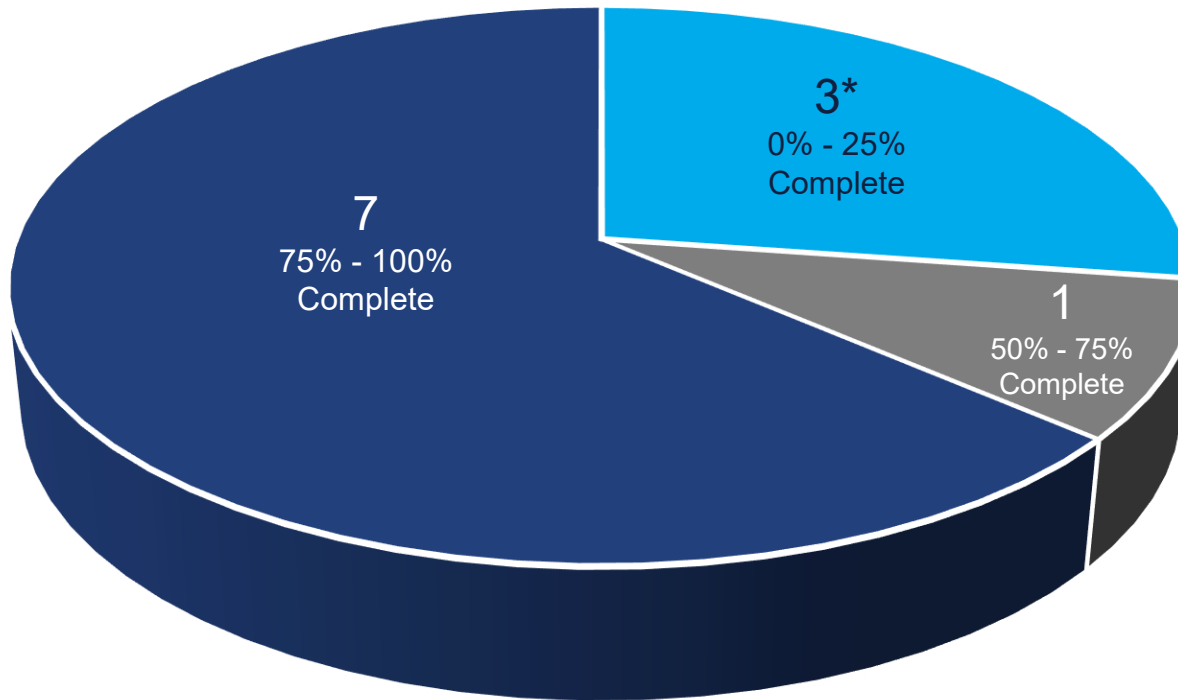


CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4

Number of Structures in Progress

- Total Structures Needed: 11



*The Amtrak Pedestrian Underpass is cleared for construction, but not yet started.



