



# ITRC Implementing Advanced Site Characterization Tools (ASCT) Team

## ITRC Team Leaders:

Ed Winner, Kentucky Division of Waste Management

Alex Wardle, Virginia Department of Environmental Quality

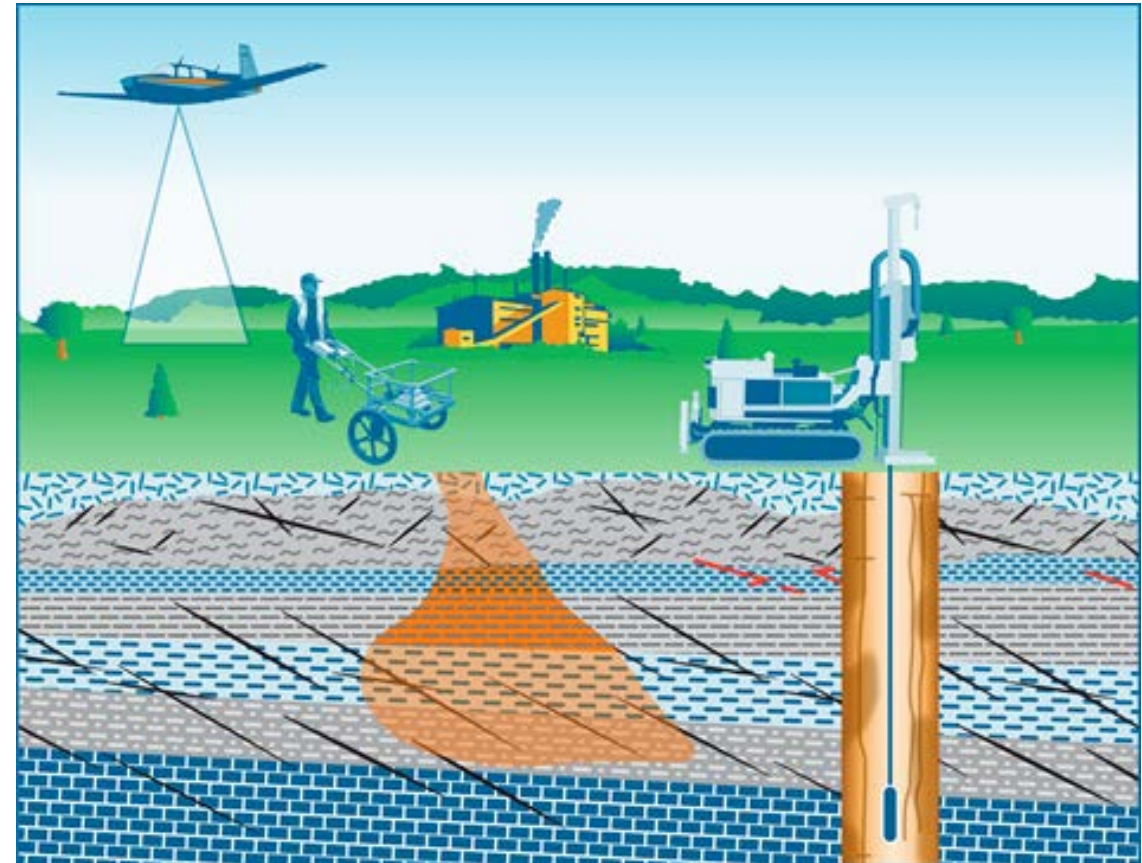
26th National Tanks Conference & Exposition

Louisville, Kentucky

September 12, 2018

[www.itrcweb.org](http://www.itrcweb.org)

Last Updated: March 2018



# What is ITRC?

ITRC is a state-led coalition working to advance the use of innovative environmental technologies and approaches. ITRC's work translates good science into better decision making.



