Challenge
Enable RTK corrections to be accessible over the entire I-225 Rail Line project corridor, nearly 20 miles in length.

Solution
Intuicom RTK Bridge-X’s were deployed at Kiewit’s offices in Denver, connected to a Trimble base station, as well as on the construction corridor. “The RTK Bridge-X has been a perfect solution for us,” states Tony Gothard, District Survey Manager, Kiewit. “I’m not aware of any other technologies that can get us out so far.”

Leveraging the full complement of communication options available on the RTK Bridge-X, Kiewit uses both UHF and 900MHz frequencies to transmit the RTK corrections being generated by the base station. “Since the RTK Bridge-X acts like a base station, it limits the GPS latency, so we can use it with our machine control more accurately,” says Gothard. “We also have one mobile bridge in a car that they can take with them with a radio repeater hooked to it if we encounter any low areas.” As a result, Kiewit has addressed all of their range and coverage issues without purchasing another expensive base station.

Benefits
Without the expense of purchasing additional base stations, Kiewit achieved their goal of rebroadcasting RTK corrections and GPS data for both machine control and survey applications over the entire I-225 Rail Line project corridor. “It’s been the perfect solution for us,” Gothard emphasizes. “The RTK Bridge-X is everything we’ve hoped for.”