

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

August 20, 2001 Board Meeting

---

10-1

---

**Subject**

---

Status report for the Inland Feeder Project for the month ending June 2001 (**Any discussion of potential litigation to be heard in closed session. Conference with legal counsel – significant exposure to litigation (two matters); to be heard in closed session pursuant to Gov. Code § 54956.9[b].**)

---

**Description**

---

**Arrowhead Tunnels**

The final amended Special-Use Permit was received from the United States Forest Service (USFS) in late June. Staff has reviewed the conditions of the permit and has verified that they are consistent with the agreements established in prior discussions with the USFS and presented to the Board in April. Six firms have responded to Metropolitan's "Request for Statement of Qualifications to Construct the Arrowhead Tunnels" issued in April 2001. Staff is reviewing the qualification statements and a selection of qualified contractors is expected in July. Staff is continuing to finalize contract documents and plans to advertise for construction bids in July.

**Arrowhead West Tunnel – Reach 1**

Metropolitan has received the contractor's submittal of claimed costs regarding delay and deletion of mining. Staff is reviewing and evaluating the submittal. Negotiations will be initiated with the contractor following the review. The Board will be updated concerning progress/schedule as information becomes available.

**Arrowhead East Tunnel – City Creek Heading – Reach 2**

The contractor has completed installation of the final impermeable liner (8,000 feet) and concrete backfill has been injected behind the liner. The remaining pipeline sections from the City Creek Portal to the end of the reach are being installed. Remaining work, including construction of the City Creek Portal structure, is scheduled for completion by late 2001.

**Highland Pipeline – Reach 3**

Design activities have been initiated to complete the bid package by Fall 2001.

**Mentone Pipeline – Reach 4**

All 16,660 feet of pipe has been installed. Mortar lining operations began in June and are expected to be complete in late August. This reach is scheduled for completion in Fall 2001.

**Riverside Badlands Tunnel – Reaches 5 & 6**

In June, the tunnel boring machine (TBM) advanced another 932 feet for a total of 38,122 feet (91 percent complete). The TBM continued to mine through a zone measuring approximately 1,600 feet in length that consists of very loose and unconsolidated material combined with groundwater. The geologic conditions through this zone are weaker than anticipated and more groundwater is present. The contractor is grouting in front of the TBM to stabilize the ground as required by the contract specifications. Due to the uncertainty of grouting requirements prior to tunneling, grouting costs are paid for under an allowance provision in the contract. This allows for the fluctuations in actual usage. Due to the additional grouting that has been required in various zones along the alignment, the cost for grouting is expected to exceed the original allowance of \$5.8 million by \$1.1 million (see Budget and Schedule for further details). Additional dewatering wells were installed to lower the groundwater levels in the vicinity of the TBM, which will expedite mining through this zone (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 Inland Feeder Program is \$980 million with a completion date of late 2006. It is projected that the cost increases on the Riverside Badlands Tunnel will be offset by other Inland Feeder work that is currently tracking to complete at less than anticipated costs. The projected total program cost (\$980 million) does not include potential costs associated with the deletion of work on the Arrowhead East and West Tunnels. Total expenditures through June 2001 are \$538.7 million (see [Attachment 2](#) for a financial summary/project cash flow and [Attachment 3](#) for a budget comparison and schedule summary/remaining budget). The Board-approved budget remains unchanged at \$1.1865 billion.

**Recent Developments**

Riverside Badlands Tunnel – Reaches 5 & 6: On July 27, 2001, the TBM “holed-through” at the Opal Avenue portal which completed excavation of the 8-mile tunnel. A ceremony was held to allow individuals to witness this significant milestone. Over 200 people including several Metropolitan directors and numerous media representatives were in attendance.

**Policy**

Board Request.

**Fiscal Impact**

Refer to the attachments.