# What ITRC Does



# Implementing the Use of Advanced Site Characterization Tools (ASCTs)

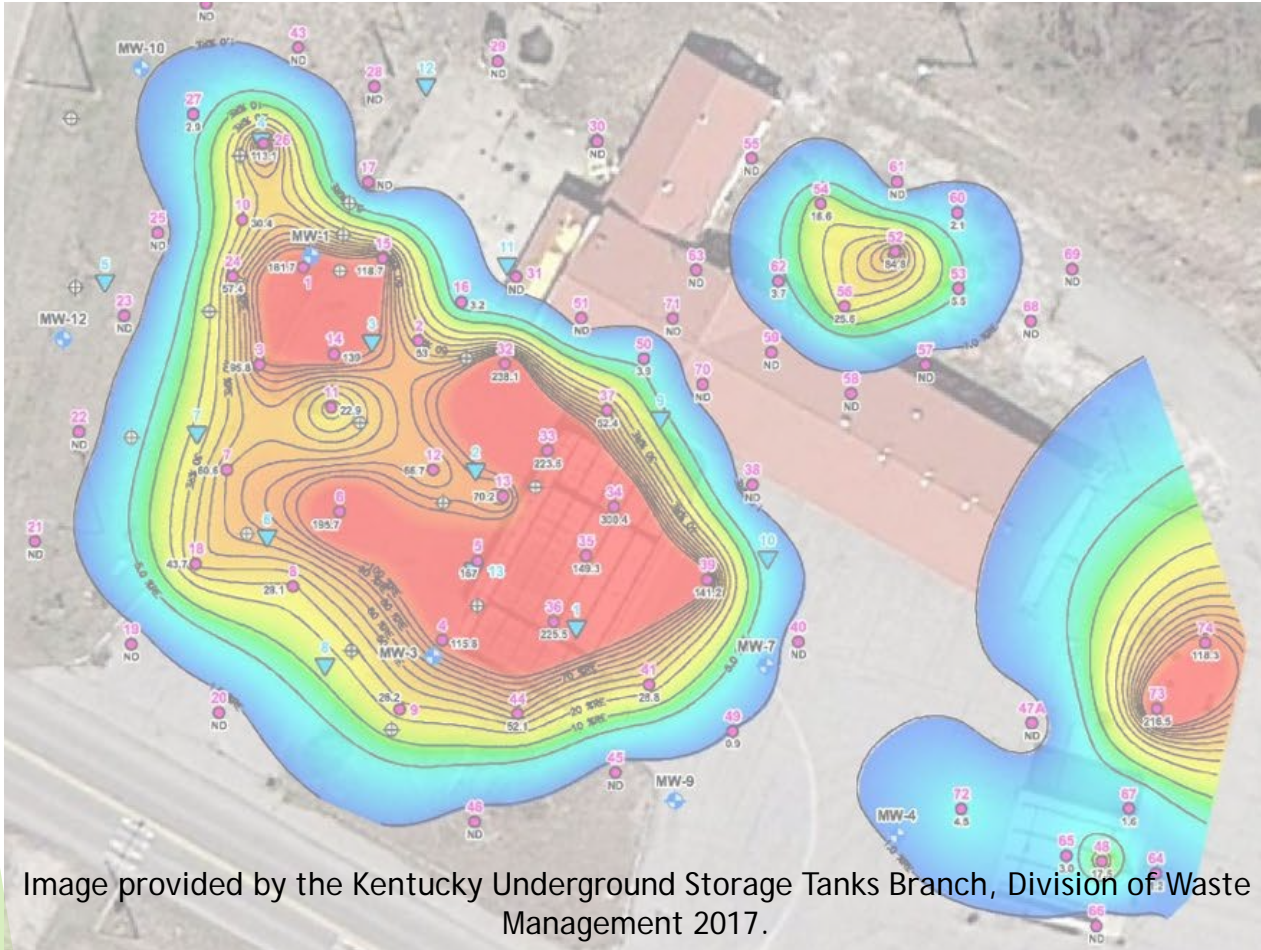


Image provided by the Kentucky Underground Storage Tanks Branch, Division of Waste Management 2017.

- A practical guide
- Support resource efficient implementation
- Provide useful examples

