



CLOSURE REASONING

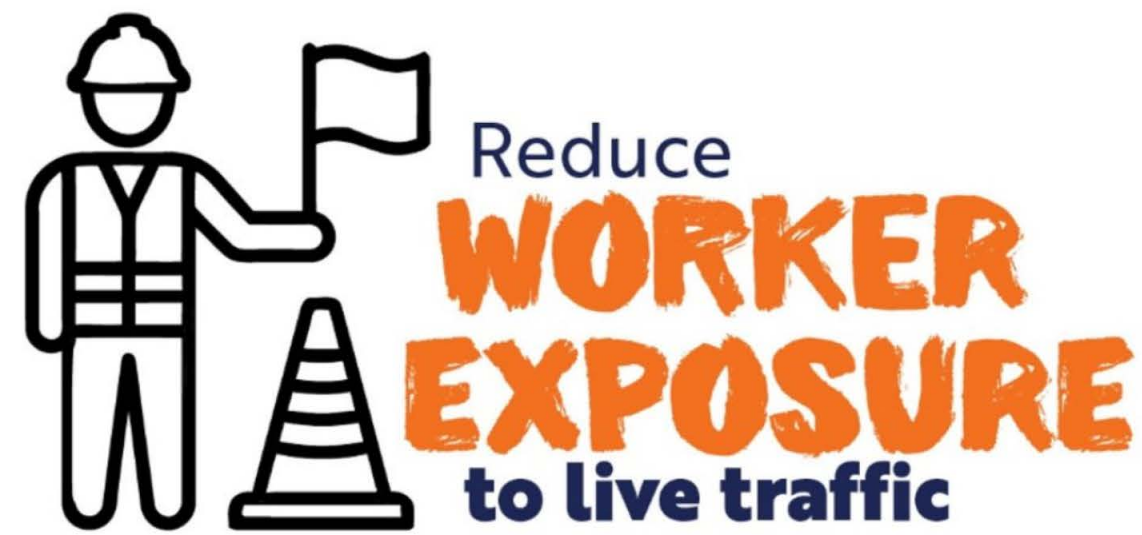
The benefits of a full closure include:



A full closure allows construction to occur much more efficiently, without live traffic adjacent to the work. This means material deliveries move more efficiently, peak-hour work restrictions are eliminated, multiple construction activities can occur simultaneously, and pavement production can increase by approximately 50% compared to phased construction.

These efficiencies reduce construction costs, allowing more improvements to be completed within the project's fixed budget. Because of the savings generated through the closure approach, the project now includes:

- Replacement of bridges that would otherwise have required rehabilitation rather than replacement.
- Extension of the new eastbound fourth lane through the Manchester Bridge, improving long-term traffic operations.



By temporarily removing live interstate traffic from the work zone, we significantly reduce one of the greatest hazards in highway construction: working immediately adjacent to high-speed traffic. Crews can perform their work without continuous interaction with high-speed traffic, reducing the potential for work zone intrusions and allowing construction activities to proceed in a more controlled environment. At the same time, motorists are removed from an active construction zone and directed onto permanent roadways designed to safely carry traffic.



A full closure shortens the overall project by approximately one year compared to maintaining traffic or utilizing partial closures. A full closure also allows crews to work across the entire corridor, utilize multiple operations simultaneously, and maintain consistent production throughout the day without repeated traffic setup and removal. Rather than asking motorists to navigate changing traffic configurations and work zones for another year, the project delivers the improvements sooner and restores normal traffic operations earlier.



While a full closure requires drivers to choose alternate routes, it provides a more predictable commute than maintaining a single lane of traffic through the work zone. Traffic modeling showed that if westbound I-70 were reduced to a single lane:

- Approximately two-thirds of drivers would likely divert to an alternate route anyway.
- Even with that diversion, traffic speeds on I-70 would be expected to drop below 20 miles per hour during peak travel periods.
- A single-lane work zone can only carry about 1,400 vehicles per hour, while demand during peak hours would exceed that capacity.
- Queues would likely grow throughout the day rather than clearing between rush hours.
- A crash, disabled vehicle, or emergency response within a single-lane work zone could bring traffic to a standstill and create significant delays.