TIRCP Program Overview

• The TIRCP provides grants from the Greenhouse Gas Reduction Fund

• Program Goal: provide monies to fund transformative capital improvements that modernize California’s intercity rail, bus, ferry and rail transit systems to achieve the following objectives:
  ✓ Reduction in greenhouse gas emissions;
  ✓ Expand and improve rail service to increase ridership;
  ✓ Integrate the rail service of the state’s various rail operations, including integration with the high-speed rail system; and
  ✓ Improve safety

• The California Department of Transportation, in collaboration with CalSTA, will be responsible for administering this program
Caltrain Grant Application

• Requests $631.5M for “Electrification Expansion”
• Funds will contribute to maximizing the benefits of Caltrain’s Peninsula Corridor Electrification Project (PCEP)
• Procurement of additional EMUs
  ✓ Supports TIRCP program’s goals by completely eliminating diesel powered passenger service from Caltrain’s mainline and increasing capacity of the system to accommodate regional growth
Scope of Grant Application

• Initial Capacity Increase:
  ✓ Procurement of **40 additional EMUs** to increase capacity of the electrified system by expanding the 6-car EMU to 8-car sets
  ✓ Minor **modification (lengthening) of platforms** at select stations to accommodate the operation of 8-car EMUs
  ✓ The implementation of **improved wayside bicycle facilities** throughout the system
  ✓ **Planning funds** equivalent to 1 percent of the total EMU cost estimate to support the critical development of plans and policy agreements to meet goals and service levels in the draft 2018 State Rail Plan
Scope of Grant Application

- **Caltrain System Enhancements:**
  - Install Broadband Communications System to attract additional ridership by providing customer facing Wi-Fi as well as enhanced reliability by creating the capability to conduct remote diagnostics and optimize ongoing maintenance.

- **Full Conversion of the Caltrain Mainline Fleet**
  - Procurement of 56 additional EMUs to facilitate the operation of a fully electrified fleet of 8-car EMUs.
The Incremental Modernization and Development of the Peninsula Corridor

Cumulative Direct Benefits

- Increased and improved service (up to 6 trains per hour per direction)
- Increased peak hour capacity (xx%)
- Reduced vehicle GHG emissions

Peninsula Corridor Electrification Project

- Construction of electrified infrastructure
- Procurement of initial 96 EMUs

Benefits to other systems

- Initial investment in infrastructure required to support CHSRA service on the Peninsula Corridor
- Full electrification of mainline fleet supports eventual blended Caltrain / CHSRA service
- Potential redeployment of diesel fleet to support Gilroy to Salinas service
- Improvements support full Caltrain / CHSRA blended service on Peninsula corridor
- May provide longterm potential to support expanded or additional rail services and connections on corridor

Long-term Development of the Peninsula Corridor

Electrification Expansion

- Increased peak hour capacity
- Reduced vehicle GHG emissions

Conceptual

- Overall expanded service and capacity
- Additional infrastructure, fleet and/or system improvements to expand capacity and accommodate blended service

*As described elsewhere in application, modifications to existing storage and maintenance arrangements will be required to support a full 192 EMU fleet. The factors influencing potential storage needs and the range of opportunities and possible solutions are complex and are not yet ripe for a decision. Storage needs will be evaluated further in 2018 to determine the range of options that could be possible. Key factors that remain to be resolved include the potential to share storage and maintenance facilities with other rail operators as well as the ultimate use and deployment of the diesel fleet.
# Grant Application Cost

<table>
<thead>
<tr>
<th>Project Element</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td><strong>Capacity Improvements</strong></td>
<td></td>
</tr>
<tr>
<td>Procurement of 40 Electric Multiple Units (EMUs)</td>
<td>$224,700</td>
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<tr>
<td>Minor Platform Modifications</td>
<td>$8,000</td>
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<tr>
<td>Wayside Bike Parking Improvements</td>
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<tr>
<td>Planning and Agreement Support</td>
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<td><strong>Subtotal</strong></td>
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<tr>
<td><strong>System Enhancements</strong></td>
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<tr>
<td>Broadband Communications</td>
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<td><strong>Subtotal</strong></td>
<td><strong>$14,000</strong></td>
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<tr>
<td><strong>Full Fleet Conversion</strong></td>
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<tr>
<td>Procurement of 56 Electric Multiple Units (EMUs)</td>
<td>$375,300</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$375,300</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$631,500</strong></td>
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</tbody>
</table>
Other Elements:

• There are additional benefits not part of Caltrain’s direct funding request that include:
  ✓ Creation of additional storage and maintenance capacity
  ✓ Potential redeployment of diesel fleet to support San Jose-Gilroy/Salinas service
  ✓ Potential use of EMU fleet to support enhanced future Caltrain service levels as part of a larger program of rail enhancements on the Peninsula Corridor

• Additional study is needed for each of these elements
Direct Benefits

• Increased Ridership based on Capacity Improvements and System Enhancements
  ✓ Allows increases in projected future ridership and further reduce greenhouse gas emissions

• Improved Regional Air Quality and Reduced Greenhouse Gas Emissions related to Vehicle Changes
  ✓ Less air pollution compared with diesel trains and improves regional air quality to meet the State’s emission reduction goals

• Safety
  ✓ Permits more precise train positioning, schedules, and maintenance; on-board real-time video surveillance helps monitor/assess situations; improves preventative maintenance
Cumulative Benefits

• **Increased service and increased ridership**
  - More efficient operations enable more frequent and/or faster train service to more riders
  - Supports service levels contemplated in draft 2018 State Rail Plan horizon year 2040

• **Coordinated Interregional and State Rail Service**
  - Fully electrified Caltrain prerequisite allowing the development of interregional and state rail network
  - Key step for blended Caltrain/California High-Speed Rail operations
  - Potential redeployment of remaining diesel fleet to support improved Gilroy service and/or rail service to Salinas
Stakeholder Support

- The Metropolitan Transportation Commission (letter of concurrence)
- Representative Jackie Speier
- Representative Anna Eshoo
- Caltrain’s State Legislative Delegation:
  - Senator Jerry Hill, 13th District
  - Senator Jim Beall, 15th District
  - Senator Scott Wiener, 11th District
  - Senator Bob Wieckowski, 10th District
  - Assemblymember Phil Ting, 19th District
  - Assemblymember Marc Berman, 24th District
  - Assemblymember Evan Low, 28th District
  - Assemblymember David Chiu, 17th District
  - Assemblymember Kansen Chu, 25th District
  - Assemblymember Kevin Mullin, 22nd District
  - Assemblymember Ash Karla, 27th District
Stakeholder Support

- California High Speed Rail Authority
- Santa Clara Valley Transportation Authority
- City and County of San Francisco
- San Francisco County Transportation Agency
- Transportation Agency for Monterey County
- Bay Area Council
- City of San Jose
- Capitol Corridor Joint Powers Authority
- Transbay Joint Powers Authority

- San Mateo County Economic Development Association
- SPUR
- Silicon Valley Leadership Group
- Friends of Caltrain
- Silicon Valley Bicycle Coalition
- San Francisco Bicycle Coalition
- Google
- Facebook
- Genentech
- Stanford University
Questions?