Mt. Murphy Road Bridge Alternatives Analysis Project

Presented to

Public Meeting

January 28, 2015

Agenda

- Environmental Review Process/Public Scoping
- Project Milestones
- Project Development Process
- Alternatives Analysis Process
- Results
- Next Steps

Environmental Review

- California Environmental Quality Act (CEQA)
  - Environmental review of discretionary approvals
  - Establishes framework to evaluate and document environmental effects
  - Avoid significant environmental effects, when feasible
    - Mitigation measures - Alternatives
- National Environmental Policy Act (NEPA)
  - FHWA delegates NEPA lead to Caltrans for federally funded road projects using study results completed by County. Will be processed concurrently with CEQA.

Environmental Review cont.

- Content of EIR
  - Project Description
  - Environmental Setting
  - Environmental Impacts
  - Mitigation Measures
  - Alternatives

Environmental Review cont.

- Issues to be considered in EIR for each alternative, including No-Project Alternative:

  - Visual Impacts
  - Air Quality
  - Traffic/Circulation
  - Cultural Resources
  - Hydrology/Water Quality
  - Biological Resources
  - Greenhouse Gases
  - Noise
  - Land Use
  - Cumulative Impacts

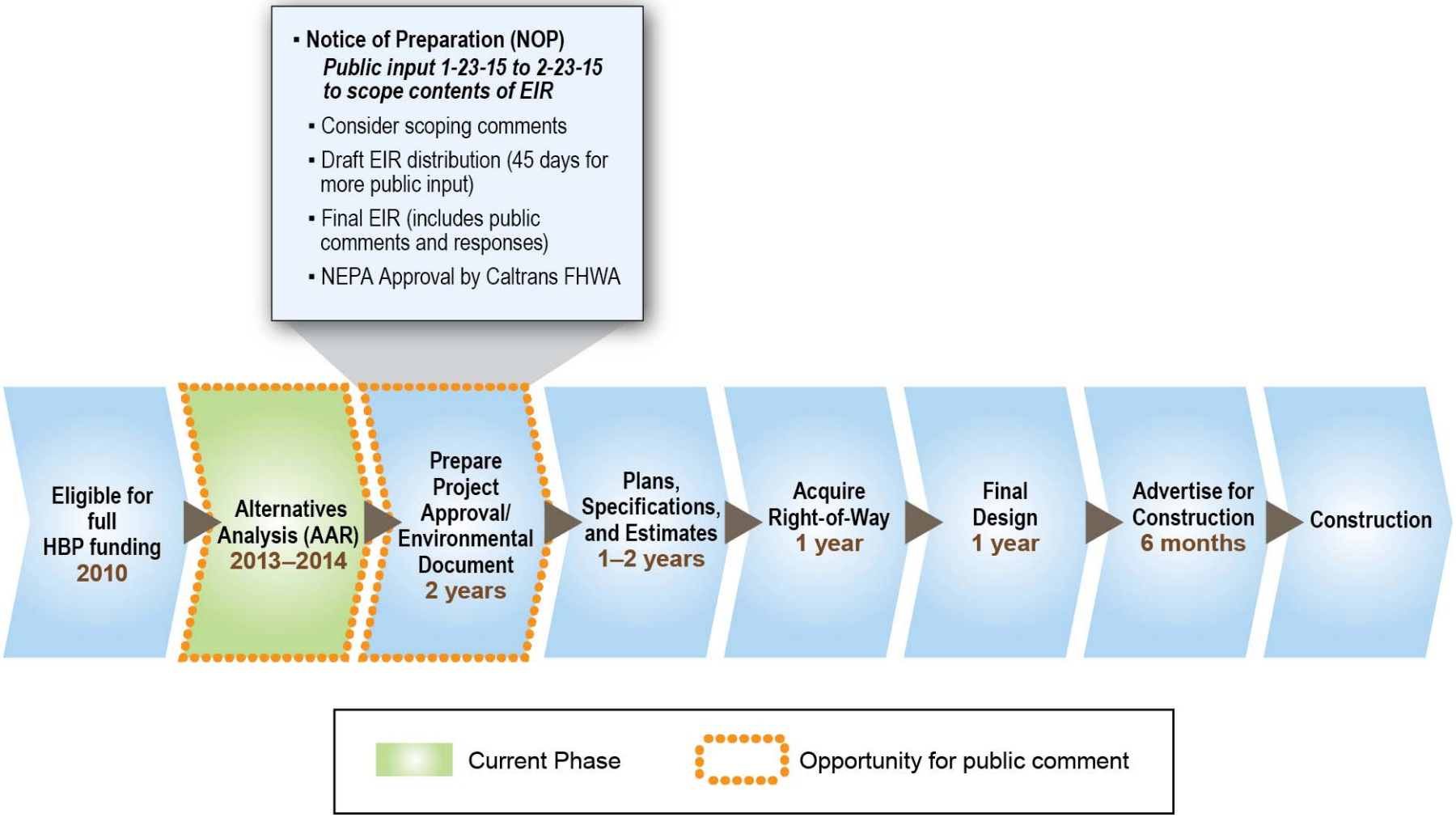
Environmental Review cont.

