• What is the Business Plan?
  » Required by PUC Section 185033
  » Represents current program status
  » Summarizes implementation approach

• Public review process
  » February 9, 2021: Release
  » February 9 – March 12, 2021: 30-day public review
  » March 2, 2021: Board hearing
  » March 25, 2021: Board meeting
  » April 15, 2021: Submittal to Legislature
COVID-19 PANDEMIC IMPACTS ON CALIFORNIA HIGH-SPEED RAIL

- 240+ workers quarantined
- $280+ million in lost Cap and Trade revenue
- Environmental schedules extended for 4 project sections
- Track and Systems procurement delayed until August 2021
- Right of Way acquisition affected by court delays
- Cost and schedule impacts

REVISED DRAFT 2020 BUSINESS PLAN
## PROJECT PROGRESS

### 2018 to 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>VS.</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Jobs Created</strong></td>
<td>2,573</td>
<td></td>
<td>5,216</td>
</tr>
<tr>
<td><strong>Structures Completed or in Construction</strong></td>
<td>19</td>
<td></td>
<td>56</td>
</tr>
<tr>
<td><strong>Environmental Drafts Released and ROD’s Certified</strong></td>
<td>5</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Right-Of-Way Parcels Acquired</strong></td>
<td>1,423</td>
<td></td>
<td>1,771</td>
</tr>
<tr>
<td><strong>Miles of Guideways</strong></td>
<td>47</td>
<td></td>
<td>79</td>
</tr>
<tr>
<td><strong>Monthly Average Expenditures on Design-Build Contracts</strong></td>
<td>$30.47M</td>
<td></td>
<td>$68.13M</td>
</tr>
</tbody>
</table>

**REVISED DRAFT 2020 BUSINESS PLAN**
MERCED TO BAKERSFIELD
171-MILE INITIAL SERVICE

• Reaffirms initial operating segment
• Environmentally cleared with highest ridership potential
• MOU with CalSTA and San Joaquin JPA to align interim service roles and responsibilities
• Exploring phased track implementation
• Independent peer review of ridership forecasts

Steps to completion:

Advance design Complete extensions Procure trains Complete stations
<table>
<thead>
<tr>
<th>Project Section</th>
<th>Draft EIR/EIS</th>
<th>Projected ROD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield to Palmdale</td>
<td>Complete (February 2020)</td>
<td>Q2 2021</td>
</tr>
<tr>
<td>Burbank to Los Angeles</td>
<td>Complete (May 2020)</td>
<td>Q4 2021</td>
</tr>
<tr>
<td>San José to Merced</td>
<td>Complete (April 2020)</td>
<td>Q1 2022</td>
</tr>
<tr>
<td>San Francisco to San José</td>
<td>Complete (July 2020)</td>
<td>Q2 2022</td>
</tr>
<tr>
<td>Palmdale to Burbank</td>
<td>Q3 2021</td>
<td>Q4 2022</td>
</tr>
<tr>
<td>Los Angeles to Anaheim</td>
<td>Q4 2021 to Q1 2022</td>
<td>Q4 2022 to Q2 2023</td>
</tr>
</tbody>
</table>
## Project Section

<table>
<thead>
<tr>
<th>Project Section</th>
<th>Draft EIR/EIS</th>
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</thead>
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</tr>
<tr>
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<td>Q3 2021</td>
<td>Q4 2022</td>
</tr>
<tr>
<td>Los Angeles to Anaheim</td>
<td>Q4 2021 to Q1 2022</td>
<td>Q4 2022 to Q2 2023</td>
</tr>
</tbody>
</table>
NORTHERN CALIFORNIA ENVIRONMENTAL PROCESS

1. Notice of Preparation
2. Development & Evaluation of Alternatives
3. Identification of Preferred Alternative
4. Public Review of Draft EIR/EIS
5. Cooperating & Responsible Agency Review
6. Prepare Draft EIR/EIS
7. Respond to Comments and Prepare Final EIR/EIS
8. Cooperating & Responsible Agency Review
10. Authority Certifies Final EIR/EIS and Issues ROD

We are here: Recirculated Materials

= ongoing outreach

REVISED DRAFT 2020 BUSINESS PLAN
### MANAGING RISK

**RISK MANAGEMENT MEASURES**

- Increased risk contingency
- Enterprise risk management
- Stage Gate process for development & delivery

#### INITIATE

<table>
<thead>
<tr>
<th>STAGE 1</th>
<th>Project Initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define initial scope, cost and schedule</td>
<td></td>
</tr>
<tr>
<td>Initial scope evaluated in programmatic environmental impact statement</td>
<td></td>
</tr>
<tr>
<td>Identify risks</td>
<td></td>
</tr>
</tbody>
</table>