# Advanced Site Characterization Tools

ASCT



Surface Geophysics



Downhole Geophysics



Direct Sensing



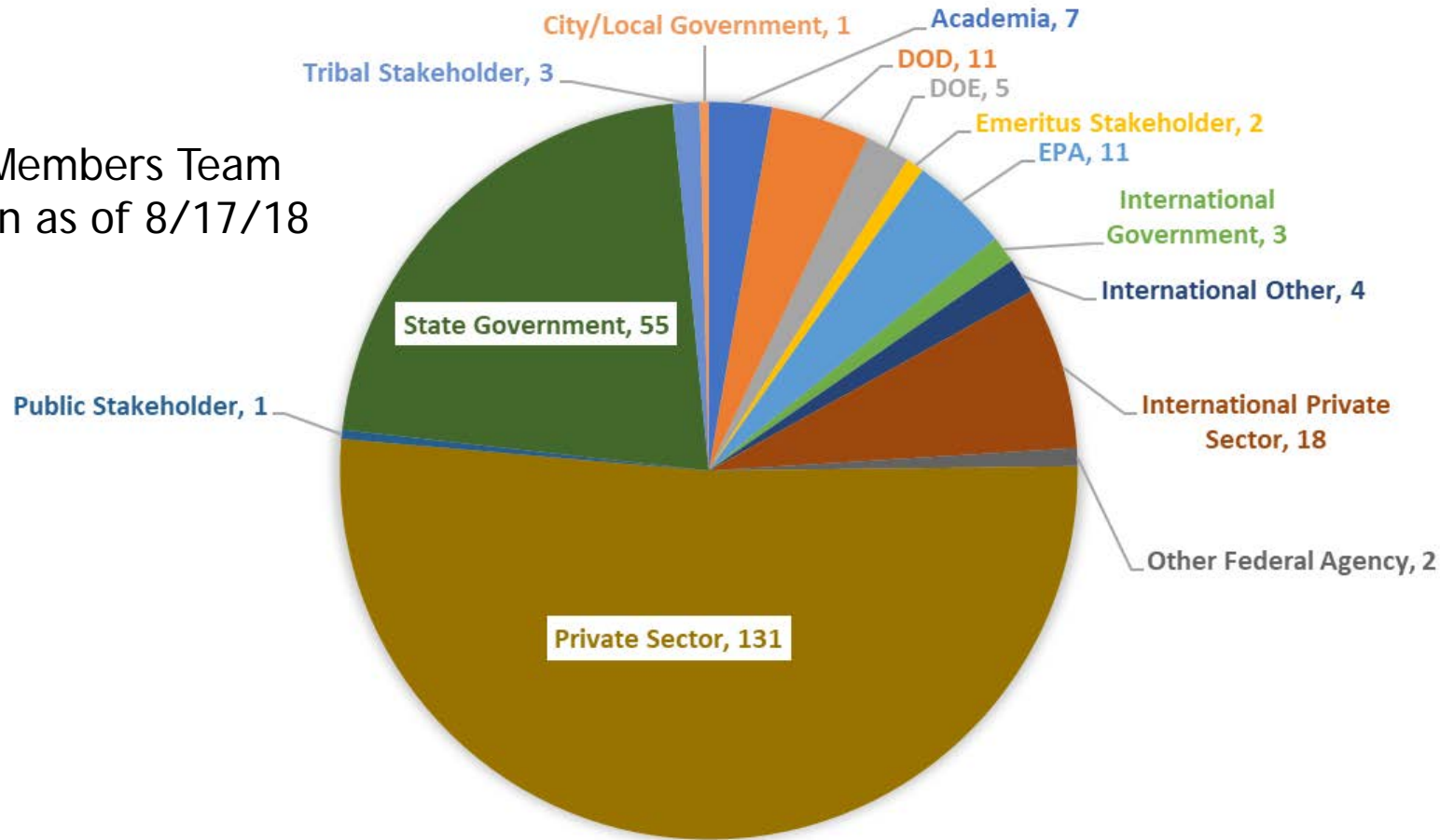
Remote Sensing



Images provided by the Kentucky Underground Storage Tanks Branch, Division of Waste Management 2017.

