BRIEFING: AUGUST 16, 2018 BOARD MEETING AGENDA ITEM #6

TO: Chairman Richard and Board Members

FROM: Margaret Cederoth, Sustainability Director

DATE: August 16, 2018

RE: Presentation on the 2108 Sustainability Report

Background

HSR POLI-PLAN-03, adopted by the Board of Directors in March 2016, states that the Authority will produce an annual sustainability report that conforms with global best practice. The Authority has published three annual reports, compliant with the Global Reporting Initiative (GRI) G4 standards, a reporting protocol used by several peer rail organizations.

Through these annual reports, the Authority honors its commitment to transparency, providing stakeholders with qualitative information and quantitative data on progress against key commitments and other topics identified by stakeholders as highly significant in disclosing the sustainability of the system.

This 2018 Sustainability Report is the third published report, covering calendar year 2017, with some data points updated to reflect progress to date. The Authority published its first report, covering calendar year 2015, in December 2016.

Prior Board Action

The Board passed Resolution #HSRA 16-05 in March 2016, approving an updated Sustainability Policy which 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 (costs 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.

The Authority's Sustainability Policy states: "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."

Annual reporting offers a periodic snapshot of the effectiveness of the Authority's implementation actions across the program. The annual report provides consistent measurement of indicators that allows the delivery team to develop reliable data to inform the refinement of contract requirements, policies, and organization activities and illustrates where corrective action may be necessary to achieve success.

Specific progress noted in the 2018 Sustainability Report includes:

- Updating the forecast of emissions savings associated with mode shift to high-speed rail based on the 2018 Business Plan. Specifically, in the first 50 years of operation the system is projected to avoid between 64 and 76 million metric tons of carbon dioxide equivalent. In tune with best practice for climate change investments, staff also analyzed mode shift using an emissions factor that accounts for the full life-cycle of energy used for transportation, yielding a result of between 80 and 96 tons of avoided emissions.
- Being named, for the second year in a row, as the top sustainable infrastructure project in North America by the GRESB Infrastructure Assessment, which benchmarks our environmental, social and governance policies, practices and performance.
- Preserving more than 2,000 acres of natural habitat.
- Securing 273 acres of agriculture preservation easements.
- Partnering with Tree Fresno to plant 2,400 trees in schools and parks in the Fresno area, and the California Urban Forest Coalition to plant thousands more trees in priority communities along the alignment.
- Avoiding more than 50,000 pounds of criteria air pollutants.
- Putting 1,699 people to work across 17 construction sites (as of December 2017) and generating economic opportunity for hundreds of businesses including small and disadvantaged businesses.
- Launching a process to update our Sustainability Implementation Plan.

• Deploying EMMA 2.0, an update to program data collection, incorporating feedback from field use and facilitating cyclical reporting that further improves the timeliness, accuracy, validity and efficiency of our reporting.

As identified at the Board presentation in January 2018, we have already moved forward with several key work items. We will continue implementation work throughout 2018 on areas including:

Greenhouse Gas Emissions: Refining the whole life carbon models for the project to update the baseline of materials and construction emissions with information from the 2018 Business Plan and Project Baseline as well as actual data from completed construction elements.

Station Communities: Building partnerships with station area communities to continue exploring financing mechanisms and investments that illustrate bold, new visions for station communities that improve access and focus development in downtown areas, and initiating a cross-discipline Authority committee to consider necessary updates to the Authority's station area policy.

Renewable Energy: Modelling system electricity to illustrate the benefits of emerging energy storage techniques.

Climate Change: Continuing a cross-agency working group developing a Climate Adaptation Implementation Plan aligned with state resilience and adaptation guidance

Organization: Finalizing a public-facing Sustainability Implementation Plan that further clarifies our definitions of program sustainability elements and details milestones and measures for success. This plan will align sustainability actions and procedures with our new organizational structure.

Reporting: Convening an internal Sustainability Committee to continue to ensure that sustainability integrates across the organization; finalizing a Sustainability Dashboard with metrics that will supply timely information on our actions and progress; and providing continuing transparency through quarterly reporting on sustainability metrics to the Board.

Procurement: Refining an action plan for improving on the Authority's demonstrated leadership in sustainable procurement through an internal, multidisciplinary working team who will lay out and enact an implementation plan.

Engagement: Conducting outreach to external stakeholders to identify social, environmental and economic shocks and stressors that could diminish the resiliency of the system; collaborating with peers on best sustainability practices for transit and rail systems; and drawing upon our partners (Rail Delivery Partner and Early Train Operator) to leverage worldwide best practices in sustainability, climate adaptation and resiliency.

The actions of every member of the Authority and its delivery partners contribute to the positive outcomes and progress detailed in the Sustainability Report.

Recommendations

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

Attachments

- 2017 Sustainability Report, June 2018