

Poles & Conduit In a Converging Utility Landscape

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Chris Witteman
Senior Staff Counsel
California Public Utilities Commission

It's About Infrastructure

- Railroads – end of 19th century, birth of CPUC



- New Concept of Infrastructure
 - Telephone line includes conduits, ducts, poles, wires, cables ... to facilitate communication ... with or without transmission wires.
 - Cable, fiber, microwave, CMRS
 - Energy “signal wires... include telephone ...and other wires”; smart grid; telemetry (also for water and gas).
 - Energy IOUs entering the telecom market

CPUC Competition Re-Look

- In 2016, the Commission revisited its deregulatory decisions 10 years before.
- Decision 16-12-025 (“competition decision”) – Physical network & economic market: two sides of the same coin.
- → Poles & Conduits – **bottlenecks**, constricting competition. ... *Pressures*:
 - Time to make ‘96 Telco Act competition real – new facilities-based providers, FTTH models
 - 5G & backhaul
 - Safety

CPUC Decisions/Initiatives re Poles & Conduit



- Decision 16-01-046 – CMRS on poles
- Decision 16-12-025: “poles are where safety and competition meet.”
- Rulemaking 17-03-009 – WIA Petition – CLEC access to poles – turnkey backhaul solutions
- March 2017 Pole & Conduit Database & Software Workshop:
 - Asset management; Work Tracking
- Investigation 17-06-027 – Census/Database?
- Rulemaking 17-06-028 – Access Reform?

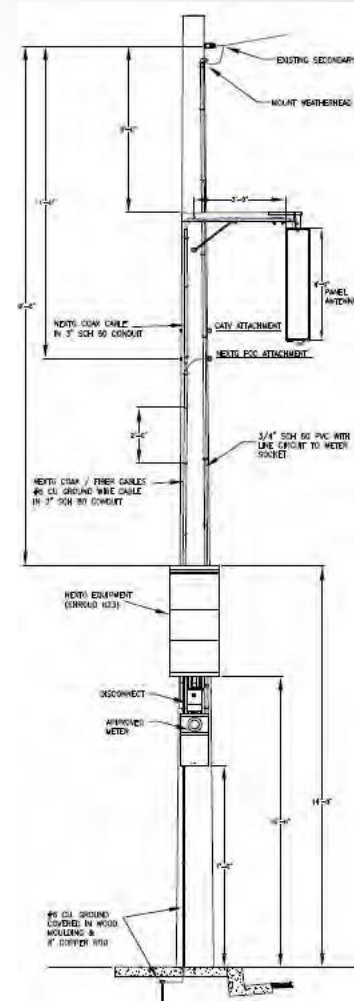
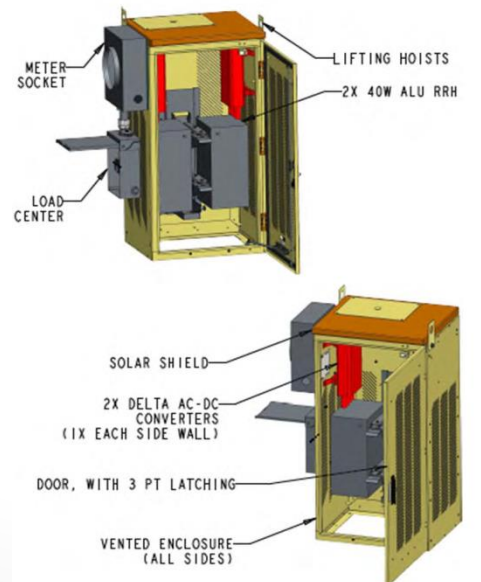
Safety

- Unauthorized or Unknown facilities
- Irregular inspection & maintenance tracking (lashing wires, rotten poles, etc)
- Urban–rural interface; extreme weather; vegetation management



Competition

- FTTH
- 5G – when, how big?
- Fiber backhaul
- How much capacity on utility poles, municipal structures?