#### PRELIMINARY ENGINEERING & ENVIRONMENTAL APPROVAL

<table>
<thead>
<tr>
<th>STAGE 2</th>
<th>Identify Preferred Alternative &amp; Begin Preliminary Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% Preliminary Engineering</td>
<td></td>
</tr>
<tr>
<td>Draft Environmental Impact Report/Statement (EIR/EIS)</td>
<td></td>
</tr>
<tr>
<td>Evaluate range of alternatives</td>
<td></td>
</tr>
<tr>
<td>Identify Preferred Alternative</td>
<td></td>
</tr>
<tr>
<td>Risk assessment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE 3</th>
<th>Environmental Clearance, Prepare for Pre-Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% Preliminary Engineering</td>
<td></td>
</tr>
<tr>
<td>Final EIR/EIS</td>
<td></td>
</tr>
<tr>
<td>Record of Decision - Environmental Clearance</td>
<td></td>
</tr>
<tr>
<td>Risk assessment</td>
<td></td>
</tr>
<tr>
<td>Develop Procurement/Delivery Plan</td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Mapping</td>
<td></td>
</tr>
<tr>
<td>Identify Utility Relocations</td>
<td></td>
</tr>
</tbody>
</table>

#### EARLY WORKS

<table>
<thead>
<tr>
<th>STAGE 4</th>
<th>Early Works and Right-of-Way Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right-of-Way acquisition</td>
<td></td>
</tr>
<tr>
<td>Third party agreements - railroads, local jurisdictions, utilities</td>
<td></td>
</tr>
<tr>
<td>Environmental permits - federal agencies</td>
<td></td>
</tr>
<tr>
<td>Risk assessment</td>
<td></td>
</tr>
</tbody>
</table>

#### PROCUREMENT

<table>
<thead>
<tr>
<th>STAGE 5</th>
<th>Procurement for Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for Qualifications/Proposals</td>
<td></td>
</tr>
<tr>
<td>Select contractor/award contract</td>
<td></td>
</tr>
<tr>
<td>Issue Notice to Proceed</td>
<td></td>
</tr>
<tr>
<td>Finalize right-of-way, third party agreements, permits and environmental mitigation</td>
<td></td>
</tr>
</tbody>
</table>

#### DESIGN & BUILD

<table>
<thead>
<tr>
<th>STAGE 6</th>
<th>Final Design, Construction, Testing and Commissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor completes final design</td>
<td></td>
</tr>
<tr>
<td>Construction initiated</td>
<td></td>
</tr>
<tr>
<td>Change order management</td>
<td></td>
</tr>
<tr>
<td>Construction completed</td>
<td></td>
</tr>
<tr>
<td>Project tested &amp; commissioned</td>
<td></td>
</tr>
<tr>
<td>Substantial completion milestone</td>
<td></td>
</tr>
<tr>
<td>Ready for track and systems</td>
<td></td>
</tr>
</tbody>
</table>

#### PROJECT CLOSE OUT

<table>
<thead>
<tr>
<th>STAGE 7</th>
<th>Project Close Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer completed project from contractor to Authority</td>
<td></td>
</tr>
<tr>
<td>Detailed project documentation complete</td>
<td></td>
</tr>
</tbody>
</table>

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Stakeholder and Community Engagement

**REVISED DRAFT 2020 BUSINESS PLAN**
Steps after Environmental Clearance

- Geotechnical investigations
- Understanding risks and costs
- Right-of-way mapping
- Utility relocations identification
- Third-party agreements
- Construction preparation

Environmental clearance completion
“We are strengthening our state by investing in California's High Speed Rail project and other infrastructure investments on water, housing, and climate resilience.”

– Governor Gavin Newsom

“We are most focused on restoring the federal commitment to California's High Speed Rail project, partnering to develop 21st century water infrastructure, and prioritizing investments in schools, broadband, housing, and renewable energy.”

– Governor Gavin Newsom
The Authority is engaging the Biden administration on:
- Restoration of Federal Partnership
- Re-obligation of FY/10 grant funding
- Program delivery schedule flexibility

Opportunity for increased federal investment in electrified high-speed rail

“... We’ve been asked to settle for less in this country, and I just don’t know why people in other countries ought to have better train service and more investment in high-speed train service than Americans do.”

— Transportation Secretary Pete Buttigieg
 CURRENT FUNDING

• Funding forecast through 2030 based on Cap and Trade projections
  » Total available: $20.6 to $23.1 billion
  » Estimate to complete Merced to Bakersfield (and other statewide investments): $21.3 to $22.8 billion

• Authority will seek appropriation of remaining Proposition 1A funds to complete construction underway
FUNDING PLAN

- Funding plan required to request appropriation of Proposition 1A funds
- Consistent with Revised Draft 2020 Business Plan
- Focused on usable segment in the Central Valley to complete ongoing construction
- Funding plan milestones
  » February 9, 2021: Authority Board approved funding plan for submittal to the Director of Finance, Peer Review Group, and Legislature (transportation and finance committees).
  » May 2021: Proposed appropriation to be included in Governor’s revised budget
  » June 2021: Final budget adopted by the Legislature
- Additional funding plan required to access funds once they are appropriated.
HOW TO COMMENT ON THE BUSINESS PLAN