- Environmental Process
  - Notice of Preparation (NOP) (30 days for public input) Just released – review period from 1-23-15 to 2-23-15) to scope contents of EIR
  - Consider NOP Scoping comments
  - Draft EIR distribution (45 days for more public input)
  - Final EIR (includes public comments and responses)
  - NEPA Approval by Caltrans FHWA
  - Additional Board Findings may include *Statements of Overriding Consideration* if impacts cannot be mitigated
  - Resource Agency Permits (Army Corps, USFWS, CAFWS, etc)

Project Milestones

- Community meeting – February 2013
- Board of Supervisors (Board) authorized first step to evaluate existing bridge - April 23, 2013
- Board approves staff recommendations of Rehabilitation Analysis – February 4, 2014
- SAC & PDT formulated – April, 2014
- Board receives update on Alternatives Analysis – December 2014
- Review Alternatives Analysis with community and initiate environmental process – January 2015

Project Development Process

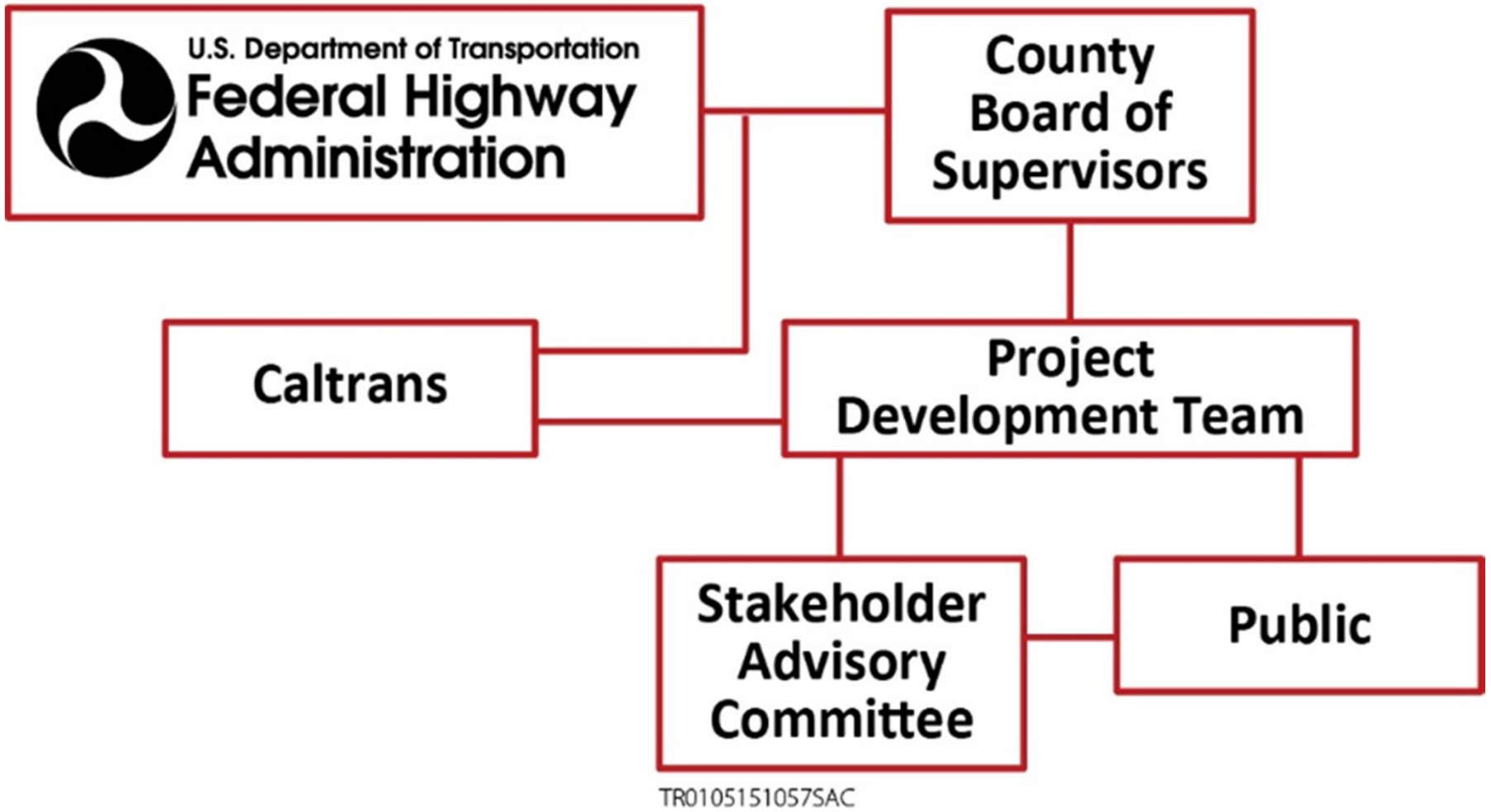


Evaluation of Existing Bridge

- Rehabilitation Analysis Completed in January 2014
- Key findings:
  - Functionally Obsolete
    - Substandard Geometry
      - Width, height, barriers
  - Structural Deficiency
    - Bridge does not meet structural condition ratings

