



Broadband Deployment Best Practice: Microtrenching

STATE LEVEL ACTION WILL:

Encourage local jurisdictions to use the industry best practice of microtrenching when installing broadband fiber lines underground.

EXPANDING INTERNET ACCESS FOR ALL

Historically Colorado has been one of the most difficult states to deploy broadband. Every local jurisdiction in our state has different permitting rules and timelines.

CLOSING THE DIGITAL DIVIDE

Right now, hundreds of thousands of Coloradans lack access to basic high-speed internet, stifling economic growth and disenfranchising low-income and rural communities.

Legislation will help close Colorado's digital divide because it will lead to broadband fiber being installed in days, instead of weeks and allow more projects to be completed, so Coloradans can benefit from high-speed internet connectivity as soon as possible.

FREQUENTLY ASKED QUESTIONS

Q: What is microtrenching?

Instead of using traditional open-trench construction and boring methods to install fiber which takes longer, costs more, and creates lane closures and disruptions to local communities, states and local municipalities around the country have added microtrenching technology as a means for deployment. This method cuts a 1-2 inch wide and roughly 12-24 inch deep trench to lay the fiber underground while simultaneously backfilling and sealing. The entire process takes hours and cars can drive on the road the same day.

Microtrench is enormously cleaner and greener than typical installation methods.

Microtrenching is typically 60% cheaper and 80% quicker than traditional open-trench street excavations and boring, as well as being less disruptive.

Q: How many jobs will be created in Colorado with the expansion of 5G?

A: Between 2021 and 2025, the expansion of 5G will create up to 291,000 jobs in Colorado, according to a recent study prepared by Accenture.

Q: What are some examples of states and cities that have model broadband deployment guidelines?

California adopted SB 378 in 2021 approving microtrench standards across the state. Prior to this, the City of Los Angeles adopted a microtrenching ordinance to accelerate the installation of fiber underground leading to over 50 miles of deployed broadband. Other major cities and communities that have used microtrench: Boston, New York, Nashville, Chicago, Boston. In Colorado, CDOT approved microtrenching for an installation on HWY 36 between Lyons and Estes Park

LOCAL COMMUNITY BENEFITS

Legislation will help:

- Expand "smart city" initiatives to allow more efficient infrastructure, transportation, and energy programs.
- Enhance telemedicine access and efficiency.
- Build stronger internet connectivity that is crucial for virtual learning and remote work programs.
- Strengthen first responder and emergency response efforts.
- Replace traditionally wasteful construction efforts with cleaner best practices.

ENDORSEMENTS

Below are examples of groups that endorsed SB 378 in California. It is expected that similar agencies and associations will support legislation in Colorado:

- California Medical Association,
- CA School Boards Association,
- Bay Area Council,
- LA BizFed,
- California Builders Alliance,
- California Building Industry Association,
- California Business Properties Association,
- Greater Sacramento Economic Council,
- Sacramento Regional Builders Exchange.

A different approach to installing fiber is needed to keep up with the coming growth.

Traditional trenching

Large excavations

Extended construction times-
more noise, debris, and disruption

Traffic lane closures



Microtrenching is safer, quicker, cheaper, greener and less disruptive to local communities...



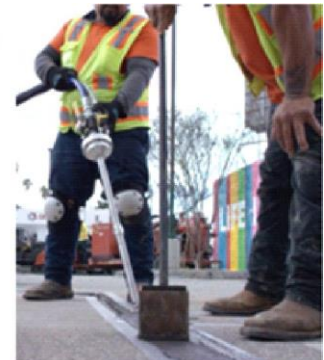
Pre-installation
Ground Penetrating Radar



Installation



cabLe Placement



Restoration

With significant benefits for your community.



80% faster than traditional
trenching

Minimal disruption to traffic

Less noise

Fewer resident complaints

