

- **Board of Directors**
Engineering, Operations and Real Property Committee

March 13, 2001 Board Meeting

10-2

Subject

Status report for the Inland Feeder Project for the month ending January 2001

(Any discussion of claims will be heard in closed session – conference with legal counsel – significant exposure to litigation (two matters) pursuant to Gov. Code § 54956.9[b].)

Description

Arrowhead Tunnels

Redesign activities related to the Arrowhead West Tunnel and the remaining portion of the Arrowhead East Tunnel are complete. The final drawings and specifications checkset are in review. The United States Forest Service is expected to issue a permit to proceed by the end of February 2001. Staff completed its evaluation of five alternative contingency alignments as a potential replacement for the Arrowhead Tunnels. An oral and written report was given to the Board in November 2000, and question-and-answer sessions were held at the December 2000 and January 2001 Engineering and Operations Committee (now Engineering, Operations and Real Property Committee) meetings. Board action on the direction to proceed with the project is expected in April 2001.

The Board of Consultants (BOC) for the Inland Feeder Project was established in 1993 prior to the commencement of the design phase. The BOC is a panel of twelve experts in various aspects of tunneling that act in an advisory role to the project on scientific and technical matters relating to design and construction. They are an integral part of the project team and their technical contributions to date have been invaluable. The BOC meets with project staff on an as-needed basis to discuss and review project status and resolve any issues related to the tunneling work. The BOC is also on call to advise in emergency situations. Recently, the BOC's contributions were instrumental in the redesign of the Arrowhead Tunnels.

Over the course of the last eight years, the makeup of the BOC has evolved to best-fit the changing needs of the tunneling projects. Based on this past experience, staff has re-evaluated the composition of the BOC to determine if the group could be re-structured to more effectively support the upcoming construction of the Arrowhead Tunnels. It was decided to select four of the BOC members to form a core advisory group. Each of the four individuals will contribute an expertise in one of the four areas deemed most critical for the success of the Arrowhead Tunnels project. The core group will meet periodically to review and advise on the project and be available in emergency situations. The balance of the BOC members will serve in a supporting role and be utilized in an as-needed capacity.

Arrowhead West Tunnel – Reach 1

Negotiations with the contractor continue over the remaining construction issues.

Arrowhead East Tunnel – City Creek Heading – Reach 2

The contractor completed concrete backfill behind the 4,100 feet of final impermeable liner that was previously installed in the tunnel. Installation of the remaining 4,000 feet of liner has begun. Lining and backfill operations are scheduled to be completed by mid-2001. Negotiations with the contractor continue over the remaining construction issues.

Highland Pipeline – Reach 3

Design activities have been placed on hold pending Board action on the direction to proceed with the project.

Mentone Pipeline – Reach 4

The contractor installed 1,600 feet of pipe during the reporting period for a total of 8,300 feet to date (50 percent complete). This reach is scheduled for completion in early 2002.

Riverside Badlands Tunnel – Reaches 5 & 6

In January, the tunnel boring machine (TBM) advanced another 977 feet for a total of 30,530 feet (73 percent complete). The contractor continued to perform grouting operations to stabilize the ground and reduce groundwater inflows ahead of the TBM (see [Attachment 1](#) for a summary of tunneling progress).

Budget and Schedule

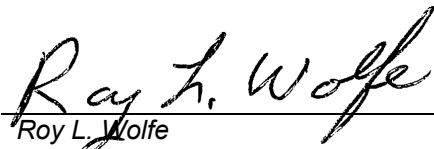

Based on proceeding with the existing project, which includes the construction of the Arrowhead Tunnels, the projected total cost for the program is \$981.5 million with a completion date of late 2006. Total expenditures through January 2001 are \$508.0 million (see [Attachment 2](#) for a financial summary and [Attachment 3](#) for a budget comparison and schedule summary/remaining budget). The project budget remains at \$1.188 billion.

