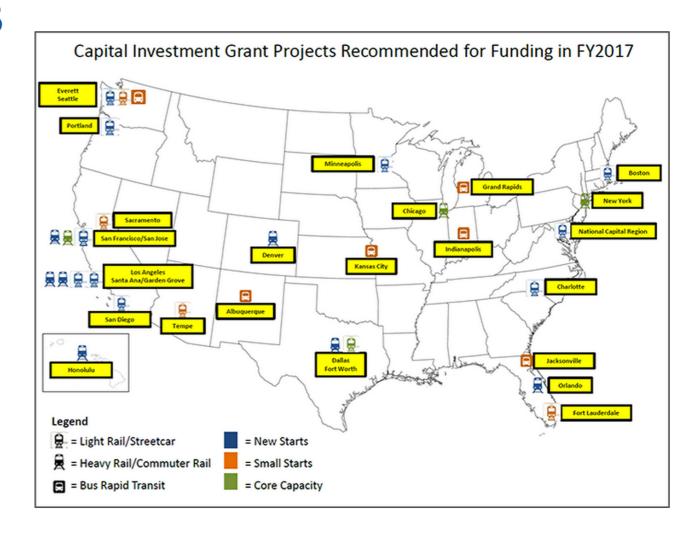
Santa Cruz: Next Steps

Santa Cruz, CA February 15, 2016



Federal Funding

- Capital Investment Grant Program authorized at \$2.3B
- FY 17 Budget \$3.5 B
- 31 projects
 - 10 Small Starts
 - 4 Core Capacity
 - 10 New Start FFGAs
 - 7 Proposed FFGAs



Federal Funding

New Starts

- Fixed guideway projects \$300 M or more in capital cost
- Federal share is typically 50 percent
- Fixed Guideway includes light rail, streetcar, commuter railroad and dedicated right of way bus rapid transit

Federal Funding

- Small Starts
 - Fixed guideway and corridor-based Bus Rapid Transit
 - Capital cost of less than \$300 million, section 5309 funding limited to \$100 M
- Local match comes from non-section 5309 monies from local, State, flexible highway monies or private sector

New Starts and Core Capacity Process



Engineering

Full Funding Grant Agreement

- Complete environmental review process including developing and reviewing alternatives, selecting locally preferred alternative (LPA), and adopting it into the fiscally constrained long range transportation plan
- Gain commitments of all non-New Starts funding
- Complete sufficient engineering and design

Construction

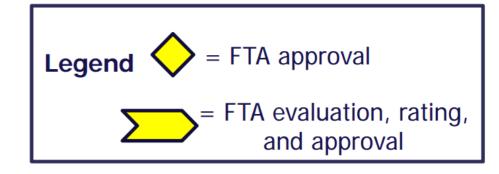
Small Starts Process



Project Development Small Starts
Grant Agreement

- Complete environmental review process including developing and reviewing alternatives, selecting locally preferred alternative (LPA), and adopting it into fiscally constrained long range transportation plan
- Gain commitments of all non-Small Starts funding
- Complete sufficient engineering and design

Construction



Project Next Steps

- Completed an initial feasibility study of potential technology options, alignments
- Initiate analysis of alternatives
 - Corridor(s), potential alignments, technology options
 - Identify corridor-specific issues that must be resolved in order to move forward

Project Next Steps

- Develop Purpose and Need
 - What issues will a project resolve?
 - What are the goals of the proposed project?
- Engineering and Design
 - Help identify project issues and initial cost estimates
 - Recommend between 5-10 percent prior to initiating environmental clearance process
 - If there are complexities in the project corridor and, if the project is a New Start, recommend more than 30-35 design and engineering

Project Next Steps

- Initiate NEPA process
 - Engage Federal Transit Administration (FTA) Region IX on both Purpose and Need and Class of Action
 - FTA recommends no less than 30-35 percent engineering and design completed during NEPA process

Project Development

- Make formal request to enter into Project Development (PD)
 - Identifying the process that lead to the LPA selection
 - Identify the project by technology, alignment and corridor that is being advanced into PD
 - Stakeholders engagement process
 - Source of funding to complete PD

Project Development

- Complete NEPA and publish NEPA finding in the Federal Register
- Adopt the LPA into the Long Range Transportation Plan of AMBAG
- Prepare information for FTA to rate and evaluate the project in order to enter into Engineering
- Complete within two years if a New Start project no two year limitation if a Small Start

New and Small Starts Project Evaluation and Rating under MAP-21

Individual Criteria Ratings

Mobility Improvements (16.66%)

Environmental Benefits (16.66%)

Congestion Relief (16.66%)

Cost-Effectiveness (16.66%)

Economic Development (16.66%)

> Land Use (16.66%)

Current Condition (25%)

Commitment of Funds (25%)

> Reliability/ Capacity (50%)

Summary Ratings

Project Justification[†]

(50% of Overall Rating)

†Must be at least "Medium" for project to get "Medium" or better Overall Rating

Local Financial Commitment[†] (50% of Overall Rating)

†Must be at least "Medium" for project to get "Medium" or better Overall Rating

Overall Rating

Overall Project Rating

Super-Capacitor Streetcars

Reims - Opened in 2011



Dubai - Opened in 2014



Nice - Opens in 2018

Battery Powered Streetcars

 Vehicle is in use in Dallas and will also be operated in Detroit



Overhead Wire Streetcars



Operated in Kansas City and Cincinnati







Operated in Salt Lake City and Atlanta





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