Alternatives Analysis Begins

Project Team



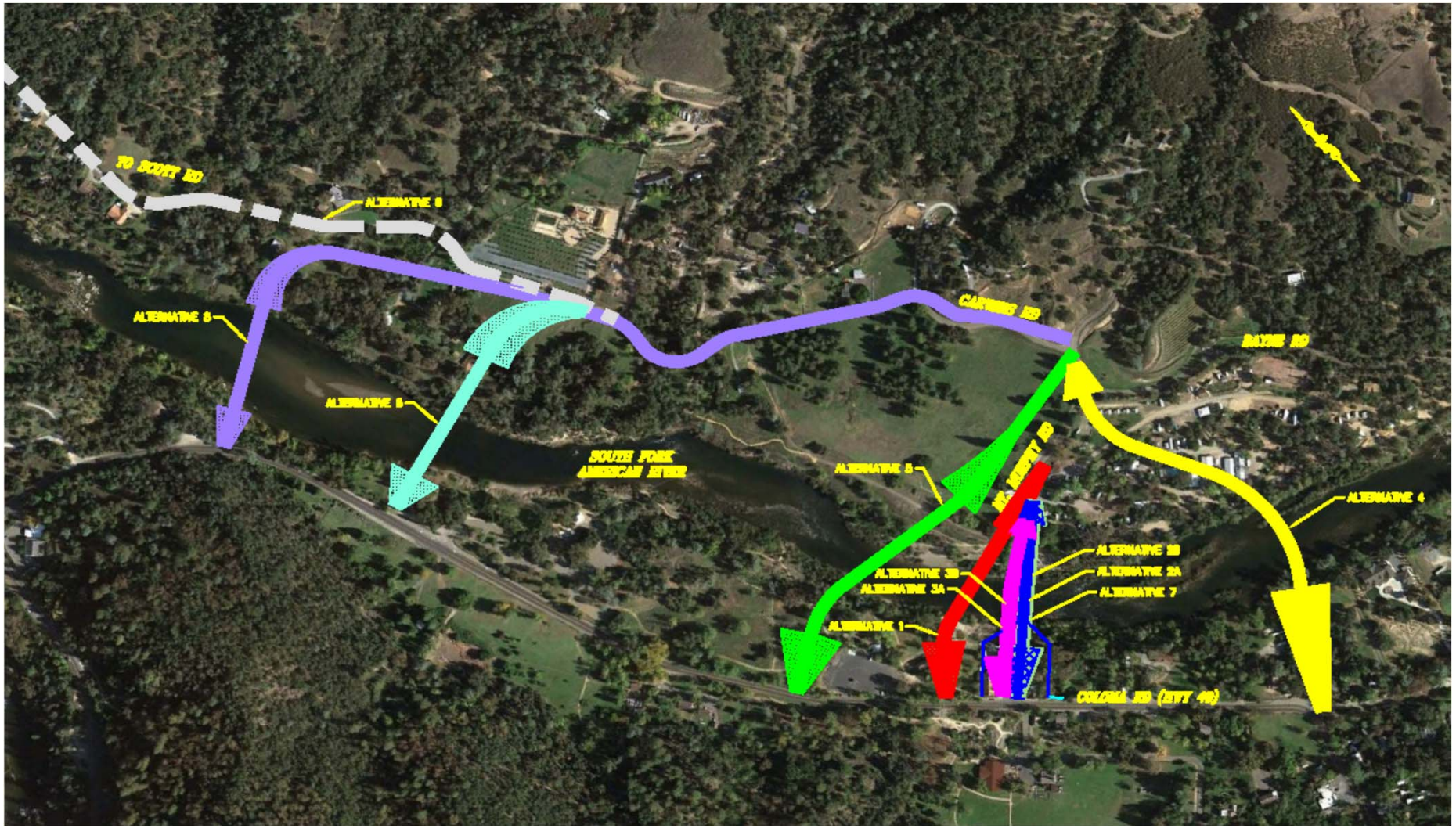
Alternatives Analysis Process

- Step 1 – Met with Stakeholder Advisory Committee (SAC) and Project Development Team (PDT)
  - What's important? What do you care about?
    - Historic & Cultural Character
    - Community Character
    - Access & Circulation
    - Safety
    - Environmental Resources
    - Right-of-Way Impacts
    - Cost
    - Design Standards
    - Meet Funding Criteria

	Criteria	Performance Measures
	Historic and Cultural	
H1	**Minimize physical impacts to cultural/historic landmarks within the Mt. Murphy Corridor.[1]**	Number of physical encr Mt. Murphy Corridor. 5=r cultural/historic impacts,
H2	**Minimize physical impacts to American River recreation use (Baby Beaches) in Mt. Murphy Corridor.**	Number of physical encr Murphy Corridor. 5=impr than 2 rafting or beach a access points disturbed,
H3	**Minimize physical impacts to Marshall Gold Discovery Park.[7]**	Number of physical encr the park. 5=no impact to the park disturbed, 1=mo
	Average Rating for Category	
	Community Character	
CC1	**Maximize blending of bridge into existing setting.**	Location blends into exis to existing setting, 1=ne
CC2	**Minimize disturbance to local vehicular circulation/mobility.**	Maintenance the existing circulation, 3=no change circulation.
CC3	**Maximize connectivity to walkways and trails for non-motorized travel.**	Improves the ability of no 5=improves existing circ 1=negative impact to circ

