



Reasons for Bridging Highway/Railroad Intersections

- **Absolute collision avoidance:**

Collisions at "at-grade crossings," where roads cross railroad tracks at the same elevation (or grade), cannot be completely eliminated. Even with continued improvement to signal systems, it is still possible for a driver to be struck by a train. Crossing collisions on a higher speed track can often cause driver deaths and locomotive and track damage. When larger, heavier trucks are involved, a train derailment can occur, which can shut down a railroad affecting both the track and crossings for several days.



- **Elimination of railroad/roadway traffic issues:**

Train speed is generally restricted in any location where at-grade crossings are present. This can cause significant train delays. Depending on whether it's a passenger or freight train, motorists can experience several minutes of delays while a train is passing through an at-grade crossing. A stopped train can cause further delays as it must accelerate very slowly near crossings to avoid occupying crossings before gates come down.



- **Elimination of crossing system failures and associated train/vehicle delays**

Crossing signal systems are complex computer and electronics systems that operate in harsh environments. Even as systems are improved, there is still possibility of failure. When this occurs, trains are required to stop at each crossing while a flagman stops vehicular traffic. This manual operation can cause significant train and traffic delays and is dangerous to flagmen/crew members.

- **Reduction of horn noise:**

For general safety, trains are required to sound horns as they approach an at-grade crossing. By eliminating crossings, trains will not be required to whistle at crossings, significantly reducing unwanted noise.

- **Comparable capital cost to bridge or overpass:**

Because a high speed track at-grade crossing employs a combination of sophisticated signal systems, the cost can be nearly as much as a bridge or overpass.



- **Improved long-term cost of maintenance:**

There are many ongoing costs for at-grade crossings with warning devices, including safety inspections and regular maintenance. Comparatively, a new bridge or underpass with no mechanical or electronic parts requires less frequent inspection and improvements.



- **Elimination of easy trespasser access:**

Pedestrian trespassing is a major safety and security problem for railroads. By eliminating at-grade crossings, the likelihood that a person will trespass and be struck by a train, or provide a security risk on the railroad right-of-way, is considerably reduced.