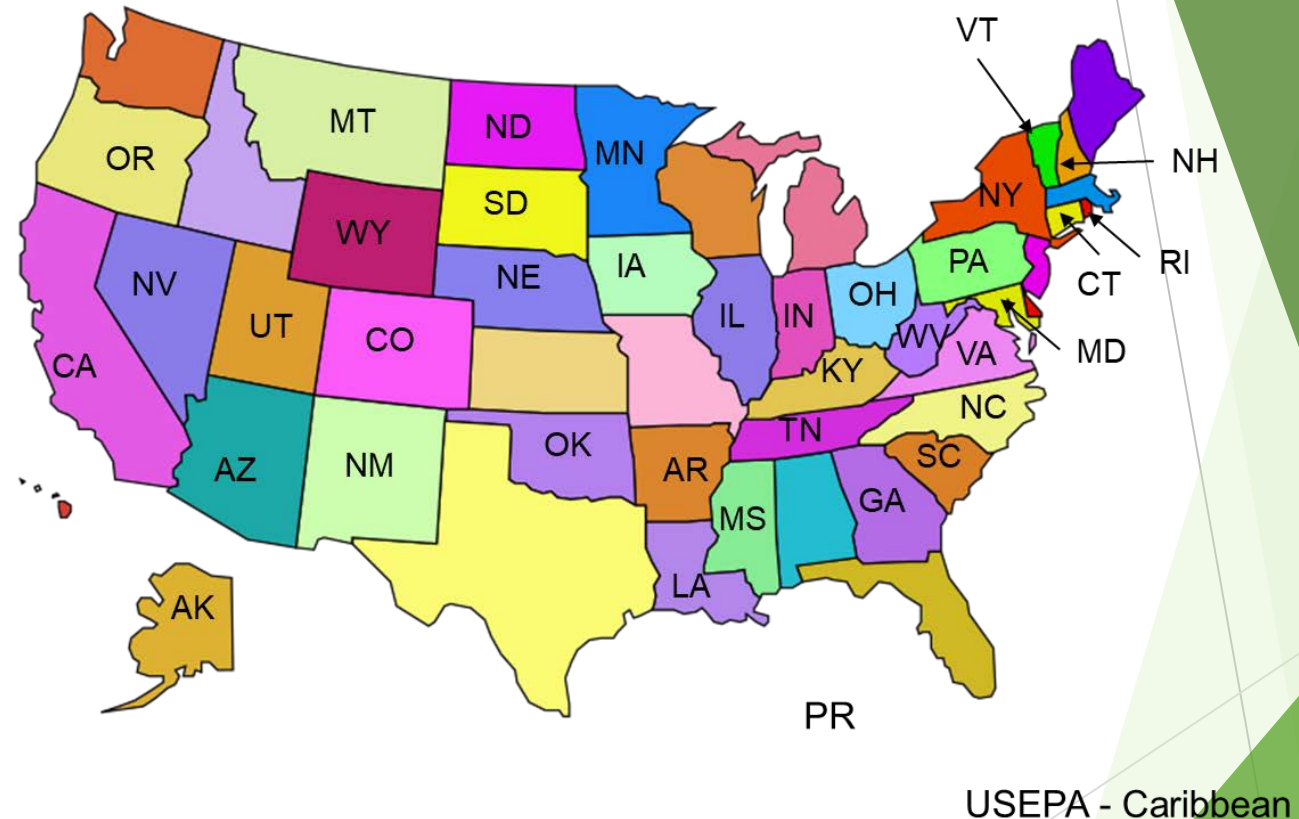
# ASCT Team Composition

256 Team Members Team  
Registration as of 8/17/18



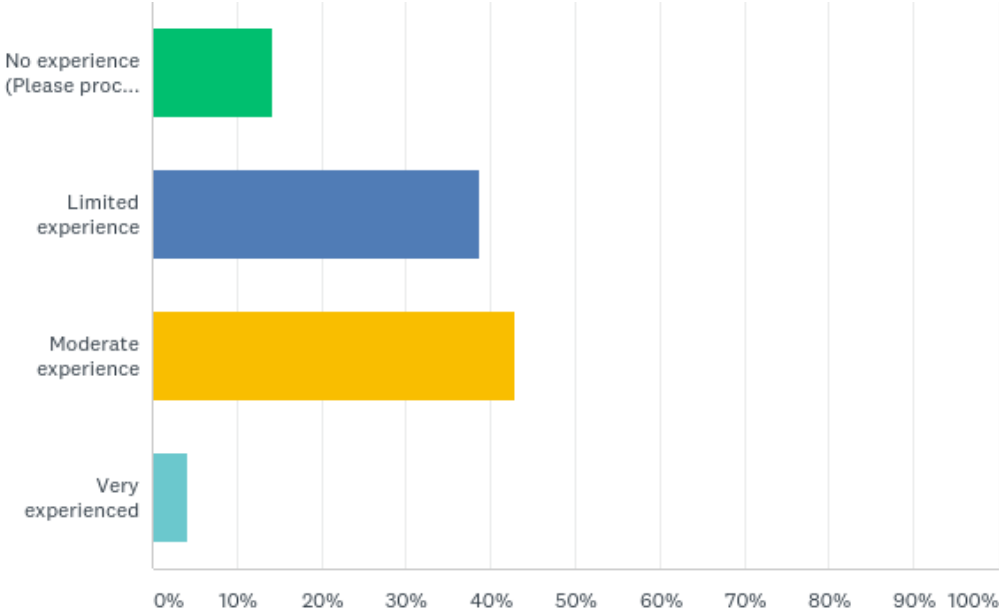
# ITRC ASCT State Survey to Understand State Experience

- 19 questions about experience with ASCTs