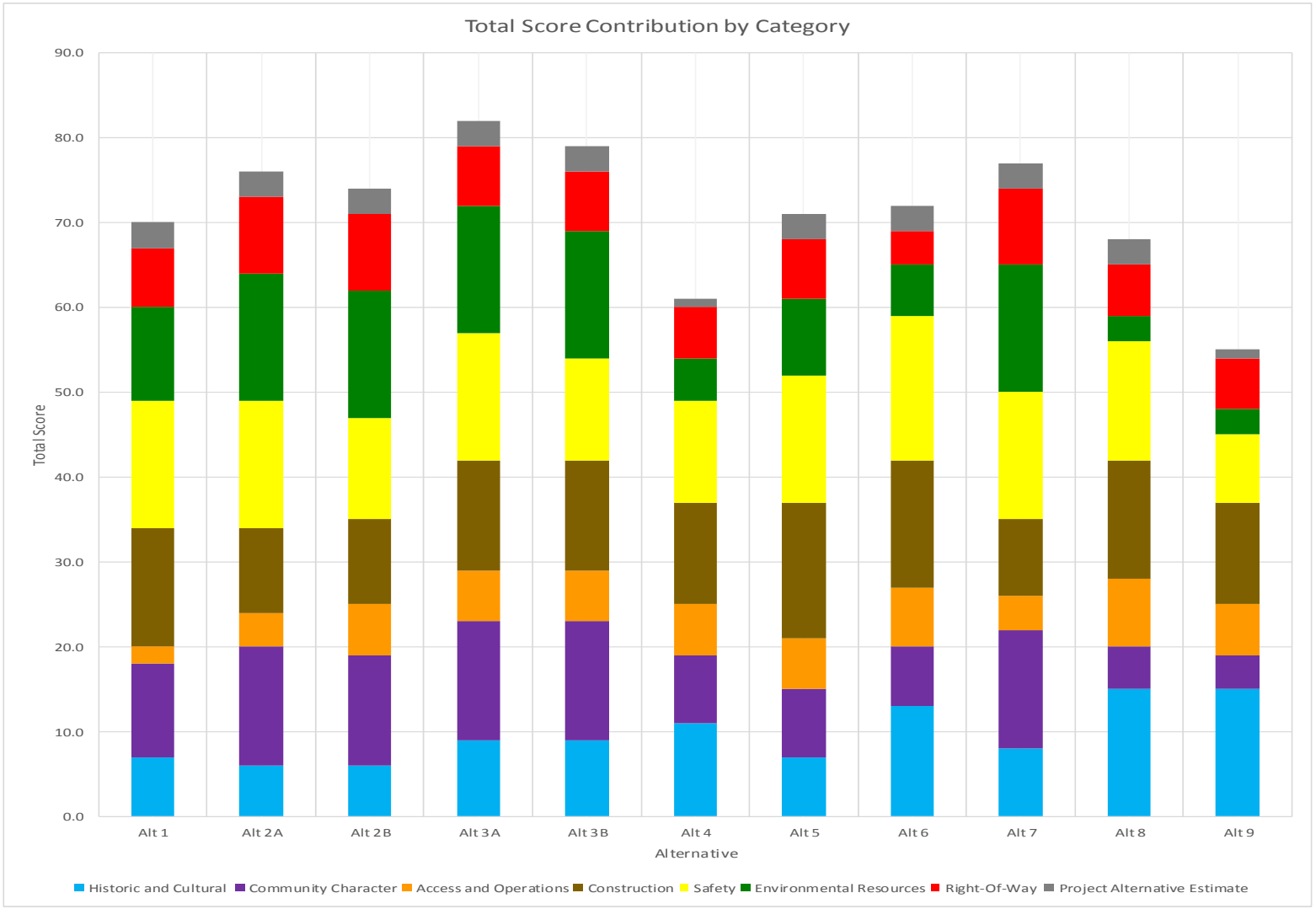
Alternatives Analysis Process

- Step 2 – Met with SAC & PDT to identify new corridor alignments



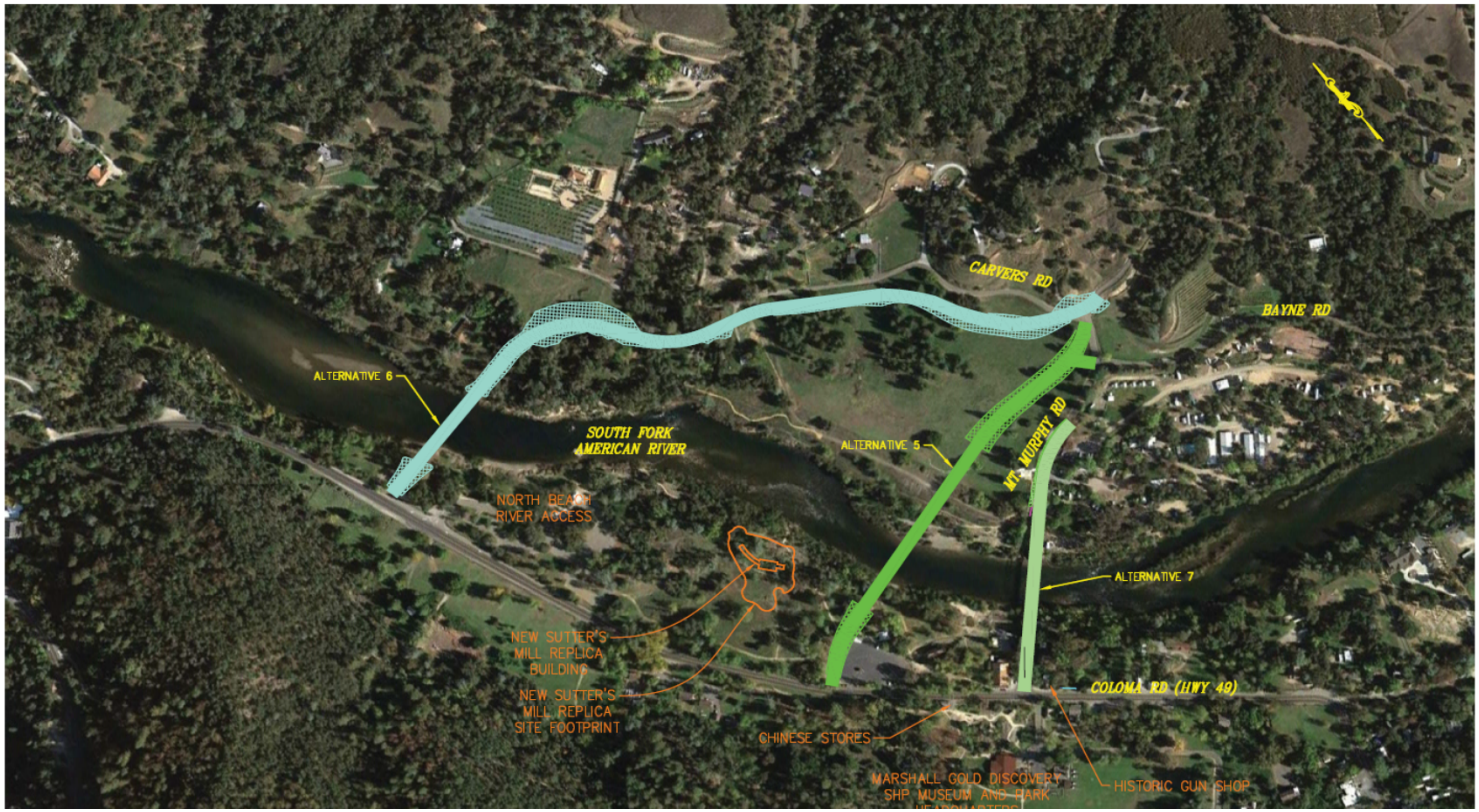
Alternatives Analysis

- Step 3 – Scored alternatives using evaluation criteria



The Results

- Corridor 1: Existing Alignment
- Corridor 2: Immediately Downstream of Existing
- Corridor 3: Downstream of North Beach



Next Steps

- Get feedback from stakeholders on 3 corridors
- Finalize Alternatives Analysis Report
- Initiate Project Approval/Environmental Document
  - Identify all environmental impacts
  - Develop more detailed design & costs
  - Define mitigation
  - Select preferred alternative

Thank you!

http://www.edcgov.us/MtMurphyBridge/

Questions??

- Write your questions on cards provided.
- Pass cards to the asile/forward.
- Answers to questions provided by panel.

Comments??

- Provide comments on sheets provided.
- Leave at sign-in table.
- Addressed/incorporated in environmental document.
- Website submission.