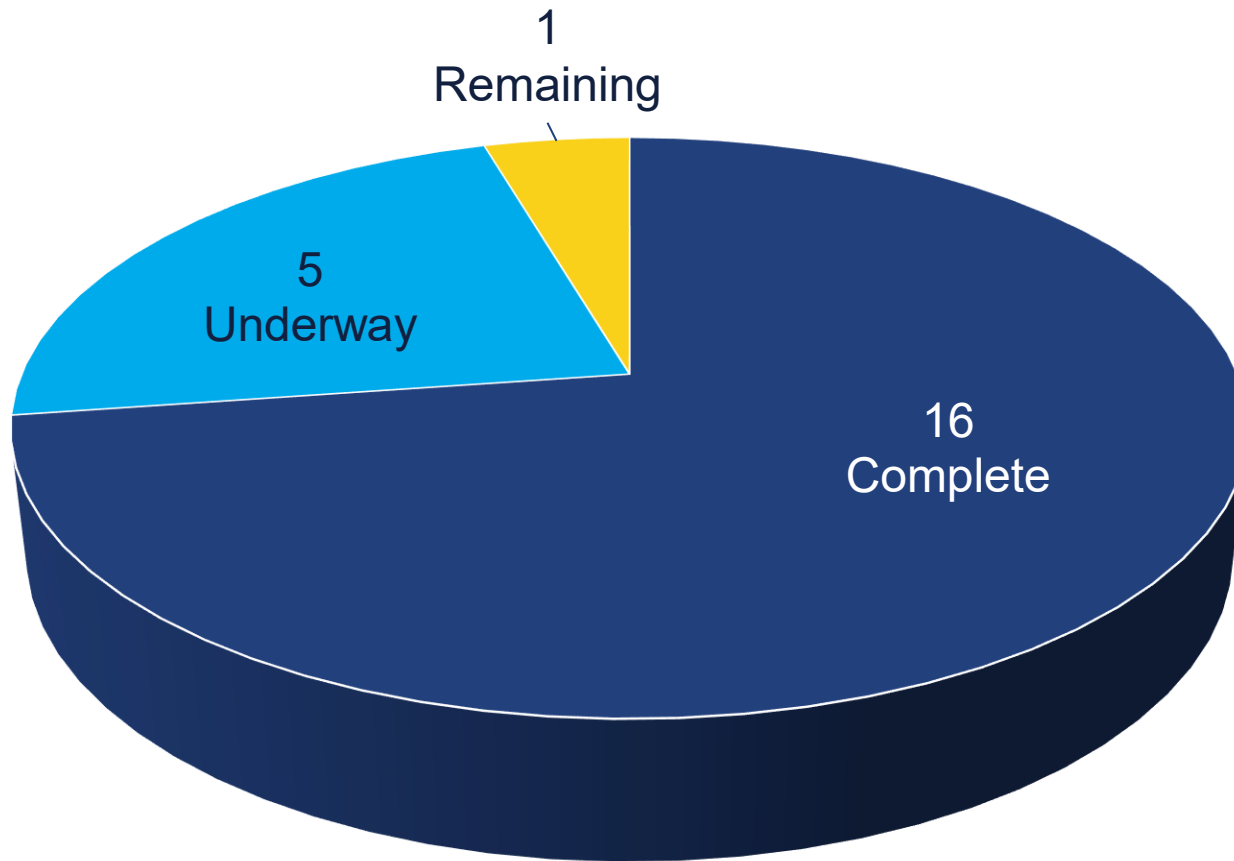
CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4

Miles of Guideway in Progress

Guideway is the riding surface that will support and physically guide the high-speed train.