Roy L. Wolfe  
Manager, Corporate Resources

8/2/2001

Date



Ronald R. Gastelum  
Chief Executive Officer

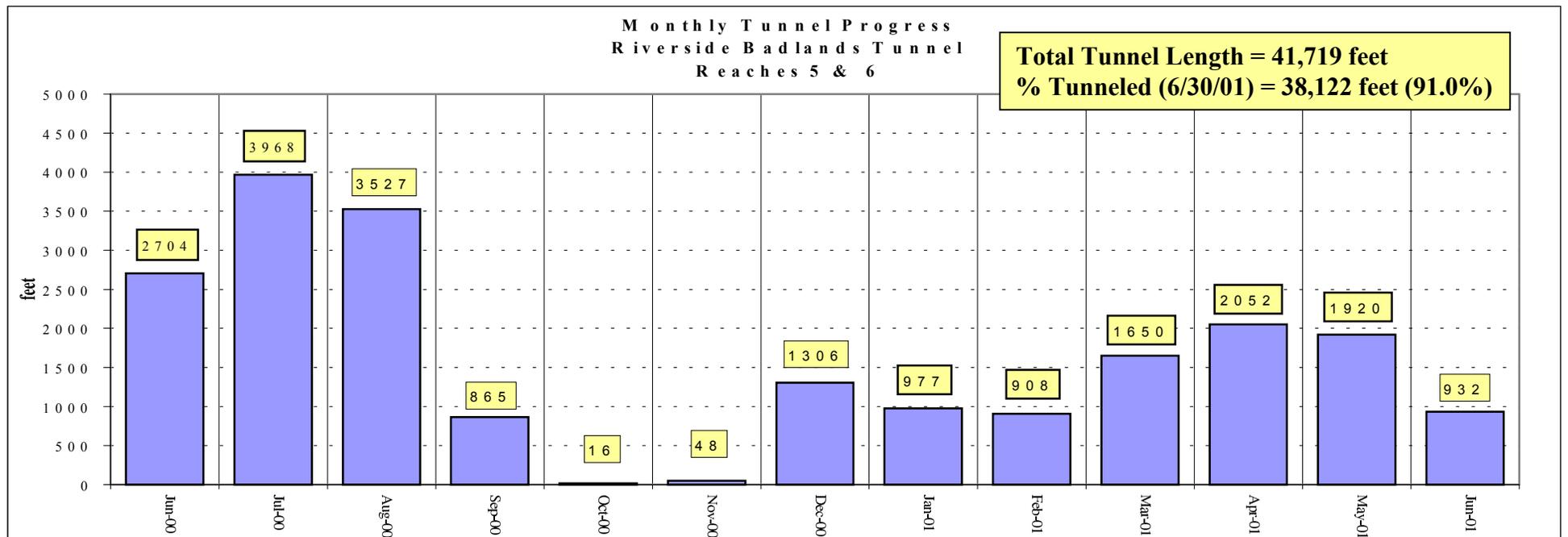
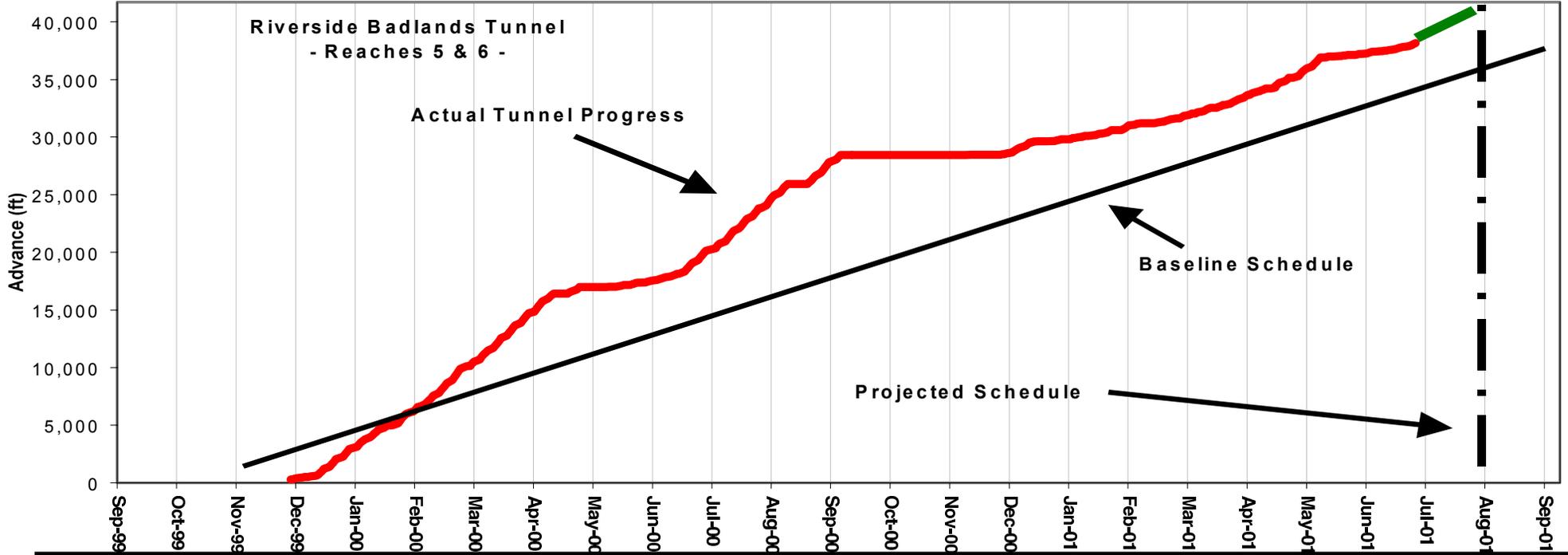
8/3/2001

