

I-70 Twin Tunnels Widening (Veterans Memorial Tunnels)

Idaho, CO



The Twin Tunnels near Idaho Springs form an important part of the Colorado Transportation network, providing access to Idaho Springs from Denver on I-70. I-70 is one of Colorado's most important routes for tourism, commerce, and access to Colorado's skiing and during peak tourism seasons, 42,000 motorists a day pass through the Tunnels.

The project was undertaken by CDOT to cut travel time and accidents on I-70, which sees heavy traffic flows, especially on weekends. In 2016, the westbound Tunnel will be widened to approximately 53-feet to accommodate a third lane. The twin tunnels are approximately 635-feet long.

After the tunnels are blasted, arched structures covered with reinforcing steel are placed into the tunnel. These forty foot long structures are then secured in place and concrete is pumped between the arched forms and the tunnel walls. The purpose of lining the tunnel with concrete is to provide permanent support with a 75 to 100 year lifespan. Epoxy-coated reinforcing steel (ECR rebar) was utilized on the interior of the tunnel to protect against corrosion.

Team

Owner:

Colorado Department of Transportation

Engineer:

Atkins Global design team, Parsons Brinckerhoff, Yeh & Associates

General Contractor:

Kraumer/Obayashi, (a Joint Venture)

Design Criteria:

- Improve traffic flow when approaching the tunnel.
- Provide an extra lane for general purpose travel, peak period travel and/or transit.
- Improve driver safety against rockfall.

Total Project Cost: \$55 million

Photography:

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