

## Information Technology Fiber Master Plan



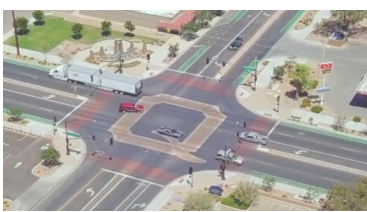
# Smart City Services



- Presentation was provided to Council October 2021

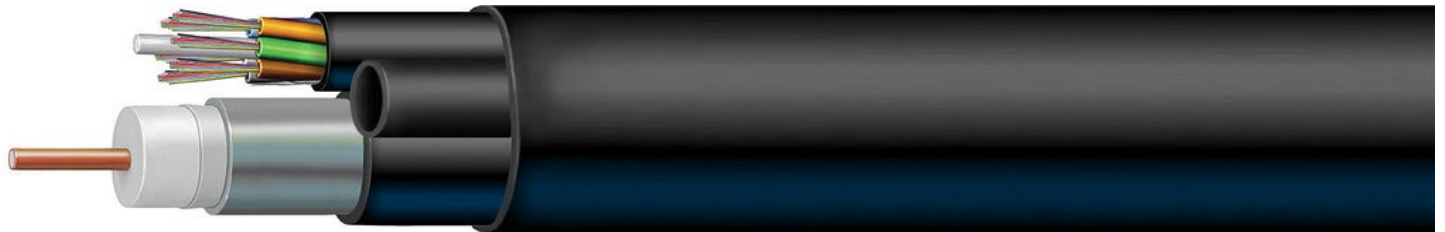
A smart city is a municipality that uses information and communication technologies to increase operational efficiencies, share information with public and improve both the quality of government services and citizen welfare – (IoT World)

- Improve the efficiency of Town's service delivery
- Enhance quality of life for all
- Increase equity and prosperity for residents and businesses ( [digi.city](#) )



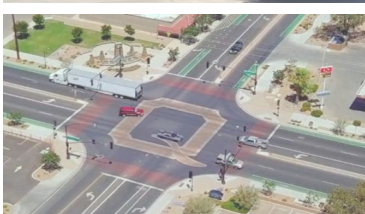
# What is a fiber network?

- Fiber-optic internet, commonly called fiber internet or simply “fiber,” is technology using fiber-optic cable, which amazingly can send data as fast as about 70% the speed of light



