



# Pole Data Collection Considerations

THE COSTS AND BENEFITS OF PRE-CONSTRUCTION POLE SURVEYS



# What are “pre-application” pole data collection?

- ▶ Sometimes called “pole harvesting,” pole data collection may be performed before submission of pole licenses. Data collection may include collecting detailed data about individual utility poles:
  - ▶ Attachments (number and type)
  - ▶ Condition
  - ▶ Height
  - ▶ Coordinates
  - ▶ Other environmental consideration

# What do we have already?



- ▶ VEC, WEC, and GMP submit pole data information sets to the state which are published on the state geodata portal. Here is what they collect
  - ▶ Pole coordinates
  - ▶ Pole ID number
  - ▶ Pole height
  - ▶ Number of attachments

# Why do pole data collection?

- ▶ Data collection is usually done by a provider in anticipation of expanding service for a specific area.
  - ▶ Development of pole attachment applications to the pole owners.
  - ▶ Estimate network costs
  - ▶ Improve network routes. The carrier may consider eliminating or changing routes based on the make ready cost of a specific pole set.

# Pole Application Preparation

- ▶ Data already in the state geodata portal is generally sufficient for preparing pole applications. This data includes the coordinates of the poles and the pole ID.
- ▶ +/-5% of poles are not included in this data set and may require surveying to prepare pole license applications.

# Network Cost Estimates

- ▶ Typically network projects develop estimates for the costs of projects before seeking financing or making investment decisions.
- ▶ cost estimates can be per-pole average costs based on prior projects or estimates based on available data.
- ▶ The pole data published on the geodata portal includes pole height and the quantity of attachments on each pole.
- ▶ This information, combined with these cost assumptions, can enable companies to develop these costs.
- ▶ Additional data from pole pre-application surveys can improve accuracy of the estimated make-ready cost but are not necessary.

# Network Design



- ▶ Additional pole data is helpful when planning specific network routes.
  - ▶ Pole condition – suppose a set of poles is in need of replacement. The carrier may decide to avoid this route or eliminate it from the project build.
  - ▶ Environmental barriers – location of pole sets off road might increase the cost of deployment and therefore should be avoided.
- ▶ Pole data collection is only useful here if the provider undertaking the collection is committed to deploying service in the area under consideration.

# Other Consideration

- ▶ Pole data is best used immediately. Data quickly becomes stale
- ▶ A statewide database of pole data would need to be actively managed and refreshed often
- ▶ The vast majority of data collected in a state-wide effort would go unused.
- ▶ Detailed pole surveys occur anyway once pole applications are received. Doing pre-application surveys will not save time or money in the make-ready process.
- ▶ Data available from WEC, VEC, and GMP provide the bulk of pole data necessary to prepare applications, make sound cost estimates.