



Nevada Governor's
Office of Science,
Innovation and
Technology

HIGHLIGHTS OF the Enacted SB53, 2017 LEGISLATURE

1. Authorizes NDOT to grant longitudinal access to ROWs controlled by NDOT to telecom providers
2. Authorizes NDOT to enter into agreements with providers that fairly compensate the Department through in-kind trade or monetary compensation for longitudinal access to certain ROWs or access to spare conduit; establishes regulation to govern the same
3. Creates a telecommunications Advisory Council to approve trade values and work on best practices for SB53
4. Expands the definition of "transportation facility" to include excess conduit, fiber assets, and related equipment.
5. Establishes procedures for the valuation of the ROW
6. Allows NDOT greater latitude to enter into public-private partnerships that benefit of transportation facilities where it serves a public purpose.

KEY BEST PRACTICES

1. Bring providers in at the planning stage, by hosting a bi-annual and annual planning meeting to overlay state projects with the providers, cities, counties, other state agencies, etc.. "wish list".
2. Establish a single POC with NDOT and OSIT for the state to make it easier to manage inquiries. Permits Office coordination, ROW office coordination, IRU contracts, provider contacts, and city and county master plans.
3. Establish valuations for ROWs in each county. Re-evaluate every 5 years.
4. Establish ongoing GIS mapping of fiber lines and fiber assets.
5. Do trade agreements other than fee based charges. Much more effective. Trade existing or planned conduit and fiber on a foot-by-foot basis and trade fiber optic on a foot-by-foot strand basis.
6. Values are kept on a balance sheet and reviewed annually. Make it possible for providers to "bank" their credits to save for really large projects.
7. Prioritize projects suitable for additional construction based on a scoring mechanism.
8. Develop a refined estimate of the incremental costs during the design phase
9. Develop a standard engineering specification for dig-once conduit
10. Develop a procedure to systematically track and manage construction projects

EXAMPLE OF ACTUAL INFRASTRUCTURE TRADE:

Provider receives:

1. Fiber optic backbone in ROW
2. Wireless towers in ROW
3. Use of NDOT fiber conduit
4. Hub or comm. hut on NDOT ROW

NDOT receives:

1. 24 strands
2. Spare conduit
3. Access to all poles for equipment or ITS or Road Weather Infor. Equip...
4. Power for devices
5. Hub space for equipment

ADVANTAGES of Dig Once and Fiber Trade Agreements:

1. Reduces deployment time by:
 - Making access to the ROW's easier
 - Being cooperative with other state and federal agencies
 - Keeping the ROW open at all times, meaning NO EXCLUSIVE access by any one provider
 - Remaining provider agnostic
2. Expands infrastructure throughout entire State
3. Expands fiber infrastructure into underserved and unserved areas
4. Helps cities and counties attract fiber telecom providers
5. Ability to bridge the Digital Divide
6. Protects newly and recently paved roads and sidewalks, enhancing the uniformity of construction
7. Ensure efficient, non-duplicative placement of infrastructure in the ROW
8. Reduces overall cost of all underground work in the ROW, both utility and telecom related for public and private parties
9. Reduces construction costs by reducing the long-term cost of building communications facilities by capitalizing on significant economies of scale.

KEY BENEFITS ACHIEVED THROUGH COORDINATED CONSTRUCTION EFFORTS INCLUDE REDUCED COST FOR:

1. Labor and material, through reduced crew mobilization expenses and larger bulk material purchases
2. Trenching or boring, when coordination enables low-cost methods such as trenching as opposed to boring or allows multiple entities to share a common trench or bore for their independent purposes
3. Traffic control and safety personnel, particularly when construction along roadways require lane closures
4. Engineering and surveys associated with environmental impact studies and approvals
5. Leasing access to private easement, such as electric utilities

6. Railroad crossing permits and engineering
7. Restoration to the ROW or roadway, particularly in conjunction with roadway improvements
8. Bridge crossing permits and engineering

DIG ONCE COORDINATION AND SUCCESSES

1. Executive Order in 2012 to facilitate the deployment of broadband technology on federal lands, buildings, rights of way, federally-assisted highways and tribal lands. The Order required the USDOT-FHWA to review the “dig once” requirements in existing programs as it related to the placement of below ground fiber optic cable along highway and roadway rights of way.

STATES THAT HAVE SUCCESSFULLY ADOPTED DIG ONCE POLICIES AND/OR FIBER TRADE AGREEMENTS:

1. Utah State

EXAMPLE OF MODEL FIBER TRADE POLICY (UDOT)

- Every time a roadway/highway project is constructed and UDOT installed fiber for its ITS system UDOT installed additional conduit per specs.
 - UDOT then assessed a low lease fee to broadband providers to use the conduit and allow providers open access to their conduit. The fee helps recoup the cost of the extra conduit.
 - Providers can also enter into a trade, whereby a value for that fiber asset is identified, approved by a committee, and kept on a balance sheet. A provider would owe UDOT that value. But it could be paid back in other forms such as leased fiber elsewhere, fiber asset improvement or creation/expansion of a different fiber line.
2. Arizona State
 3. Minnesota State

CITIES THAT HAVE SUCCESSFULLY ADOPTED DIG ONCE AND/OR FIBER TRADE AGREEMENTS:

1. City of Boston- 1ST major city to implement a dig once in 1988
2. City of Berkeley, California
3. City of Bellevue, Washington
4. City of Gonzales, California
5. Arlington County Virginia
6. City of San Francisco, California