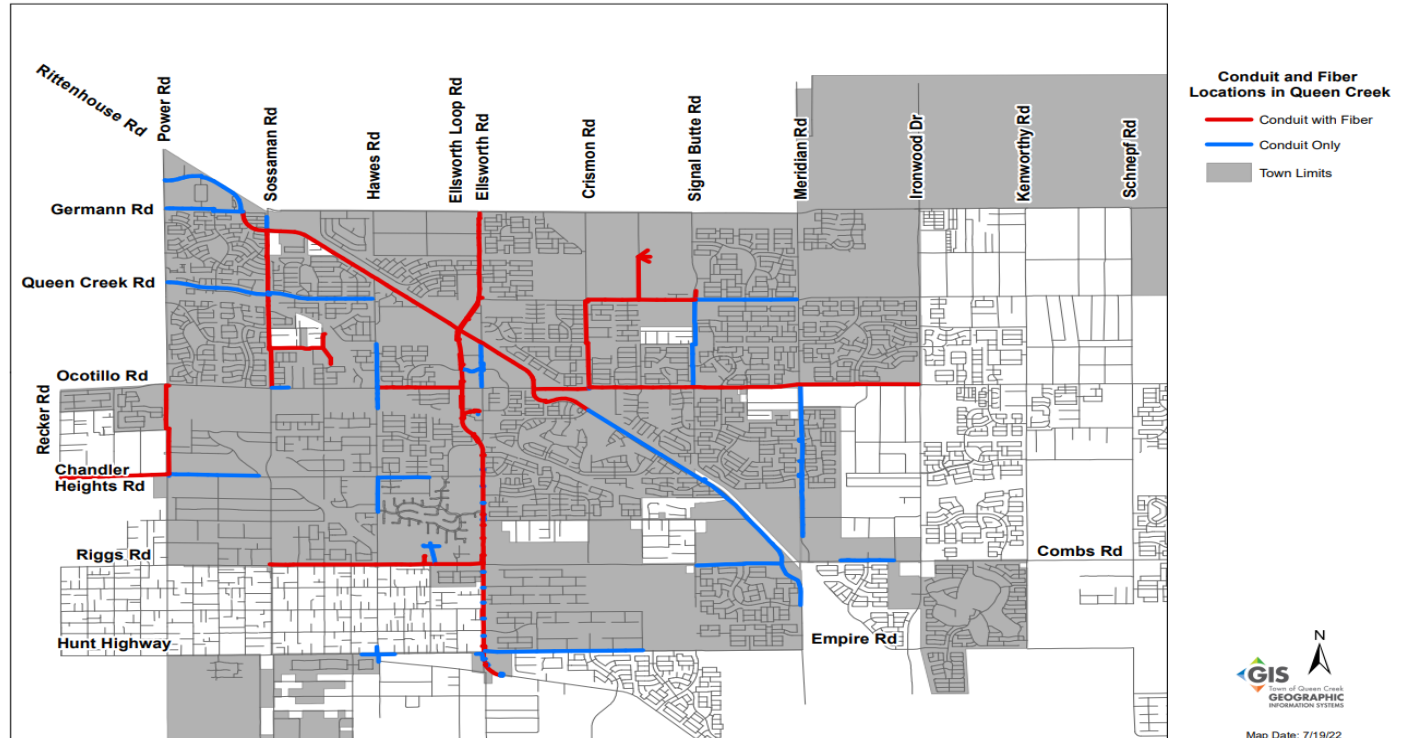
# What is fiber-optic conduit?

- Fiber optic conduit is a protective tubing that surrounds individual fiber strands to keep them safe and secure. Conduit houses fiber cabling and is considered some of the most critical pieces of infrastructure for a network or device.



# Town of Queen Creek's Fiber Assessment

Beginning FY23 the Town of Queen Creek plans to conduct a comprehensive fiber asset inventory to determine usefulness and to show where gaps exist in the fiber infrastructure.



# Purpose of Fiber Assessment



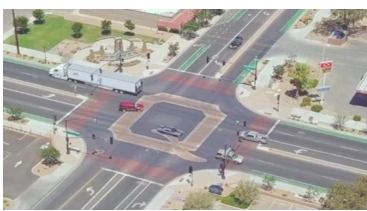
## Expectations:

- Assess underground conduit and inner duct: empty and available conduit
- Assess all fiber related assets including cables, strand counts, splice points, terminations, and utilized strands
- Verify and document vault and hand hole locations
- Verify and document locations of towers and vertical assets
- Recommend phased approach for building out a fiber network, and connecting all Town facilities
- Provide current as - builds and documentation
- Provide Town GIS maps including Town owned property, right of way, and easements



# Importance of the Project

- **Public Safety Agencies**
  - Secure network connection
  - Reliability / redundancy
  - Connections to additional agencies
- **Economic Development**
- **Municipal Infrastructure**
  - Public Safety / Emergency Services
  - Town Buildings
  - Utilities SCADA Systems
  - Traffic Systems
  - Disaster Recovery
- Opportunity to partner with the private sector to close gaps in the fiber network



# “Dig Once” Practice

In 2020 Town staff began to work on a “Dig Once” practice to ensure that fiber and/or conduit in the ground is completed along with street construction projects.





# “Dig Smart” Practice Incentives

- Dig Smart Promotes Competition
- Traffic Disruption and Road Deterioration
- Public Safety and Service Outages
- Wasted Government Resources
- Service Reliability
- Aesthetics



# Are There Any Questions?