- Total Guideway Miles Needed: 22

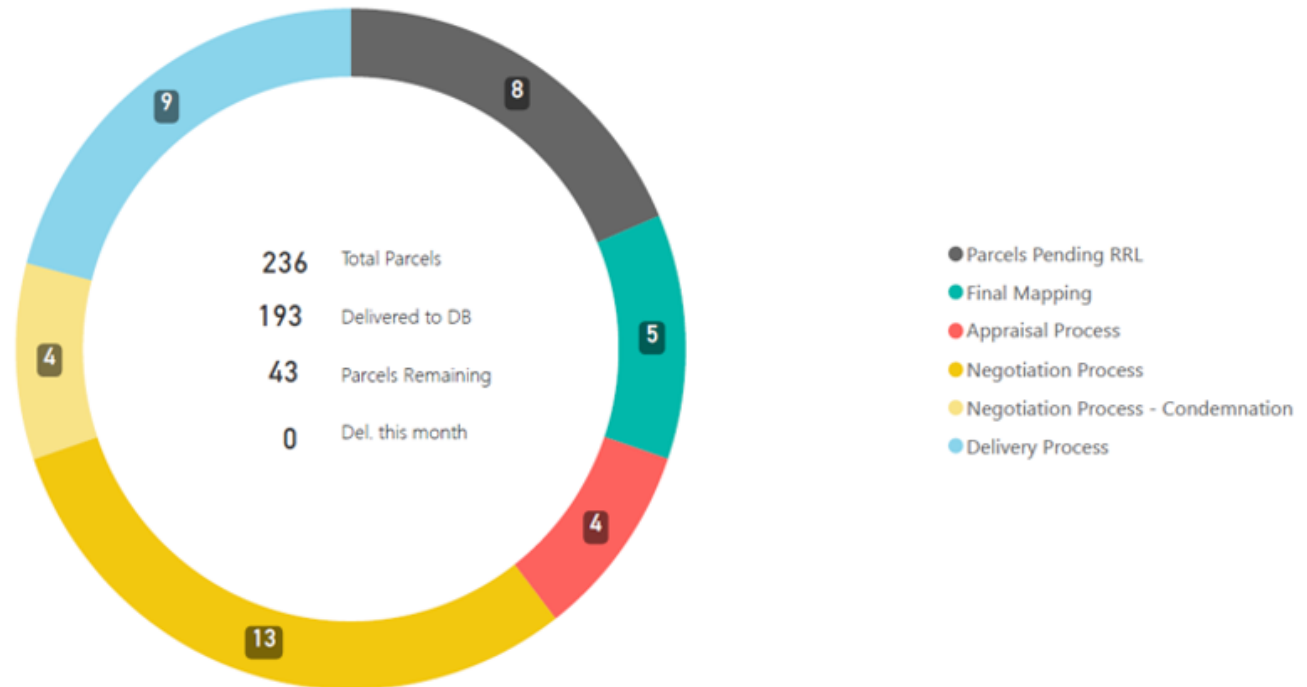


PROGRAM UPDATE

CONSTRUCTION PACKAGE 4

Right of Way Production

CP 4 Parcels – 82% Delivered



Data Date: 10/31/2021

*Reflects preliminary October results subject to change



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4

Finalizing Scope - Pending Change Orders to Complete Construction

» Intrusion Protection Barrier

Resolution of final components related to the installation of the Intrusion Protection Barrier (loss of excavated material, retaining walls required to implement V-Ditch, and Cast-in-place walls)

» Time Impact Analysis

Resolution of CRB's claim for excusable and compensable delays resulting from third-party and ROW impacts.



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 4

Primary Risk Areas – Unmitigated Risks Could Adversely Affect Schedule

1. Semitropic design and work plan reviews and approval timing.
2. Poso Avenue encroachment permit.
3. PG&E and BNSF processing for reviews and approvals of designs and maintenance agreements.

Risk Mitigations Underway

1. Assigned staff lead to work with Semitropic on design review approvals.
2. Executed agreement with Semitropic in August 2021 to execute design approvals and ROW acquisition.
3. Advancing partnership with the City of Wasco to progress permitting and work.
4. Applied for Federal RAISE Grant to address project mitigation in Wasco (demolish former farmworker housing). Grant decision expected by end of year.
5. Establishing Third-Party Task Force to engage PG&E and BNSF for a more focused effort on expediting design approvals.



CONSTRUCTION PACKAGE 1



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1







Cedar Viaduct



- Construction Package 1 (CP 1) is the first construction contract executed on the Initial Operating Section
- Extends 32-miles between Avenue 19 in Madera County to East American Avenue in Fresno County
- Includes 19 grade separations, 3 viaducts, a major river crossing over the San Joaquin River and 2 trenches.
- **Estimated Completion Date: Under Enhanced Risk Review**

CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

		CP 1
	Design Completed	95.0%
	Right-Of-Way Parcels Delivered to DB	91.7%
	Utility Relocation	59.5%
	Structures Complete/In Progress	79.0%
	Miles of Guideway Complete/In Progress	50.0%
	Overall Contract	66.0%



Tulare Street Underpass



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1



Design Packages
Ready for Construction

2018

9 of 38

VS.

2021

38 of 40

100% Designed

Q4 2021



Road 27



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Remaining Design Progress

Authority Approved Design Package	September 2021 (% Complete)
Caltrans 2.5 Mile Section (SR99)	100% - Pending Final Approval
Sweeper Package	100% - Pending Final Approval