- 53 responses from 38 states plus USEPA

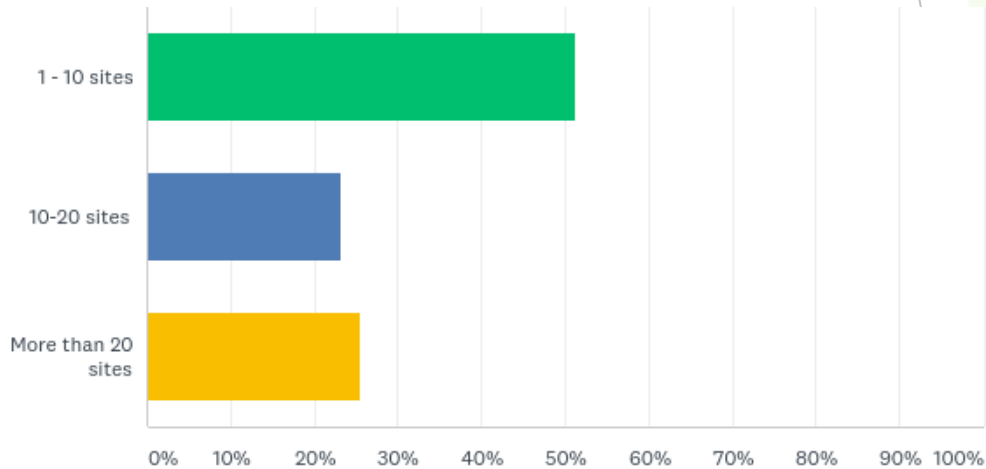


# Results from the State Survey

### Level of Experience



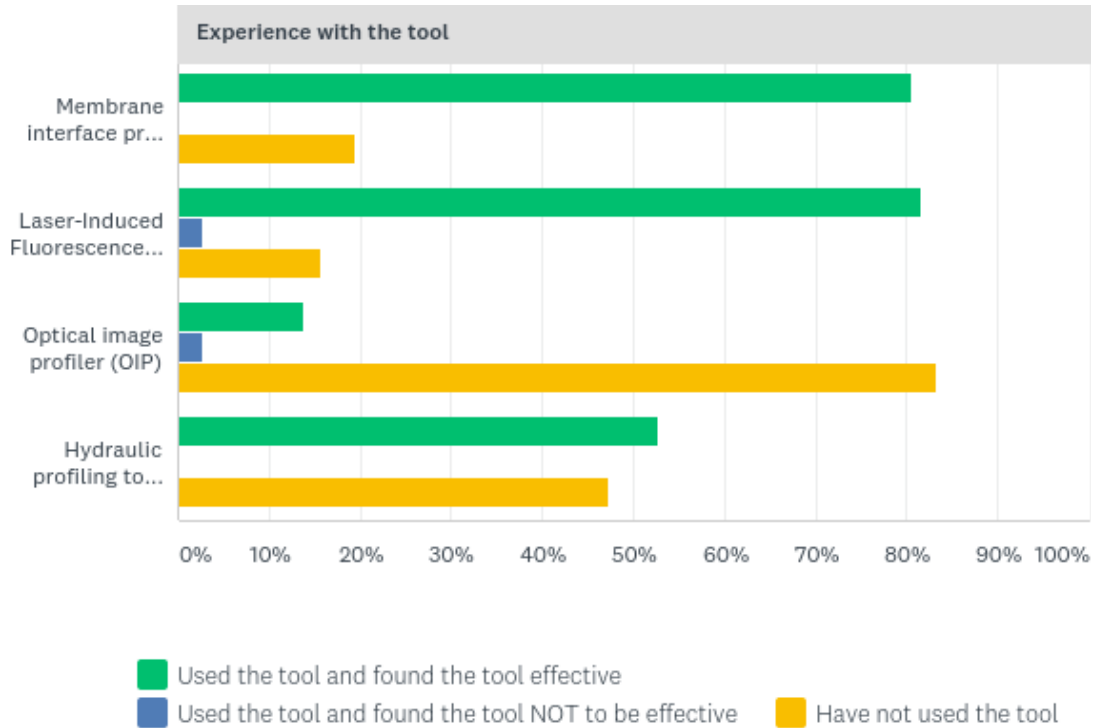
### Estimated Number of Sites Using ASCT