Policy

Board Request.

Fiscal Impact

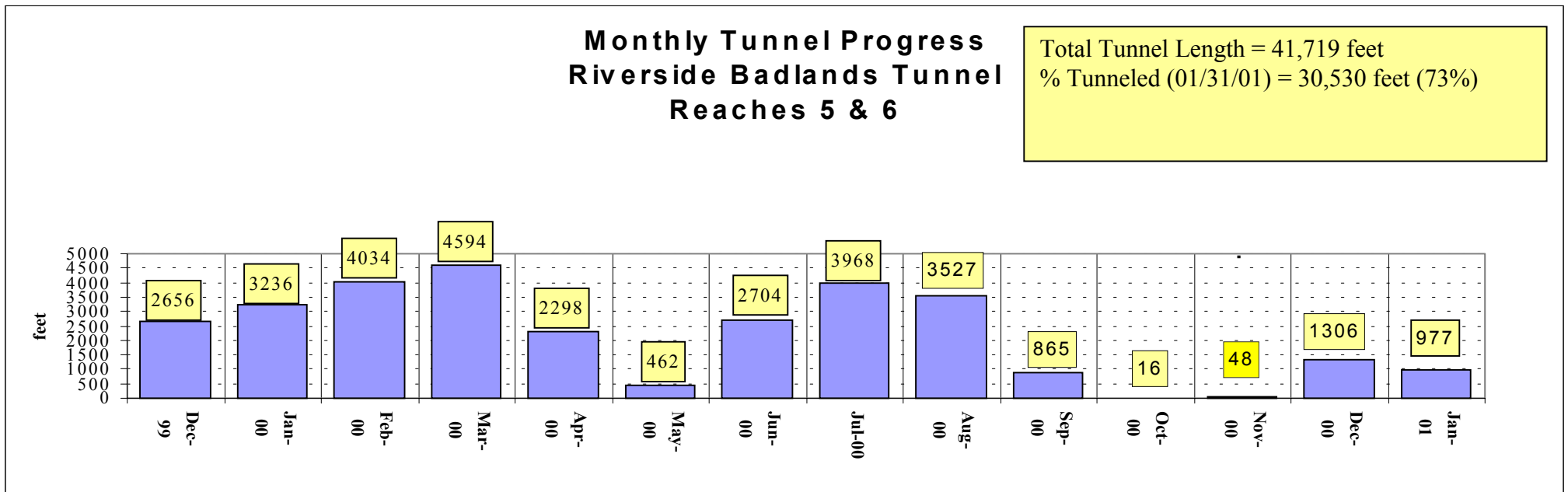
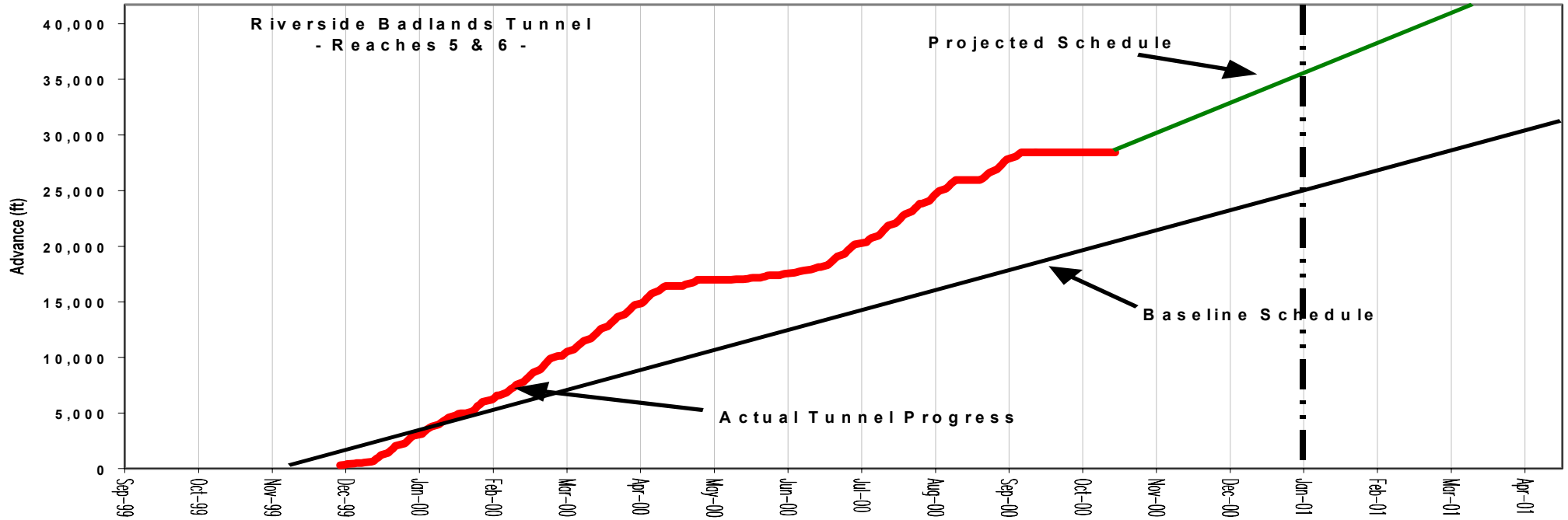
Refer to the attachments.