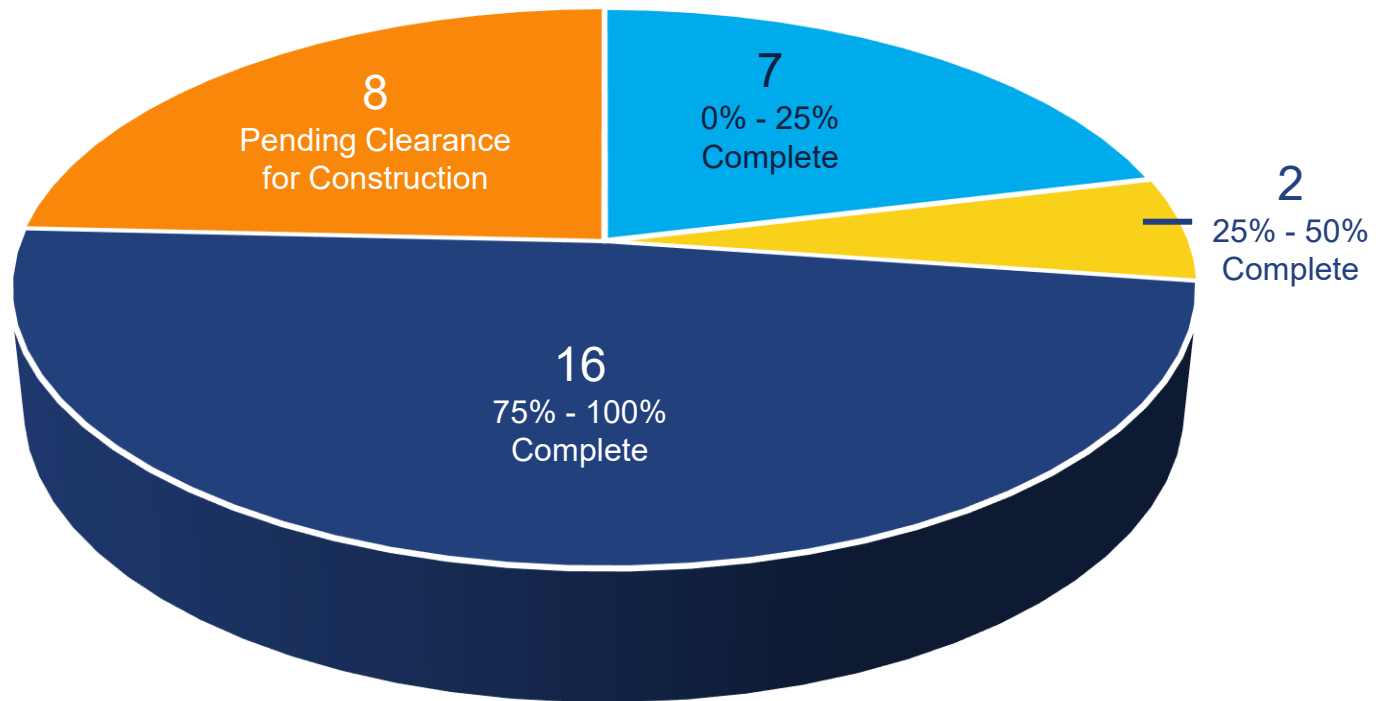


CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Number of Structures in Progress