Date

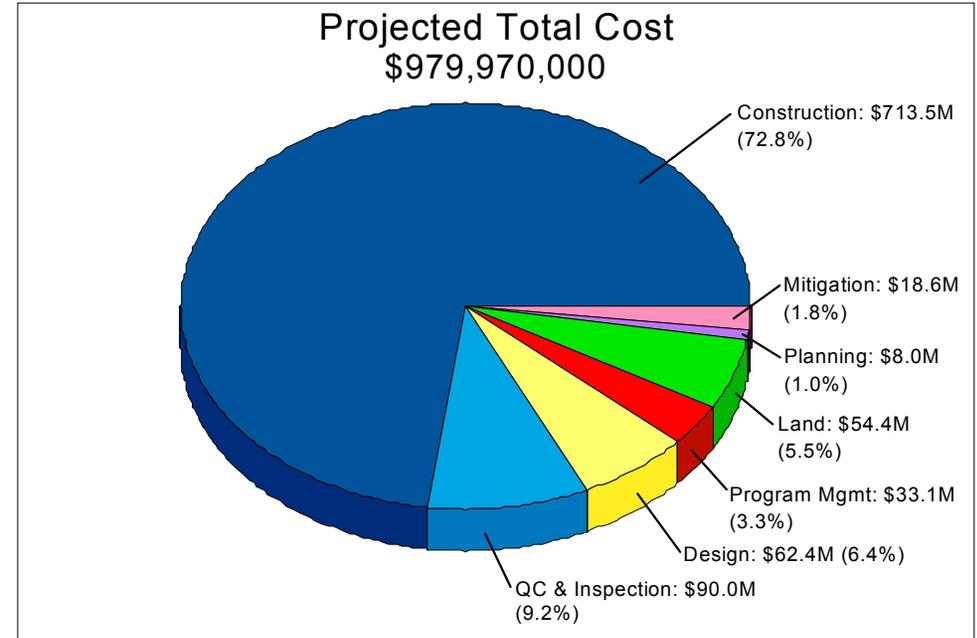
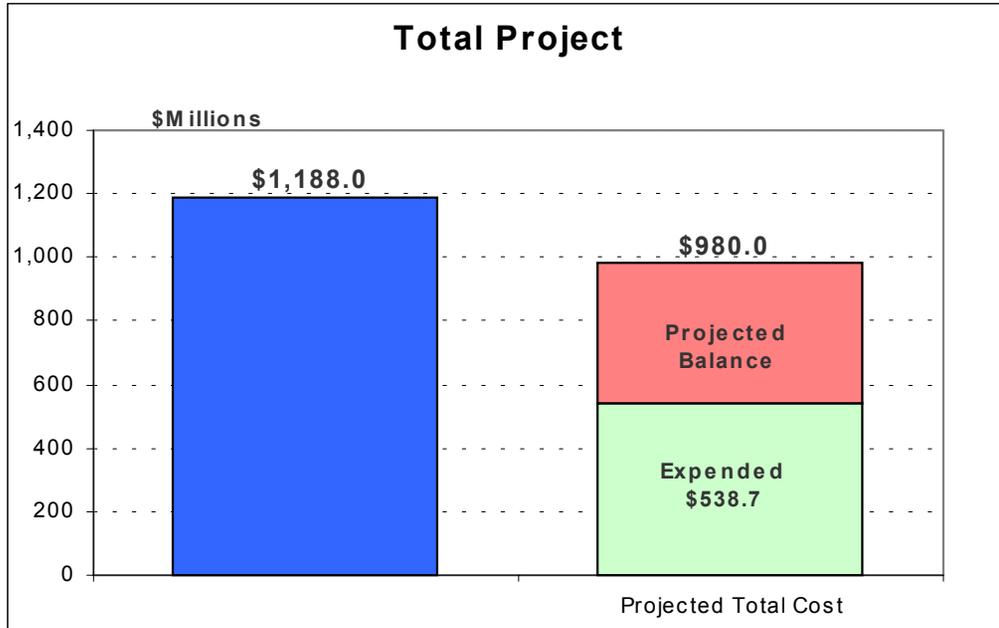
[Attachment 1 – Riverside Badlands Tunneling Progress](#)