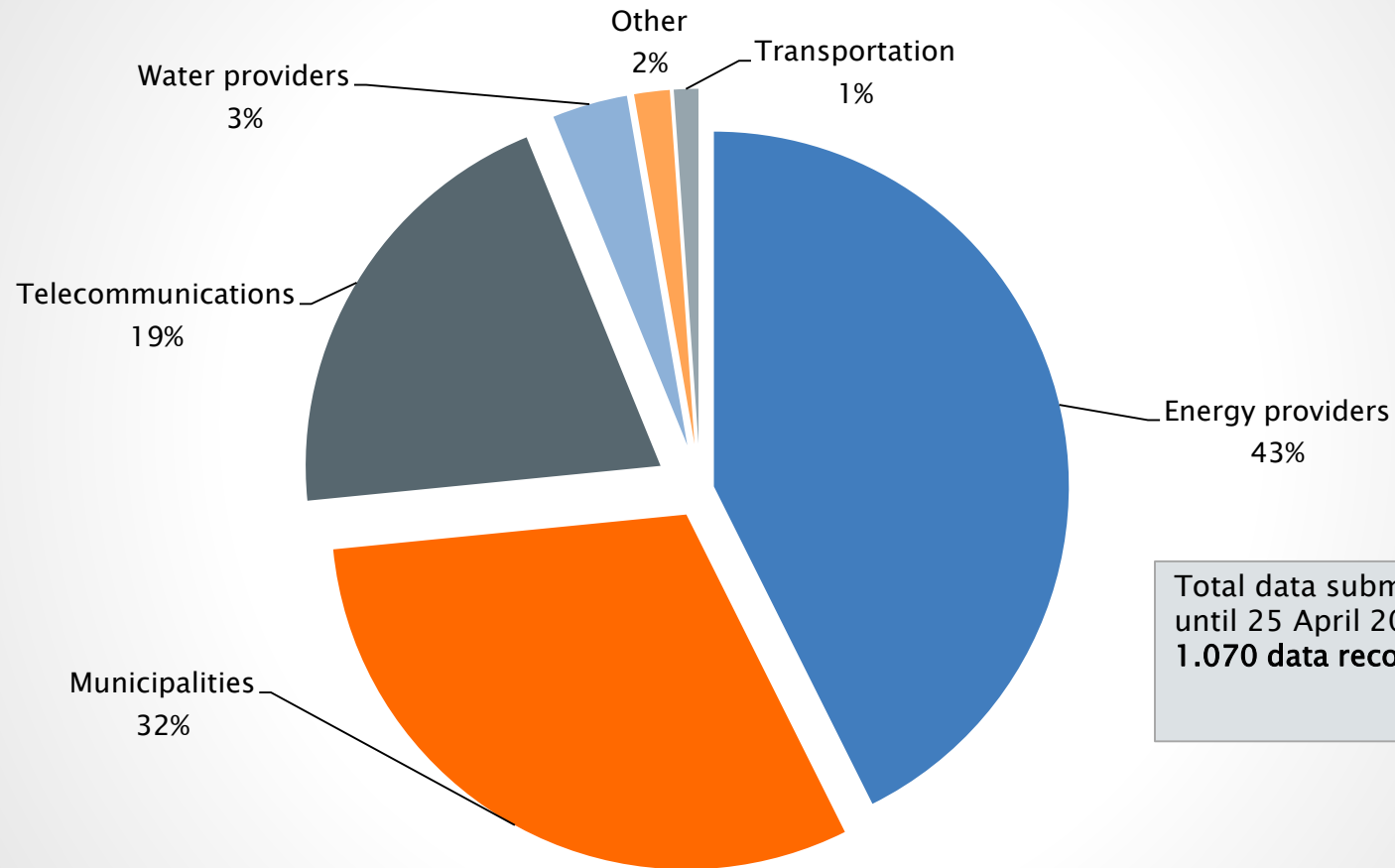
Shared Database?