- Total Structures: 33



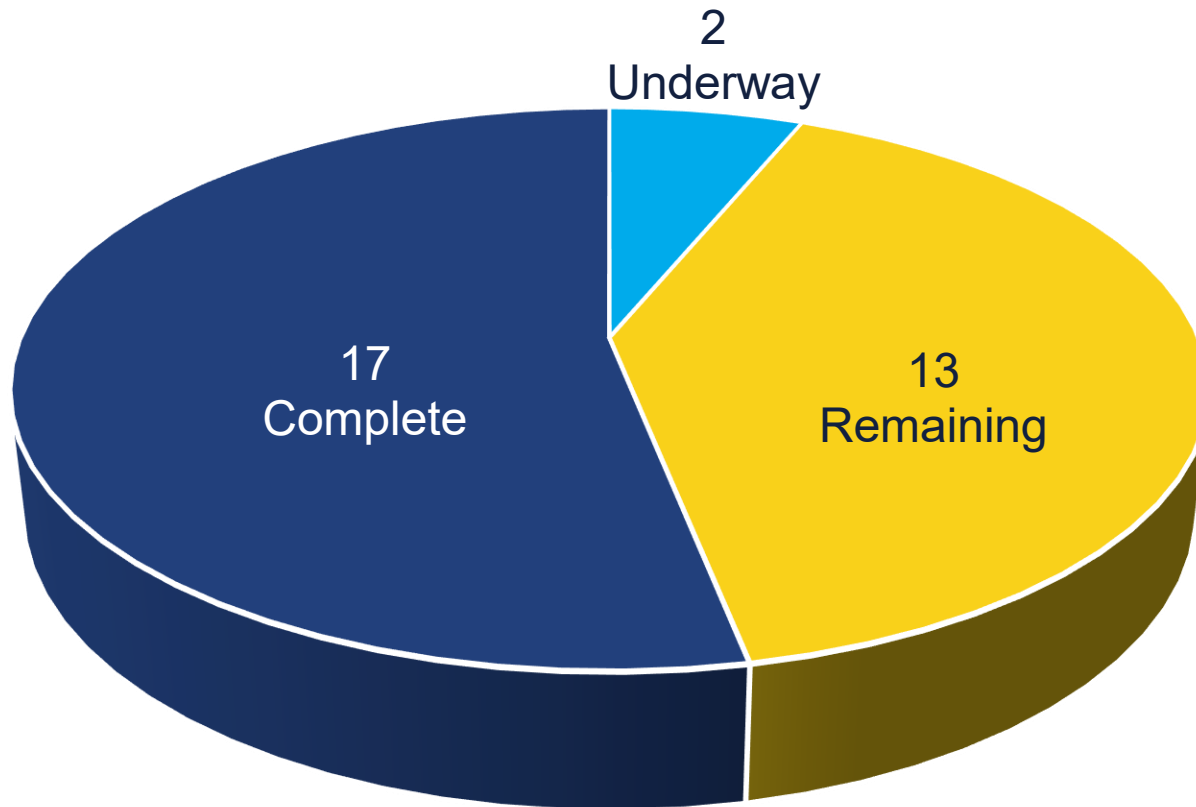
CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Miles of Guideway in Progress

Guideway is the riding surface that will support and physically guide the high-speed train.

- Total Guideway Miles: 32



PROGRAM UPDATE

CONSTRUCTION PACKAGE 1

Right of Way Production

CP 1 Parcels – 92% Delivered



Data Date: 10/31/2021

*Reflects preliminary October results subject to change



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Finalizing Scope - Significant Pending Change Orders to Complete Construction

» Church Avenue – Grade Separation Changes

Change configuration to create two bridges in lieu of one at the junction of Church and East Avenue, City of Fresno utilities, and satisfy Fresno to Bakersfield Environmental Impact Report change, added cul-de-sacs, overcrossing modifications, and street connections

» Purpose: City of Fresno changed the configuration of the grade separation

» Downtown Area - Changes to Tulare, Ventura, and Fresno Streets

Widening UPRR structures in Tulare and Ventura underpasses, adding an access structure to the UPRR structures at Fresno Street, changes to specifications to G Street Bridges in all underpasses.

» Purpose: UPRR requested wider bridges

» Golden State North & South Road Realignment

Realigning Golden State Blvd to the West for approximately 4 miles, increasing road from 2 to 4 lane - industrial arterial standard, includes bicycle lanes, increasing sidewalk width

» Purpose: City of Fresno required the Authority to realign Golden State Blvd North



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Finalizing Scope - Significant Pending Change Orders to Complete Construction (Cont.)

» McKinley Avenue – North Weber Avenue Junction Configuration

- Change configuration to increase bridge length, relocate traction power substation, City of Fresno traffic control system and utility work
 - » Purpose: City of Fresno changed designation of the road

» Belmont Avenue Overcrossing and Grade Separation

- Relocate proposed bridge to deconflict with AT&T line, including demolition of UPRR bridge, increasing bridge length and width and changing the Fresno Trench design under Belmont overpass
 - » Purpose: City of Fresno requested design refinement

» Guideway Construction for Caltrans SR-99 (Between Clinton and Ashlan Avenues)

- Construct additional 2.5 miles of at-grade guideway plus Intrusion Protection Barrier walls between Clinton and Ashlan Avenues
 - » Purpose: Scope was included in the project constructed by Caltrans but could not be completed due to AT&T not being relocated. Adding this scope to the TPZP contract.