Bull Pen Slides for Q&A

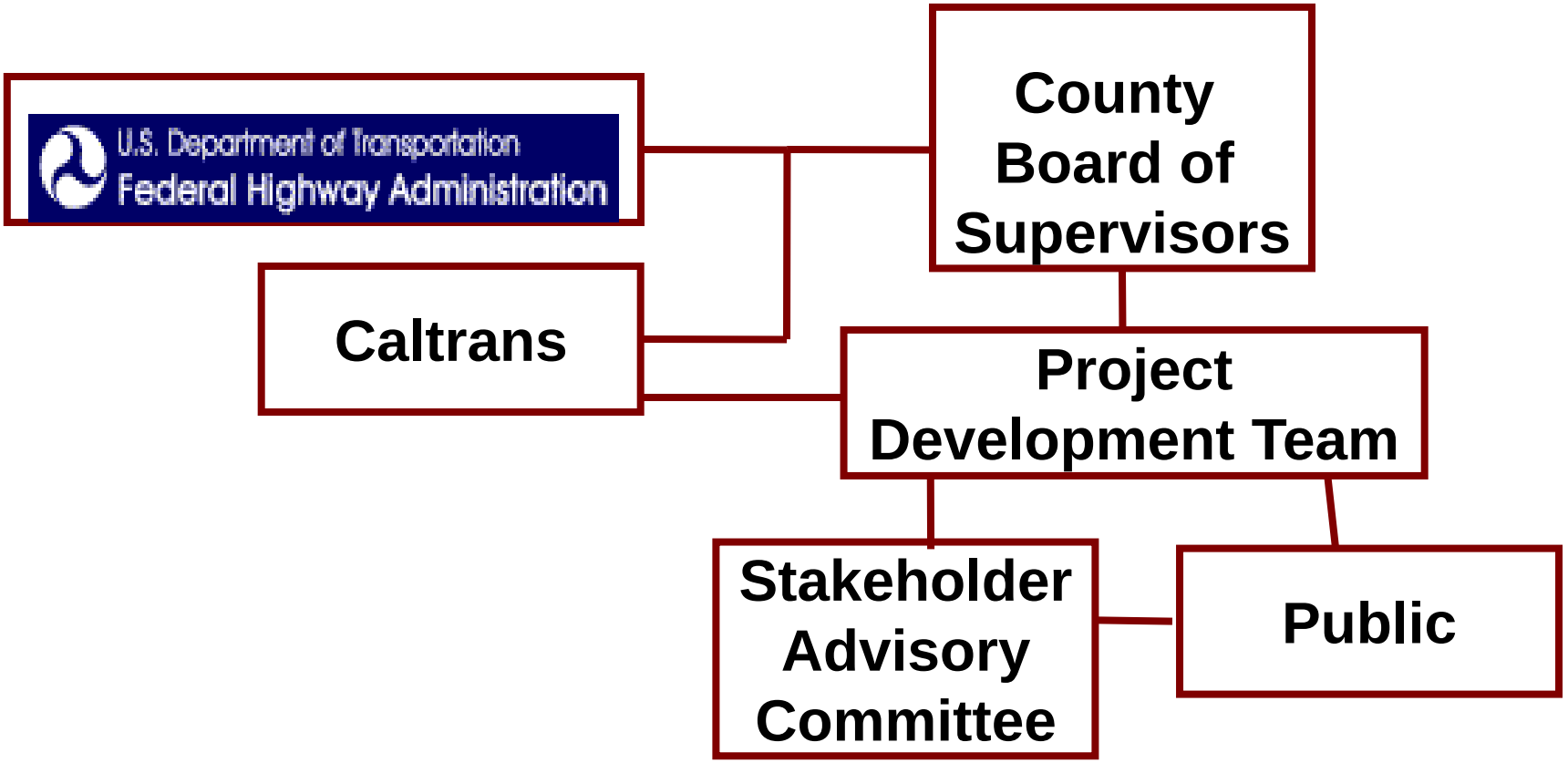
Costs (Excluding ROW, ED/Design/CM)

- Rehabilitation
  - Bridge scenarios range from $6.5 - $14.2 million ($700/sf - $1,550/sf)
  - County may be required to pay for all or a portion of the fix
  - Higher future maintenance costs for inspection and painting, shorter life span than a new bridge

