Dig Once in Maryland

Environment and Transportation Committee HB 626 February 13, 2025

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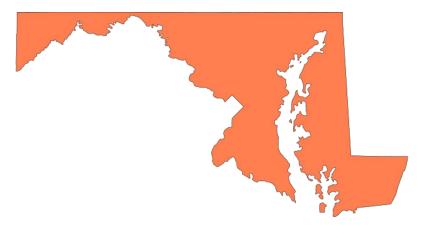


Dig Once and Build Faster, Cheaper, Competitive Broadband

"I want Maryland to be the capital of quantum – And A.I. – And clean energy – And biotech – And all of the sectors that will define the economy of tomorrow."

- Governor Moore, State of the State 2025

- Building robust fiber optic networks are necessary
 to move the data that makes this possible
- This does not have to be a constant disruption
- Dig Once minimizes construction disruption, reduces cost, increases competition
- Dig Once can eliminate first provider monopolies in muti-tenant environments

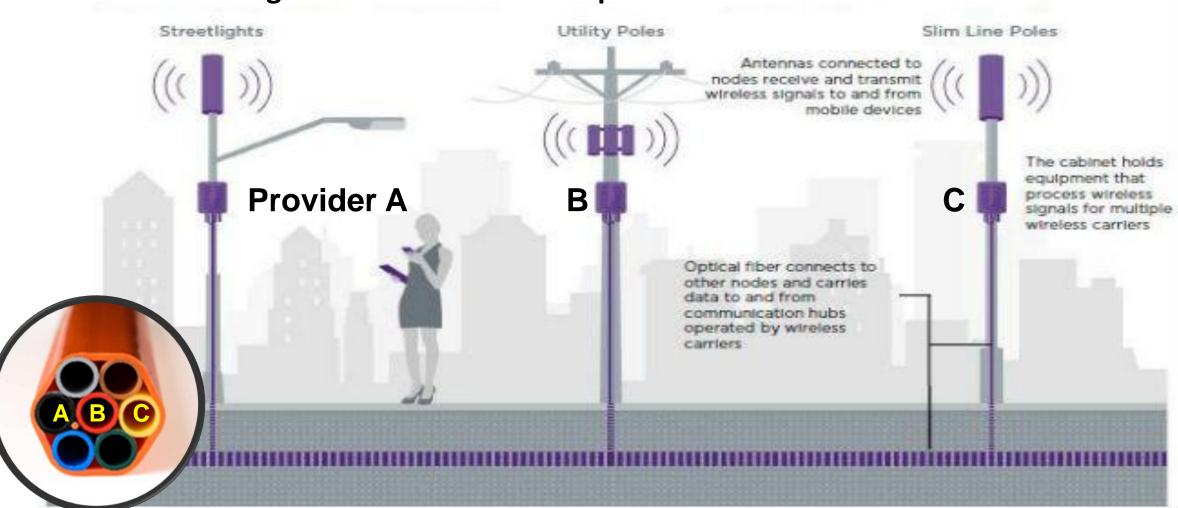


Dig Once for Fiber Construction in Public Rights of Way

- The First Road Cut: One Trench With Spare Conduit For Future Use
- Spare Conduit Available To Future Carriers In Cost Sharing Arrangements

Shared Investment Faster Deployment of Networks Less Construction Disruption





Dig Once ... One Trench ... Spare Path for Future Carriers

DIG ONCE example of Multi-Cell Conduit for Mobile Carriers – As on The Boardwalk in Ocean City, MD. When fiber and antennae are installed or rearranged, the installation uses multi-cell conduit with spare microduct available to multiple carriers.

Example: Micro Conduit with Microducts



7 Way 12/10mm Direct Buried HDPE Micro Duct Tube Bundle

• 1.64 inch outside diameter

Representative Costs

- Trenching: \$50/ft
- Incremental cost of Micro Conduit: \$0.25 to \$2.00 per foot for armored conduit.
- With Dig Once all providers share one \$50/foot trench

MDOT Avoids road cuts and construction disruption



Dig Once Public Right-Of-Way

- New buried fiber optic installations should require conduit containing at least seven microducts for expansion and to share with other carriers.
- Carriers will use cost sharing just as they share power poles, concrete conduits, and cell phone towers today.
- Maryland will avoid future construction or damage in the Right-Of-Way and carriers will share common investment with lower costs of entry
- This is very effective in other states

Dig Once Is a Mature Method Used Across The Country

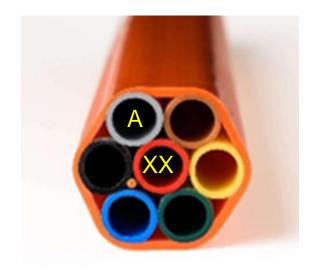
California North Carolina Alexandria VA Colorado Arlington VA **Bellvue WA** Oregon Vermont Chicago IL Syracuse NY Arizona Minnesota Illinois

Dig Once: Multi-Tenant Environment

- Having only one broadband provider in a multitenant environment is a de facto monopoly.
- For new construction or major improvements in apartments, condos, or townhouse blocks, codes should require placing Dig Once conduit that is available to competitive broadband carriers at fair rates.
- "Major improvements" include improving electric infrastructure for clean energy to replace fossil fuel appliances or enable vehicle charging.
- Micro Conduits should be in utility easements into building telecommunication spaces.
- Managing access to micro conduits will be by the landlord just as for telecommunications antennas on the roof.
- This provides broadband competition in MTE.



Appendix: Concept of Operation



Multicell conduit is laid by the first installer of new fiber optic cable.

When telecom company (A) installs multicell duct its agreement with the ROW owner permits other carriers to use vacant cells for reasonable fees.

One cell (XX) remains a spare for maintenance.

One or more telecom companies could place the conduit in a similar arrangement as used today for sharing cellular antennas.

This could apply to private easements and the risers of multitenant properties.

After initial construction Companies B, C, D, E place fibers in other cells according to agreements. No new digging is required. Company A is reimbursed fairly for its investment.

If company B needs to construct a leg off the original conduit, or perform maintenance, it must conform to the original agreement and maintain the spare microduct.