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 1

Primary Risk Areas – Unmitigated Risks Could Adversely Affect Schedule

1. AT&T cutover activities have long durations and are critical pre-construction activities.
2. PG&E design reviews and approvals require specific vendors and bandwidth can be limited.
3. Timeliness of design approval and ROW crossing agreements with railroad partners.
4. Finalizing scope into the contract in a timely manner.

Risk Mitigation Underway

1. PG&E agreement achieved to extend shelf-life of designs to 12 months.
2. Establishing Third-Party Task Force for a more focused effort to improve design reviews with railroads and utilities.
3. Aggressively negotiating remaining scope elements.



CONSTRUCTION PACKAGE 2-3



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2-3

South Avenue Grade Separation



- Construction Package 2-3 (CP 2-3) is the second significant construction contract executed on the Initial Operating Section
- Extends approximately 65 miles from the terminus of Construction Package 1 at East American Avenue in Fresno to one mile north of the Tulare-Kern County line
- Includes approximately 26 grade separations in the counties of Fresno, Tulare and Kings, including viaducts, underpasses and overpasses.
- **Estimated Completion Date: Under Enhanced Risk Review**



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2-3

CP 2-3



Design Completed 97.2%



Right-Of-Way Parcels
Delivered to DB 85.3%



Utility Relocation 58.5%



Structures
Complete/In Progress 59.2%



Miles of Guideway
Complete/In Progress 73.8%



Overall Contract 67.0%



Adams Avenue



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3



Design Packages Ready
for Construction (of 109)

2018

2

vs.

2021

106

100% Designed

Q1 2022



Conejo Ave



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3

Remaining Design Progress

Design Package	September 2021 (% Complete)
Cole Slough	90%
Dutch John Cut	90%
Alpaugh Pond	100% - Pending Final Approval