	2/23/2001
Roy L. Wolfe Manager, Corporate Resources	Date
<hr/>	
	2/26/2001
Ronald R. Jester General Manager	Date

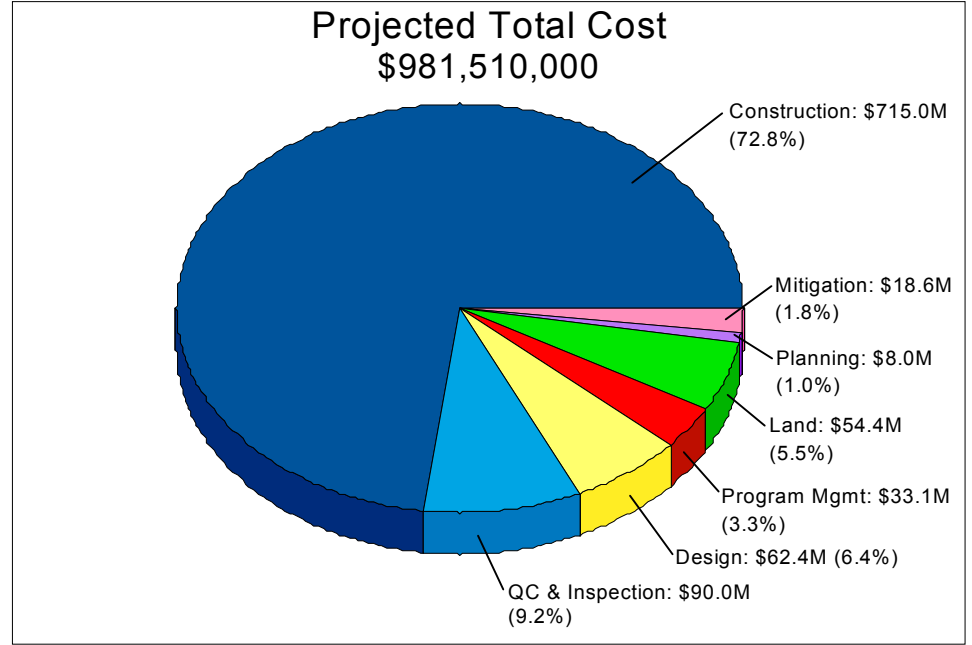
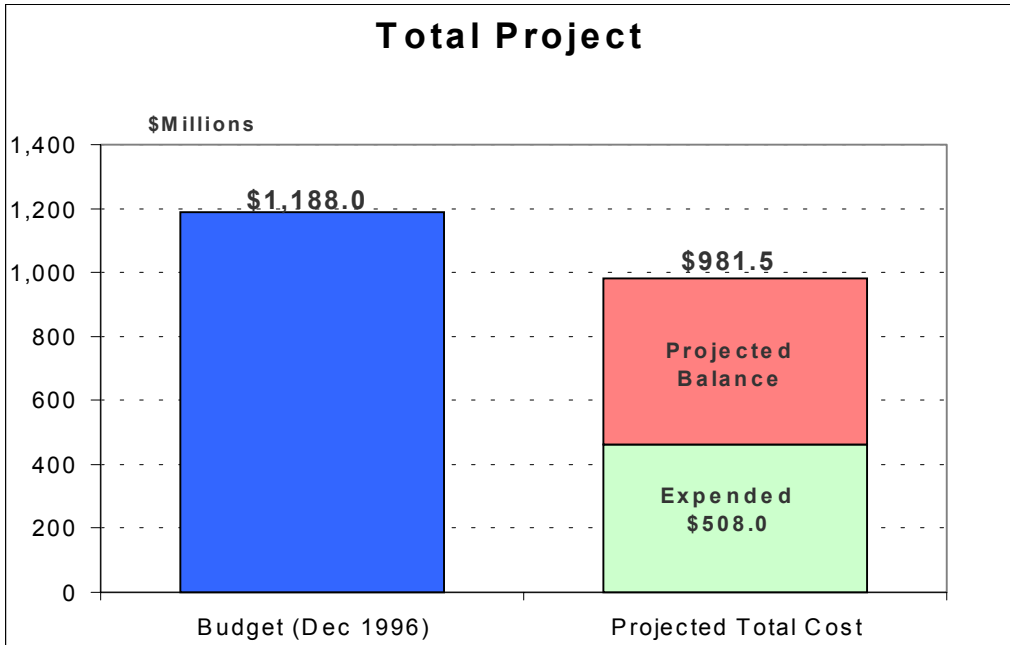
[Attachment 1 – Riverside Badlands Tunneling Progress](#)

