



## PURPOSE & NEED

The purpose of the I-80 Reconstruction project is to provide a safe and efficient transportation system for both local and regional connections in the area by reducing future congestion in the 2045 design year to Level of Service (LOS) E or better, improving safety, and bringing I-80 up to current standards

## Project Needs include:

### Safety

**Crash rates** are above the statewide average, with a high percentage of rear-end, side swipe, and hit fixed object crashes which can be attributed to the congestion and geometric deficiencies within the corridor. Geometric deficiencies include:

- **Acceleration and deceleration lane lengths** below PennDOT/AASHTO design criteria.
- **Insufficient weave lengths** when both entrance and exit ramps are in close proximity.
- **Insufficient shoulder widths:** existing shoulders range from 1 foot to 10 feet, with 10 feet to 12 feet minimum required. This results in reduced access for emergency vehicles during incidents.

**Deteriorated roadway and bridge components** cause hazardous conditions under normal use as well as during lane closures for ongoing maintenance issues. The pavement, constructed in the 1950s and 1960s, has reached the end of its useful life and is in poor condition. In addition, the I-80 bridge over Bridge Street is structurally deficient.

### Congestion

**Existing and projected future high traffic volumes** contribute to congestion in the project area. Current volumes on I-80 average approximately 47,300-70,500 vehicles per day with 12% trucks. 2045 projections show volumes of approximately 89,200-132,800 vehicles per day. The additional future traffic will increase congestion, with the entire mainline from Exit 304 to Exit 307 operating at Level of Service (LOS) F.

### Mobility

**System continuity is lacking.** Design criteria as well as driver expectation call for all traffic movements to be available at each interchange. Exits 303, 304, and 306 provide only some of the connections available.

**The project corridor services both local and through traffic,** creating conflicts between the types of traffic and deviating from the intent of the Interstate system to facilitate long range travel.

**Four lanes of traffic, two in each direction, must be maintained on I-80 at all times** during construction.

**The Strategic Highway Network (STRAHNET) system** is the system of roads deemed necessary to support the Department of Defense's operations. As a component of this system, I-80 should include minimum vertical clearances of 16'6".