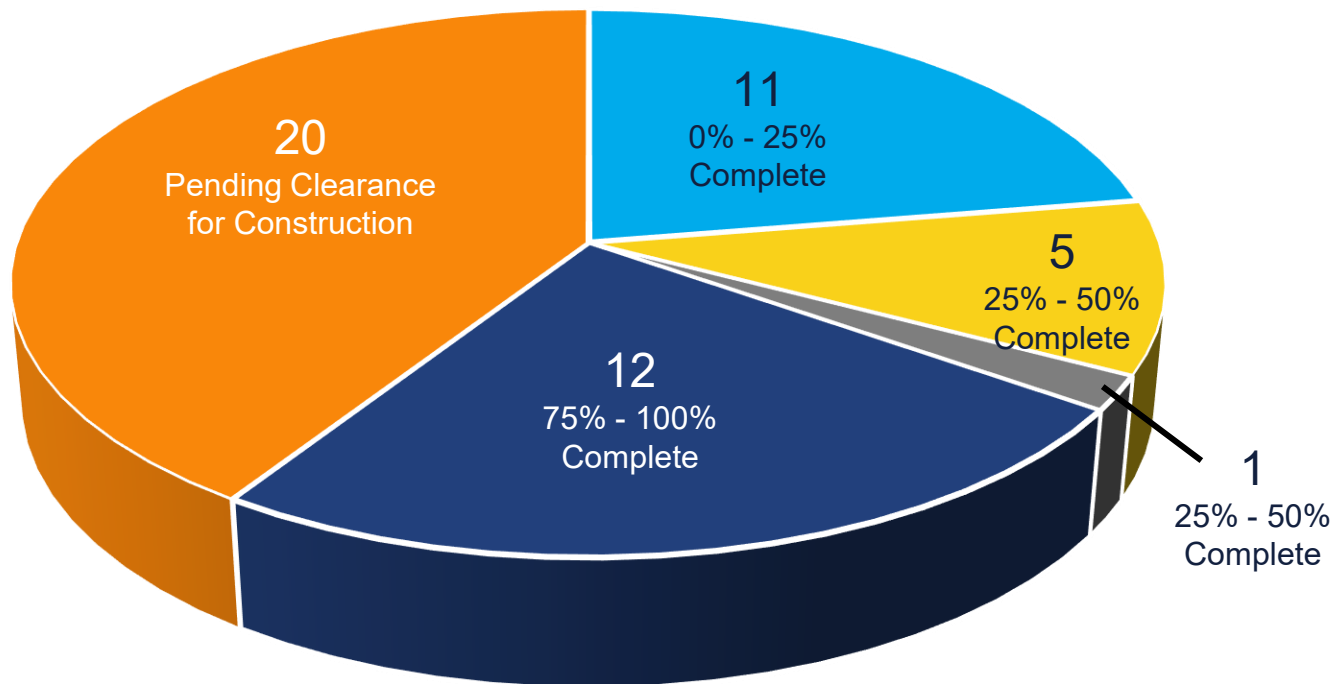


CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3

Number of Structures in Progress

- Total Structures: 49



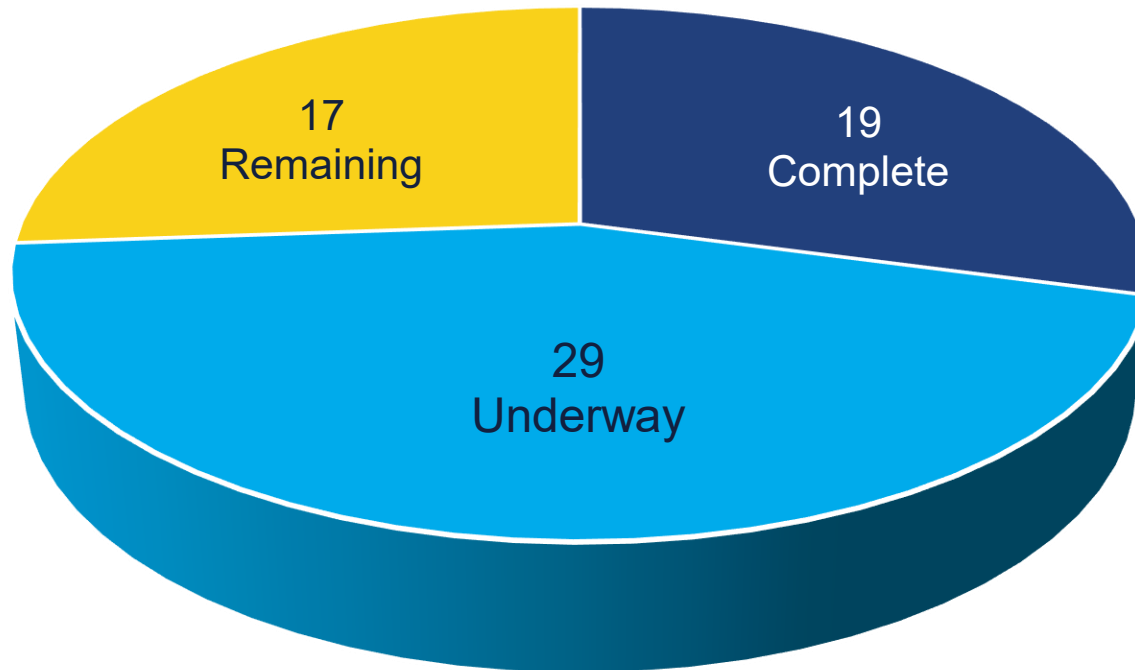
CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3

Miles of Guideway in Progress

Guideway is the riding surface that will support and physically guide the high-speed train.

- Total Guideway Miles: 65



PROGRAM UPDATE

CONSTRUCTION PACKAGE 2-3

Right of Way Production

CP 2-3 Parcels – 85% Delivered



Data Date: 10/31/2021

*Reflects preliminary October results subject to change



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3

Finalizing Scope - Significant Pending Change Orders/ Dispute Resolution to Complete Construction

» Hanford Viaduct Superstructure

- Finish superstructure of 6000-foot elevated guideway, configuration change due to Alternative Technical Concept accepted during original procurement
 - » Status: Negotiated “Get-to-Work” Time and Materials change orders and monitoring progress.

» BNSF Intrusion Protection Barrier

- Construct 15 miles of barrier
 - » Status: In negotiations with DFJV on settlement.

» Deer Creek Viaduct

- Contractor redesigned to 3000-foot viaduct to minimize elevated guideway
 - » Status: Negotiations to commence in December 2021.

» Cross Creek Viaduct

- Contractor redesigned to 2500-foot viaduct to minimize elevated guideway
 - » Status: Negotiations to commence in December 2021.