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

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

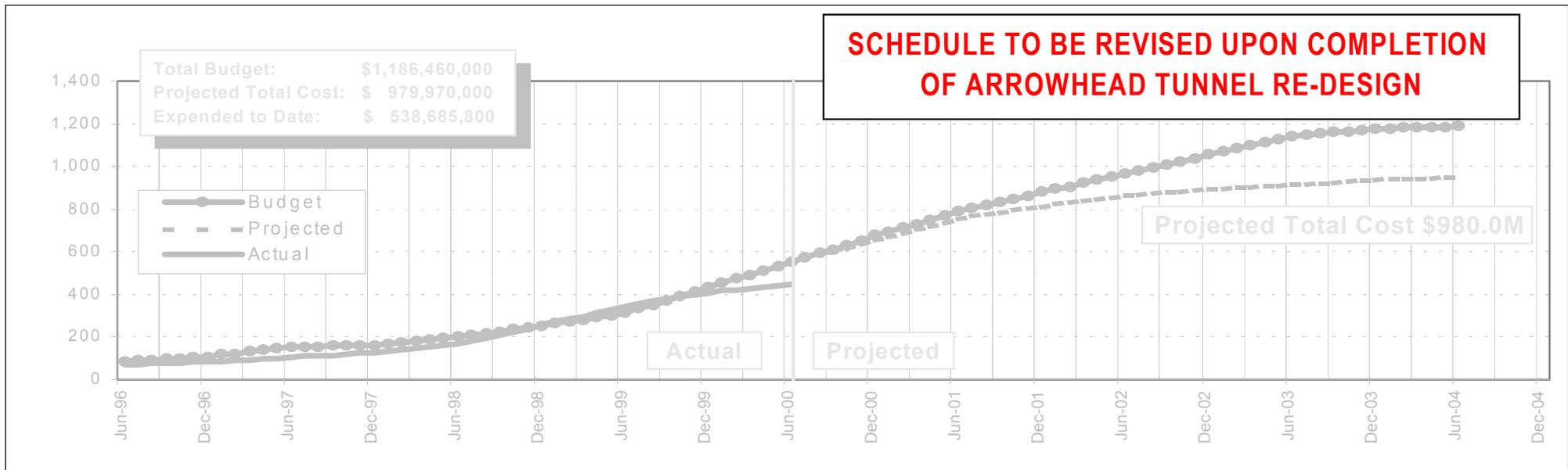


# Financial Summary



1. Based on knowledge of current field conditions.

# Project Cash Flow



**Budget Comparison and Schedule Summary**

|                                   | PRELIMINARY<br>REBASELINE<br>(JUN-2000) <sup>(1)</sup> | FORECAST<br>(JUN-01)    | ACTUALS<br>THRU<br>(JUN-01) <sup>(2)</sup> | PROGRESS              |   | COMPLETION DATE |                      | COMMENTS            |
|-----------------------------------|--|-------------------------|--|-----------------------|---|-----------------|----------------------|---------------------|
|                                   |  |                         |  | PLANNED<br>% COMPLETE | ACTUAL<br>% COMPLETE<br>(JUN-01) <sup>(4)</sup> | CONTRACT<br>(5) | FORECAST<br>(JUN-01) |                     |
| <b>Construction Reaches</b>       |  |                         |  |                       |   |                 |                      |                     |
| Arrowhead West Tunnel             | \$ 211,728,000   | \$ 210,188,000          | \$ 57,590,600                              | ----                  | 25%   | Dec-02          | T.B.D.               | On hold.            |
| Arrowhead East Tunnel             | \$ 281,607,000   | \$ 281,607,000          | \$ 129,387,000                             | ----                  | 38%   | Jan-03          | T.B.D.               | On hold.            |
| Highland Pipeline <sup>(3)</sup>  | \$ 57,199,000  | \$ 51,813,000           | \$ 7,809,600                               | 0%                    | 0%  | ----            | T.B.D.               | In Design.          |
| Mentone Pipeline                  | \$ 35,056,000  | \$ 40,442,000           | \$ 37,231,900                              | 35%                   | 78%   | Mar-02          | Oct-01               | Under construction. |
| Riverside Badlands Tunnel         | \$ 142,534,000   | \$ 142,534,000          | \$ 108,804,000                             | 55%                   | 63%   | Aug-03          | Apr-02               | Under construction. |
| Riverside North Pipeline          | \$ 57,984,000  | \$ 57,984,000           | \$ 55,236,700                              | 100%                  | 100%  | Completed       | Nov-99               | Completed Nov. 99   |