- Pro:
 - Route planning
 - Facilitate one touch make ready?
 - Safety oversight – track inspections, rogue attachments, load calcs
 - Facilitate billing?
- Contra:
 - Effort and Cost
 - Efficiencies of Big Data?
 - Security





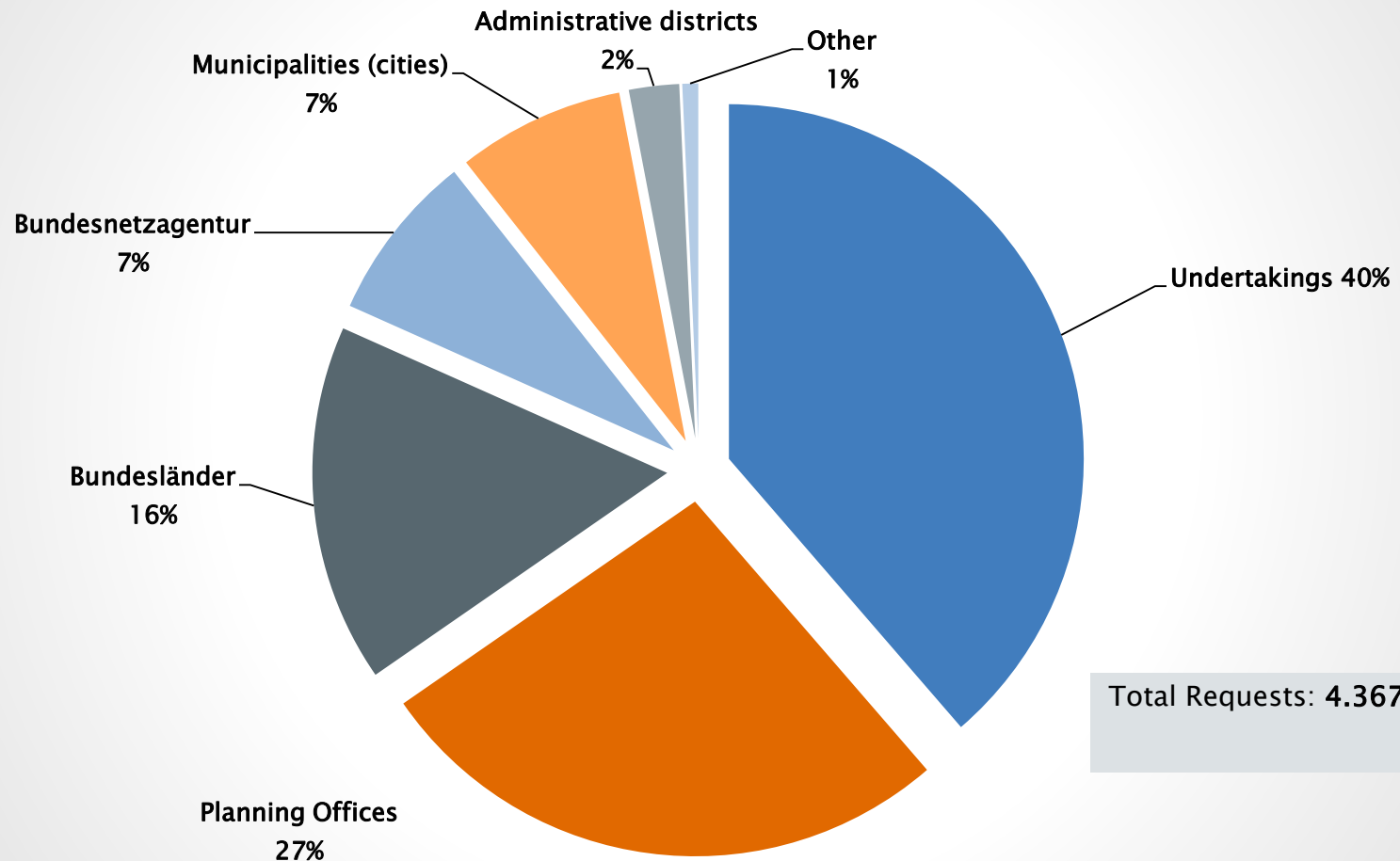
Data delivery by Branches



Total data submission
until 25 April 2016:
1.070 data records



Requests – Range of users



Last updated 03/2016

Access Reform

- **Timelines (for Competitive Attachments)**
- Competitors access to digital maps & information
- **Make-Ready** (One Touch? Right Touch?)
- Potential Integration of State & Local Roles re Planning and Safety

Questions?

Chris Witteman

CPUC

505 Van Ness Ave.

San Francisco, California 94102

wit@cpuc.ca.gov