[Attachment 2 – Financial Summary/Project Cash Flow](#)

[Attachment 3 – Budget Comparison and Schedule Summary/Remaining Budget](#)

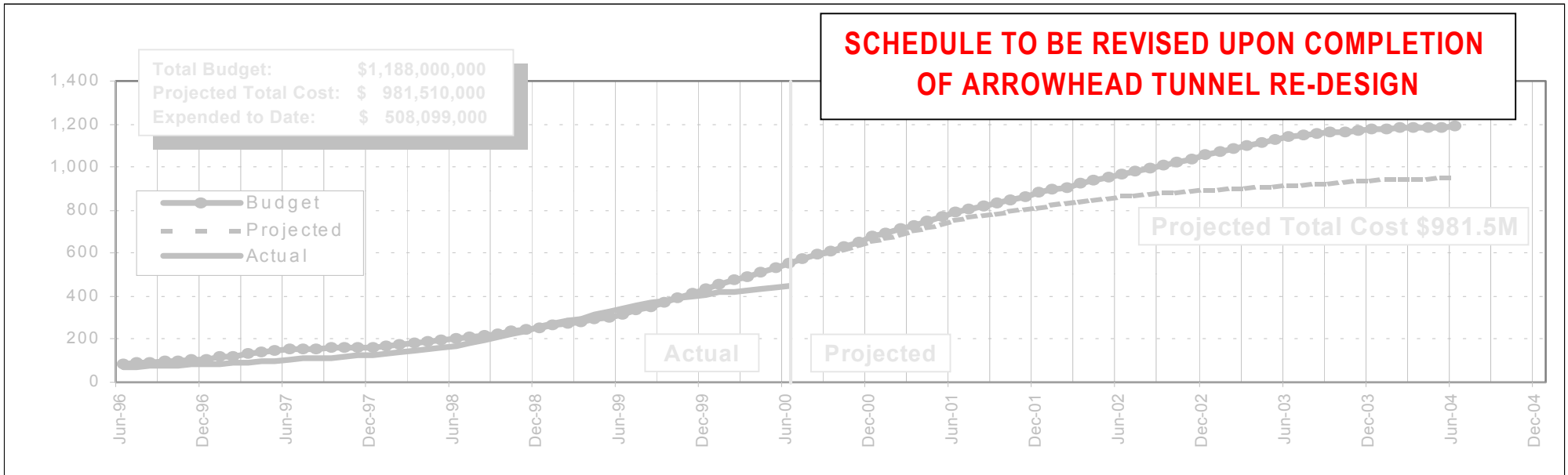


Financial Summary



1. Based on knowledge of current field conditions.

Project Cash Flow



Budget Comparison and Schedule Summary

	PRELIMINARY REBASELINE (JUN-2000) ⁽¹⁾	FORECAST (JAN-01)	ACTUALS THRU (JAN-01) ⁽²⁾	PROGRESS		COMPLETION DATE		COMMENTS
				PLANNED % COMPLETE	ACTUAL % COMPLETE (JAN-01) ⁽⁴⁾	CONTRACT (5)	FORECAST (JAN-01)	
Construction Reaches								
Arrowhead West Tunnel	\$ 211,728,000	\$ 211,728,000	\$ 56,174,000	----	25%	Dec-02	T.B.D.	On hold.
Arrowhead East Tunnel	\$ 281,607,000	\$ 281,607,000	\$ 122,958,000	----	38%	Jan-03	T.B.D.	On hold.
Highland Pipeline ⁽³⁾	\$ 57,199,000	\$ 51,813,000	\$ 7,146,000	0%	0%	-----	T.B.D.	In Design.
Mentone Pipeline	\$ 35,056,000	\$ 40,442,000	\$ 28,720,000	35%	78%	Mar-02	Oct-01	Under construction.
Riverside Badlands Tunnel	\$ 142,534,000	\$ 142,534,000	\$ 96,936,000	55%	63%	Aug-03	Apr-02	Under construction.
Riverside North Pipeline	\$ 57,984,000	\$ 57,984,000	\$ 55,248,000	100%	100%	Completed	Nov-99	Completed Nov. 99