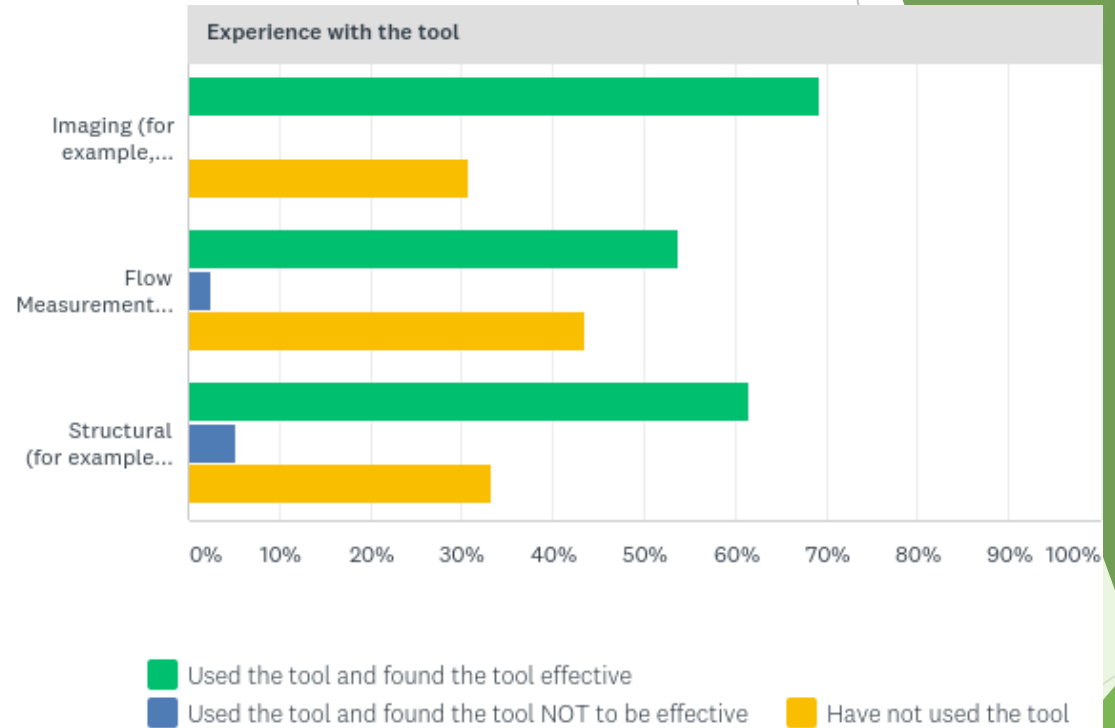


# Results from the State Survey

## Direct Sensing

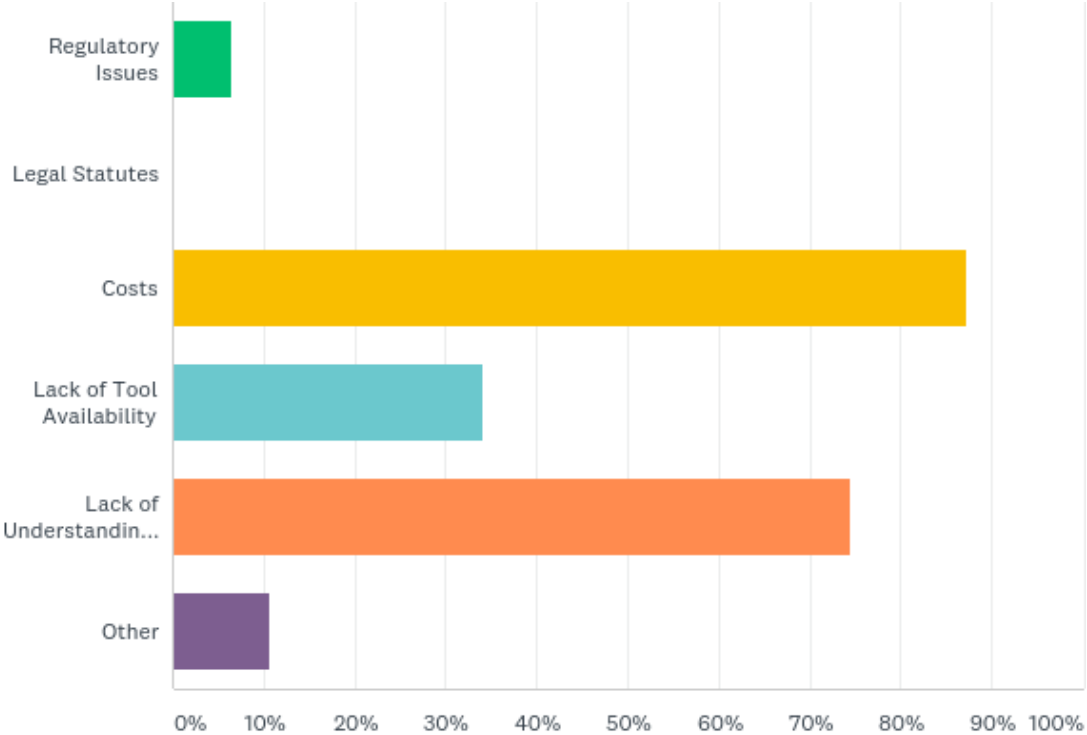


## Downhole Geophysics

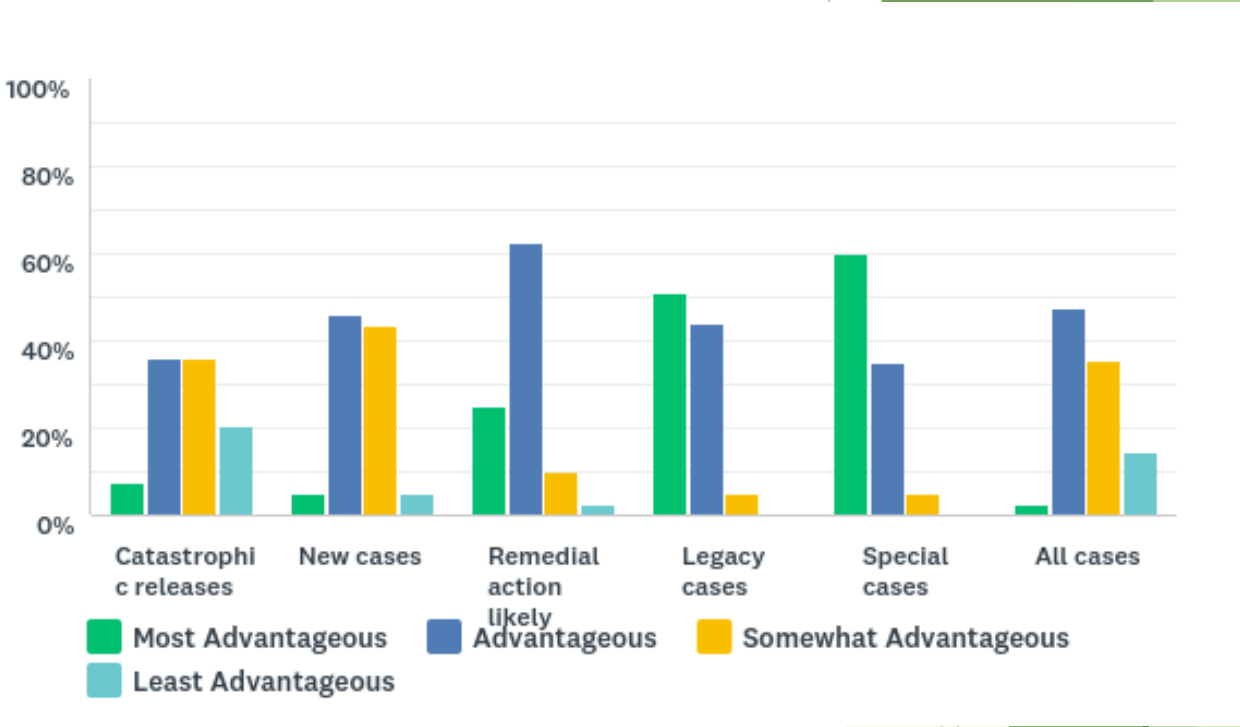


# Results from the State Survey

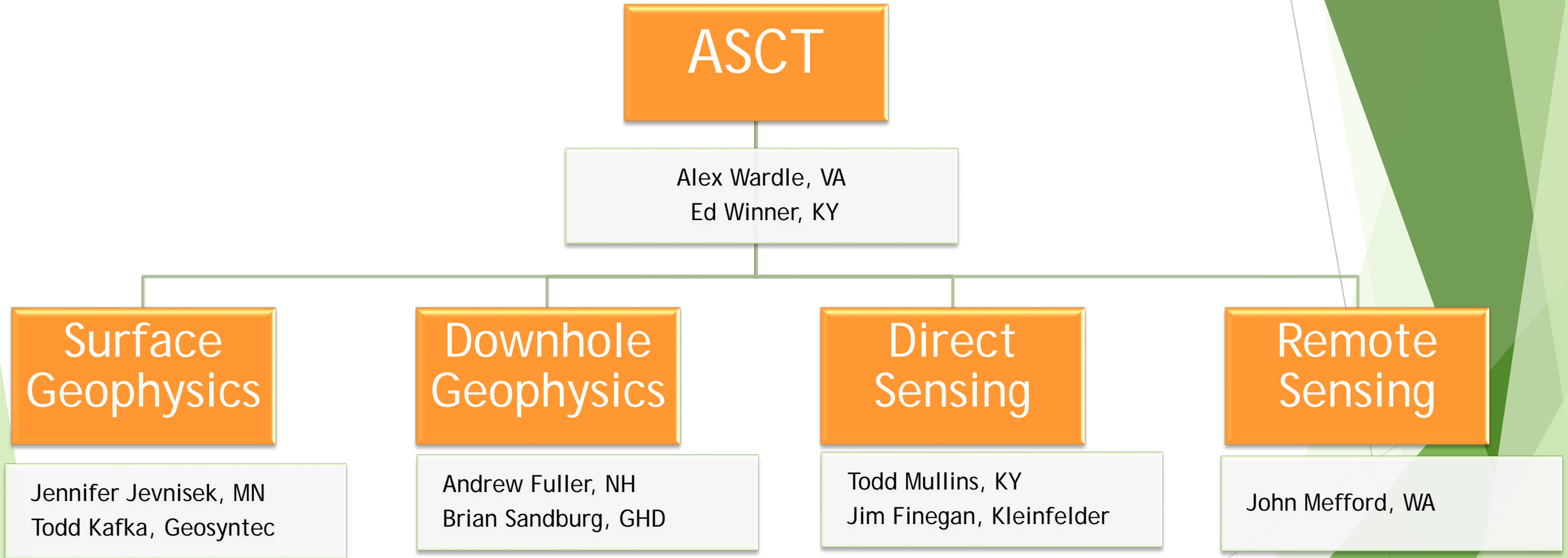
Barriers to Use



When to Use



# ASCT Team Writing Subgroups for Document Development



# Technical and Regulatory Guidance Document

The guidance document will be web-based

## Purpose

- ▶ What is the tool?
- ▶ Why would you use it?
- ▶ When should it be used?
  - ▶ Tools that support one another
- ▶ How to get it or them on your site
- ▶ What to expect
- ▶ How to interpret the results

## Objectives

- ▶ Prepare a request for proposals
- ▶ Review a proposal for completeness
- ▶ Understand a report received from a contractor
- ▶ Know whether information received is a quality, reliable product