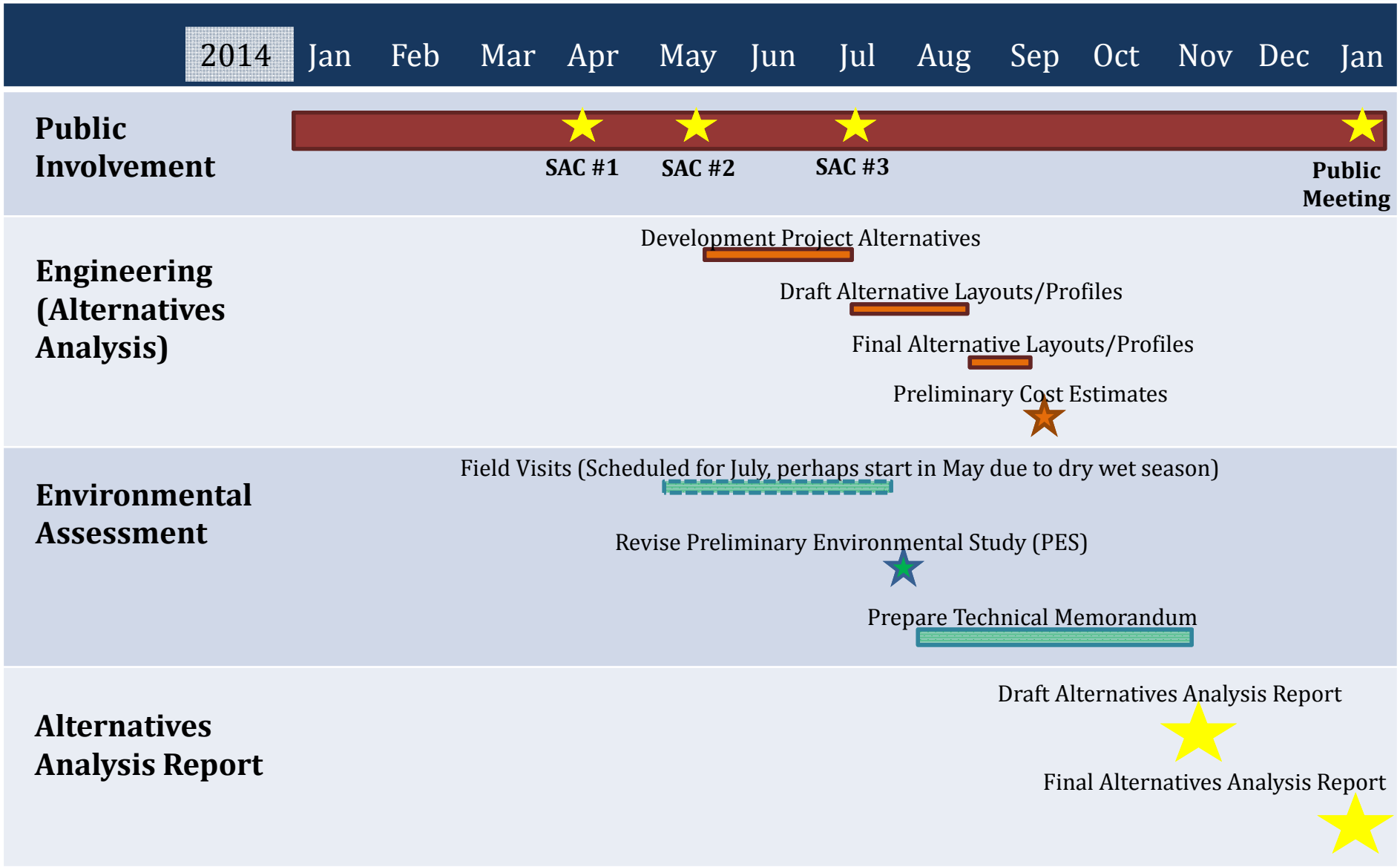
- Replacement - assumes 2-lane, shoulders, pathway
  - $1.7 million to keep old bridge as pedestrian only bridge plus $15.3 million ($555/sf) for a replacement bridge

  County does not need to contribute to funding of new bridge, but would have to pay for keeping the old bridge for use as a pedestrian bridge

Study Team Organization



Project Timeline



Mt Murphy Road Bridge – Structurally Deficient

Pier foundations are scour critical and lightly reinforced (seismic)

Most truss members require strengthening or replacement

Eye-bar members are fracture critical and have cracks started

Stringers and floor beams overstressed for permitted load

Mt Murphy Road Bridge - Structurally Deficient

Lightly reinforced columns

Some exposed rebar, low concrete cover. Large stone aggregate. Locations with visible hay, pine needles (and a hack saw blade) embedded in the concrete.

Structure Status

- Retrofit Needs