CENTRAL VALLEY UPDATE

CONSTRUCTION PACKAGE 2/3

Primary Risk Areas – Unmitigated Risks Could Adversely Affect Schedule

1. ROW Acquisition for critical utility relocations (electric transmission and irrigation).
2. Third-Party coordination for design review/approval, negotiation on work windows (irrigation season, transmission black-out periods, railway moratoriums), and negotiation on maintenance agreements.
3. Commercial settlement of four key disputes.

Risk Mitigation Underway

1. Working to finalize ROW agreements for utility relocations.
2. Establishing Third-Party Task Force for more focused effort to negotiate resolutions.
3. Actively negotiating commercial settlements on disputes.



CENTRAL VALLEY REGION



CENTRAL VALLEY UPDATE

CEQA CLAIMS RESOLVED

Central Valley Wye

- All CEQA risks have been eliminated with the City of Madera settlement
- NEPA has a two-year statute of limitations (expires September 2022)

Next steps:

- Working with stakeholders to implement obligations under the six agreements and MOU's
 - ✓ Fairmead Community and Friends (Community improvements)
 - ✓ City of Chowchilla (Sewer connection to Fairmead) and settlement obligations)
 - ✓ County of Madera (Community facility and water supply improvements for Fairmead)
 - ✓ City of Chowchilla (City Specific settlement obligations)
 - ✓ City of Madera (City-specific settlement obligations)
 - ✓ Chowchilla Elementary School District (assisting with bus route impacts)



CENTRAL VALLEY UPDATE

CENTRAL VALLEY TRAINING CENTER

Pre-apprenticeship program fulfills CEQA mitigation efforts

- In partnership with the City of Selma, the Central Valley Training Center provides pre-apprenticeship training and job placement assistance for underserved communities in the Central Valley.
- Prepares a workforce for the HSR program.

Status of Program:

- Successful completion of three 16-week cohorts the first year.
 - ✓ Graduated 54 students.
 - ✓ Students earned more than five industry-specific certificates.
- Extending training program for one additional year and continue to provide workforce development assistance.
- Applying for the Consolidated Rail Infrastructure and Safety Improvements Program (CRISI) grant to further extend program multiple years.



CENTRAL VALLEY UPDATE

CITY OF WASCO PARTNERSHIP

Working cooperatively with the City of Wasco to finalize several agreements and permits.

Permits required to progress work:

- ✓ Pedestrian Underpass for Amtrak access – Nov 2021
- ✓ Poso Avenue Permit Phases 1 & 2 – Dec 2021
- ✓ Poso Avenue Permit Phases 3 & 4 – Jan 2022

Agreements:

- ✓ Operations and Maintenance Agreement
- ✓ Grade Separation Agreement
- ✓ Right of Way Transfer Agreement
- ✓ Partnership agreement for City to perform work within City's Jurisdiction

Federal RAISE Grant to address project mitigation in Wasco to demolish former farmworker housing (decision expected by end of year).



CENTRAL VALLEY UPDATE

ONGOING STATION PLANNING WITH FRESNO

Pre-design planning effort involving consistent engagement with the station communities.

Regular meetings on key station delivery topics including

- Station access integration with surrounding neighborhoods
- Street configurations to accommodate buses, pedestrians and bike lanes
- Transit-oriented development locations and leveraging the station to advance adjacent development
- Location of parking facilities and addressing urban heat island (shade trees)

What Next

- Bakersfield: Continue interchange and active transportation access discussion
- Kings-Tulare: Continue active transportation access discussion and support land use planning studies
- Fresno: Seismic, historic and accessibility retrofits for historic buildings on the station complex leading to use of the historic building and adjacent site for community activities
- Merced: Coordination with San Joaquin Joint Powers Authority and City of Merced on station location

4 Initial Stations



All work leading toward and laying the groundwork for procurement of stations designer in 2022.



CENTRAL VALLEY UPDATE

FRESNO STATION CANOPY & PEDESTRIAN BRIDGE RENDERING



CENTRAL VALLEY UPDATE

CALIFORNIA HIGH-SPEED RAIL

Questions?



CENTRAL VALLEY UPDATE



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