



**BRIEFING: JANUARY 16, 2018 BOARD MEETING AGENDA ITEM #3**

**TO: Chairman Richard and Board Members**

**FROM: Margaret Cederoth, Sustainability Manager**

**DATE: January 16, 2018**

**RE: Presentation on the 2017 Sustainability Report**

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**Background**

In March 2016, the Board adopted an updated Sustainability Policy, which included a provision that the Authority produce an annual sustainability report that conforms with global best practices.

As such, the Authority developed an annual report compliant with the Global Reporting Initiative (GRI) G4 standards, a reporting protocol used by several peer rail organizations. This 2017 Sustainability Report was released in December 2017 and details the progress of the program against a set of indicators identified by internal and external stakeholders as highly significant in showing sustainability of the California High-Speed Rail system.

The Authority published its first report, covering calendar year 2015, in December 2016. The 2017 Sustainability Report is the second published report, covering calendar year 2016, with some data points updated to reflect 2017 progress.

**Prior Board Action**

In March 2016, the Board adopted an updated Sustainability Policy (Resolution #HSRA 16-05), and included specific commitments to:

- Net-zero greenhouse gas and criteria pollutant emissions in construction
- Operating the system entirely on renewable energy
- Net-Zero energy, LEED-Platinum facilities
- Planning for climate change adaptation
- Prioritizing life-cycle considerations (cost and impacts)

Resolution #HSRA 16-05 also directed staff to:

1. Revise specifications and contract provisions to improve materials life-cycle scores and other stated board objectives;
2. Develop a means of scoring construction bids that demonstrate compliance with the Authority's sustainability policy;
3. Develop a baseline of the materials currently being installed for the project to determine their environmental characteristics;
4. Carry out information sessions with industry providers and contractors;
5. Complete climate change vulnerability research and develop appropriate mitigation and adaption strategies; and,
6. Report to the Board and public on the overall impacts of implementing sustainable infrastructure principles in the high-speed rail program, and how such a program furthers the state's low carbon, natural resources and community benefit goals.

### **Discussion**

Sustainability represents the degree to which actions taken today enable current and future generations to lead healthy and rewarding lives. In 2008, Californians approved Proposition 1A as a means of achieving sustainable development for the state: furthering economic development and mobility without producing greenhouse gas emissions, while also incentivizing compact land use patterns. As expressed in the Sustainability Policy:

*“The Authority will deliver a sustainable high-speed rail system for California that serves as a model for sustainable rail infrastructure. The Authority has developed, and will continue to implement, sustainability practices that inform and affect the planning, siting, designing, construction, mitigation, operation, and maintenance of the high-speed rail system.”*

The 2017 Sustainability Report details the value realized through sustainability approaches, explains progress on specific steps to realize commitments, and identifies the contribution of the program to state climate and sustainability goals.

Key progress noted in the 2017 Sustainability Report includes:

- The system will contribute between 58 and 71 million metric tons of carbon dioxide emissions reductions during the first 50 years of operations.
- Through 2016, 99% of all construction materials have been recycled, including 100% of all concrete and steel, keeping more than 87,000 tons of material out of landfill and avoiding approximately 13,000 tons of carbon dioxide emissions.
- Because of the requirement for cleaner construction fleets, air quality on construction sites was reported to be 50% to 60% better than average California construction sites.
- More than 52% of total investments through 2016 were made in disadvantaged communities throughout the state.
- Total investment has resulted in appropriately 20,000 job-years of employment, as of June 2016.

- Over 1,000 tons of total lifetime reductions of criteria air pollutant emissions have been realized in the Central Valley through tractor, engine, and school bus replacements.
- Over 2,000 acres of natural habitat have been preserved.
- We maintained our standing among leading infrastructure projects globally in terms of sustainability, as considered by the GRESB infrastructure benchmark.

Looking forward, we will continue to build on this work in several key areas in 2018:

- **Climate Change:** Building on the initial work on exposure to climate stressors, the Authority will develop a climate adaptation implementation plan.
- **Greenhouse Gas Emissions:** Based on the 2018 Business Plan, we will refine the whole-life carbon models for the project, including forecasted emissions reductions from mode shift and modelling emissions associated with the construction and operation supply chain. This modelling work will include recent grant awards by CalFIRE for tree planting.
- **Station Communities:** Continue to work with the station area planning team to identify sustainable development opportunities involving access and development, including work on financing tools that can advance dense infill development in the station area.
- **Renewable Energy:** Update the strategic energy plan from 2012 to reflect recent policy and industry context and create more dynamic models of system energy demand to understand the feasibility and utility of emerging technology that manages peak demand and stores electricity.
- **Stakeholders:** Meet with internal and external stakeholders to review reporting and revise indicators to reflect emerging issues and evolving stakeholder priorities.

### **Recommendations**

There are no recommendations associated with this item; it is informational only.

### **Attachments**

– Sustainability Report, December 2017