30-day public comment period: February 9 – March 12

Online at: www.hsr.ca.gov/about/business_plans/business_plan_2020_comment_form.aspx

By phone: 916-384-9516

By email: DraftBP2020@hsr.ca.gov

Verbally: March 2, 2021 Board hearing

By mail:
California High-Speed Rail Authority
Attn: Draft 2020 Business Plan
770 L Street, Suite 620, MS-1
Sacramento, CA 95814
CALIFORNIA HIGH-SPEED RAIL FUNDING 101
HOW HIGH-SPEED RAIL IS FUNDED

California High-Speed Rail Funding

1. $9.95 billion
   Bond measure
   2008 Proposition 1A

2. $2.5 billion
   Federal Grant
   2009 American Recovery and Reinvestment Act (ARRA)

3. $929 million
   Federal Funding
   FY 2010 Appropriations Bill

4. $500-$750 million per year
   Annual Cap and Trade Auction Market

CALIFORNIA HIGH-SPEED RAIL FUNDING 101
California voters approved Proposition 1A in 2008 to begin construction of a high-speed rail system

- Bond included funding for HSR planning and development, HSR construction, and connected projects
- Downpayment provided 20% of the estimated cost of the program at the time
- Required 1:1 match from other funding sources that did not exist at the time
- Included system requirements on speed, travel time, system design, approval processes, and operating subsidies

2008
Proposition 1A
Approved

2012
Last appropriation of Prop 1A funds for construction in the Central Valley, Caltrain Electrification, and other projects

2021
The Authority will be requesting the remaining $4.1 billion in Prop 1A funds
• Senate Bill (SB) 1029, 2012
  » Appropriated $2.6 billion in Proposition 1A bonds to begin construction in the Central Valley, matching $3.5 billion in federal funds
  » Appropriated $2 billion in Proposition 1A funds leveraging $5 billion in other funds for connectivity and bookend projects

CONNECTIVITY PROJECTS provide direct connectivity to high-speed rail lines and facilities. Example – BART Maintenance Shop and Yard Improvements.

BOOKEND PROJECTS are projects in the Bay Area and Los Angeles area that were allocated funding as part of the high-speed rail system. Example – Caltrain electrification project.
Central Valley Construction
California received almost 40% of the available HSR federal funds from the American Recovery and Reinvestment Act (ARRA) and FY’10 appropriations.

Salesforce Transit Center
Provided $400 million for trainbox construction at the Salesforce Transit Center in San Francisco.

No additional federal funds have been provided since 2010, leaving the federal share at about 17% of the program funding.*

Matching Funds
Matched state funds to begin construction in the Central Valley. $2.5 billion in ARRA funds had a 2017 expenditure deadline.

Included funds (and requirement) to complete environmental clearance for Phase 1 system from San Francisco to Los Angeles / Anaheim.

* Compared to 80-90% for historical highway projects and 30-50% for contemporary transit projects.
CAP AND TRADE AND HIGH-SPEED RAIL

2014 Appropriations (SB 852 and SB 862):
- One-time appropriation of $650 million
- Continuous appropriation of 25 percent of the annual proceeds from Cap and Trade Program

2017 (AB 398):
- The Legislature extended the Cap and Trade Program through 2030

Cap and Trade also funds other transit and intercity rail programs, affordable housing, and other efforts to reduce emissions.
HISTORICAL CAP AND TRADE AUCTION PROCEEDS

CHSR Quarterly C&T Auction Proceeds
(in millions $)

As of May 2019, all unsold current allowances accumulated prior to the passage of AB-398 have been resold or put in reserve.

CALIFORNIA HIGH-SPEED RAIL FUNDING 101
POTENTIAL FUNDING SOURCES

FEDERAL

- High-Speed Rail Corridor Development Act of 2020 (Rep. Costa)
  Would provide $32 billion in federally designated high-speed rail corridors through 2024
- American High-Speed Rail Act (Rep. Moulton)
  Would invest $205 billion in high-speed rail across the country
- Transportation reauthorization and recovery plans

STATE

- The Authority would benefit from the expected extension of the Cap and Trade program to 2050
- A Cap and Trade extension would also benefit local transit and other interrelated programs

REGIONAL/LOCAL

- Metropolitan Transportation Commission's (MTC) Plan Bay Area 2050 blueprint includes investment in bringing high-speed rail to the Bay Area as part of the region’s long-range plans
- MTC was the first region in the state to take such action and positions the Authority to leverage regional, state, and federal funds
The Authority will continue to advance the program in building blocks based on available funding. Goals include:

» Initiate high-speed rail service in California as soon as possible
» Make strategic, concurrent investments that will be linked over time
» Position ourselves to construct additional segments as funding becomes available

Consistent with Proposition 1A and the federal grants strategy in 2009/2010, the Authority is:

» Advancing construction work to begin service in the Central Valley
» Completing its commitments to bookend projects in NorCal and SoCal
» Completing environmental clearance statewide and using available funds to advance those segments to the next stage of project development
THANK YOU!