Riverside South Pipeline	\$ 42,358,000	\$ 42,358,000	\$ 42,347,000	100%	100%	Completed	Aug-99	Completed Aug. 99
Construction Support								
Right-of-Way and Land	\$ 54,448,000	\$ 54,448,000	\$ 42,391,000	-----	78%	-----	-----	-----
Environmental Planning/Mitigation	\$ 18,598,000	\$ 18,598,000	\$ 10,992,000	-----	59%	-----	-----	-----
Owner Controlled Insurance Prog.	\$ 38,889,000	\$ 38,889,000	\$ 18,973,000	-----	49%	-----	-----	-----
Study/Initial Planning	\$ 8,024,000	\$ 8,024,000	\$ 8,024,000	-----	100%	-----	-----	-----
Program Management	\$ 33,085,000	\$ 33,085,000	\$ 18,190,000	-----	55%	-----	-----	-----
Projected Total Cost	\$ 981,510,000	\$ 981,510,000	\$ 508,099,000					
Remaining Budget	\$ 206,490,000	\$ 206,490,000						
Total Approved Budget	\$ 1,188,000,000	\$ 1,188,000,000						

(1) Based on 30% design for Arrowhead Tunnels

(2) Actuals for construction reaches include design costs

(3) Expenditure for design which is at 90%.

(4) Based on work complete for construction reaches and \$ expended for construction support

(5) Based on original contract duration and approved extensions

Remaining Budget ¹