# Guidance Document Outline

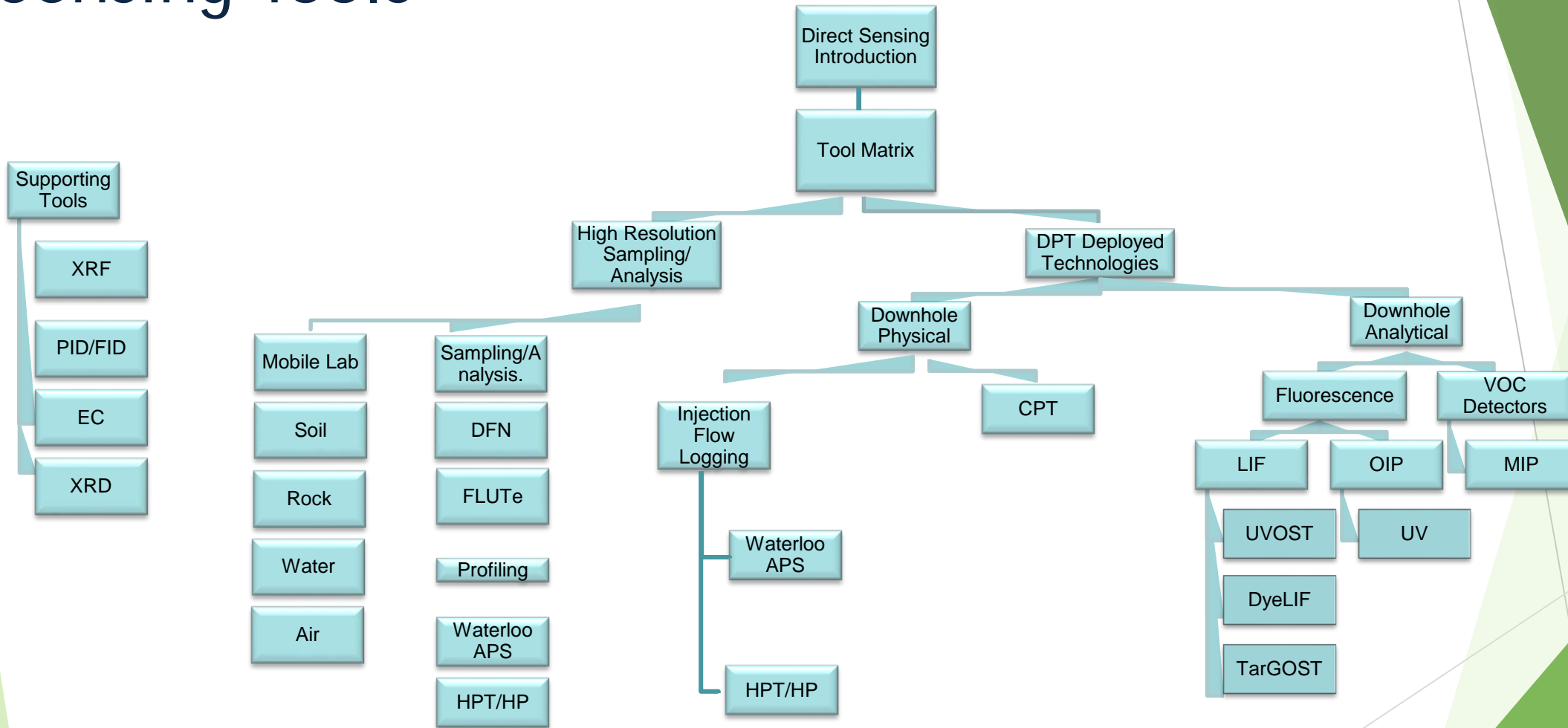
## Document Outline

- ▶ Introduction
- ▶ Technology Overview
- ▶ Direct Sensing
- ▶ Geophysics
  - ▶ Downhole Geophysics
  - ▶ Surface Geophysics
- ▶ Remote Sensing
- ▶ Stakeholders Perspective
- ▶ Regulatory Context
- ▶ Case Studies
- ▶ References
- ▶ Additional Information

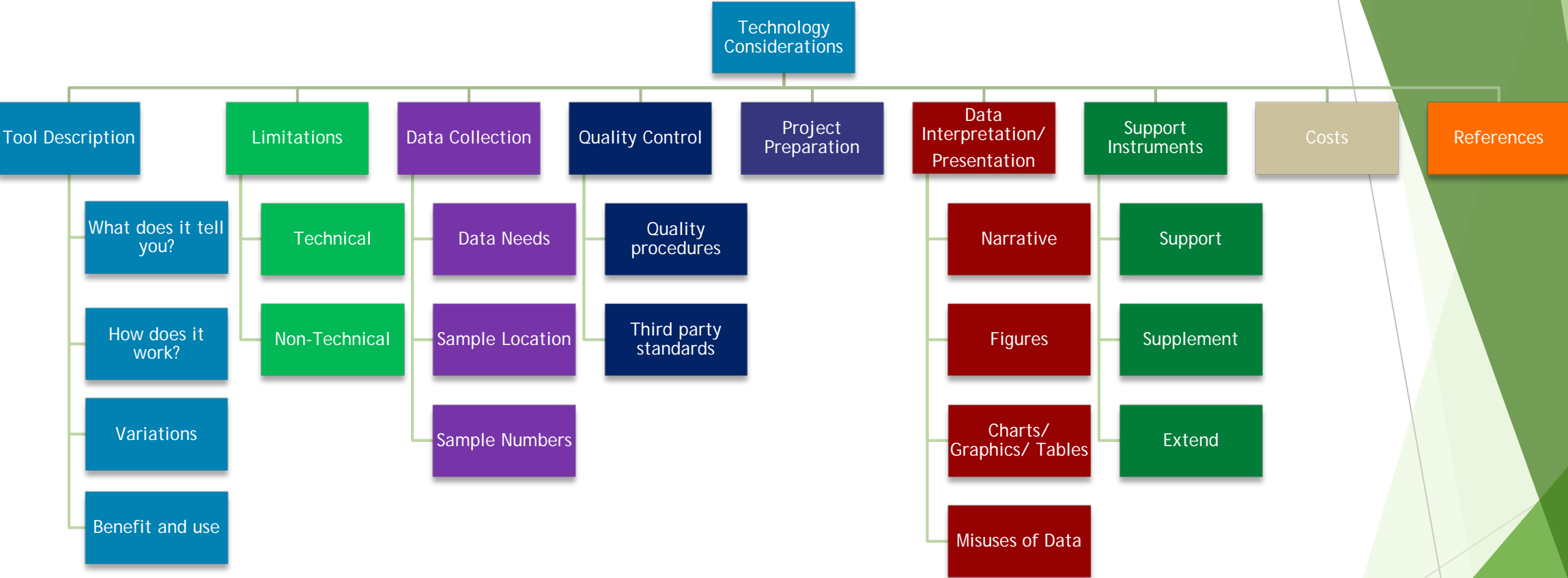
## Tool Section Topics

- ▶ Introduction
- ▶ Site Preparation
- ▶ Tools
  - ▶ Short Description
  - ▶ Advantages and Limitations
    - ▶ Technical and Non-Technical
  - ▶ Quality Control
  - ▶ Data
    - ▶ Collection Design
    - ▶ Interpretation and Presentation
  - ▶ Costs
  - ▶ Case Studies
- ▶ References

# Example Chapter Content- Direct Sensing Tools



# Example Chapter Outline: Direct Sensing



# Team Schedule

- ▶ First draft for team review September 2018
- ▶ Second team draft document December 2018
- ▶ ITRC external review of document April - May 2019
- ▶ Internet-based Training (IBT) development Mid-2019
- ▶ Web-based document and IBT complete End-2019



# Thank you!

## ASCT Team leaders:

Ed Winner - [edward.winner@ky.gov](mailto:edward.winner@ky.gov)

Alex Wardle - [alexander.wardle@deq.virginia.gov](mailto:alexander.wardle@deq.virginia.gov)

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