| Riverside South Pipeline          | \$ 42,358,000  | \$ 42,358,000           | \$ 42,345,000                              | 100%                  | 100%  | Completed       | Aug-99               | Completed Aug. 99   |
| <b>Construction Support</b>       |  |                         |  |                       |   |                 |                      |                     |
| Right-of-Way and Land             | \$ 54,448,000  | \$ 54,448,000           | \$ 44,321,000                              | -----                 | 81%   | -----           | -----                | -----               |
| Environmental Planning/Mitigation | \$ 18,598,000  | \$ 18,598,000           | \$ 11,366,000                              | -----                 | 61%   | -----           | -----                | -----               |
| Owner Controlled Insurance Prog.  | \$ 38,889,000  | \$ 38,889,000           | \$ 17,140,000                              | -----                 | 44%   | -----           | -----                | -----               |
| Study/Initial Planning            | \$ 8,024,000   | \$ 8,024,000            | \$ 8,024,000                               | -----                 | 100%  | -----           | -----                | -----               |
| Program Management                | \$ 33,085,000  | \$ 33,085,000           | \$ 19,430,000                              | -----                 | 59%   | -----           | -----                | -----               |
| <b>Projected Total Cost</b>       | <b>\$ 981,510,000</b>                                  | <b>\$ 979,970,000</b>   | <b>\$ 538,685,800</b>                      |                       |   |                 |                      |                     |
| <b>Remaining Budget</b>           | <b>\$ 206,490,000</b>                                  | <b>\$ 206,490,000</b>   |  |                       |   |                 |                      |                     |
| <b>Total Approved Budget</b>      | <b>\$ 1,188,000,000</b>                                | <b>\$ 1,186,460,000</b> |  |                       |   |                 |                      |                     |

- (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 <sup>1</sup>**

