



Video Chat Inspections

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Background



How it works



What we learned



Benefits

Who is Tacoma Power



Public Utility

- 97% renewable power portfolio
- Owns 7 dams
- Purchase hydro power from BPA

Unique Service Territory

- Located in Pierce County, Washington
- 180 square miles
- 9 smaller electric utilities
- Shared with investor owned dual fuel utility

Over 155,000 residential customers

- 54% within city limits / 46% rural
- 40% heat with electric

Residential Conservation Programs

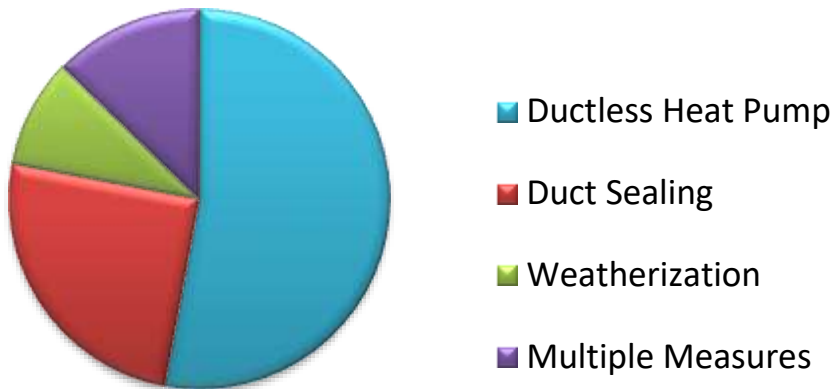
Multiple Inspections

- Mechanical inspection - City/County
- Electrical inspection - Tacoma Power
- Conservation inspection

Program Requirements

- Loans require 100% inspection
- Grants require 25% inspection
- Rebates require 25% inspection

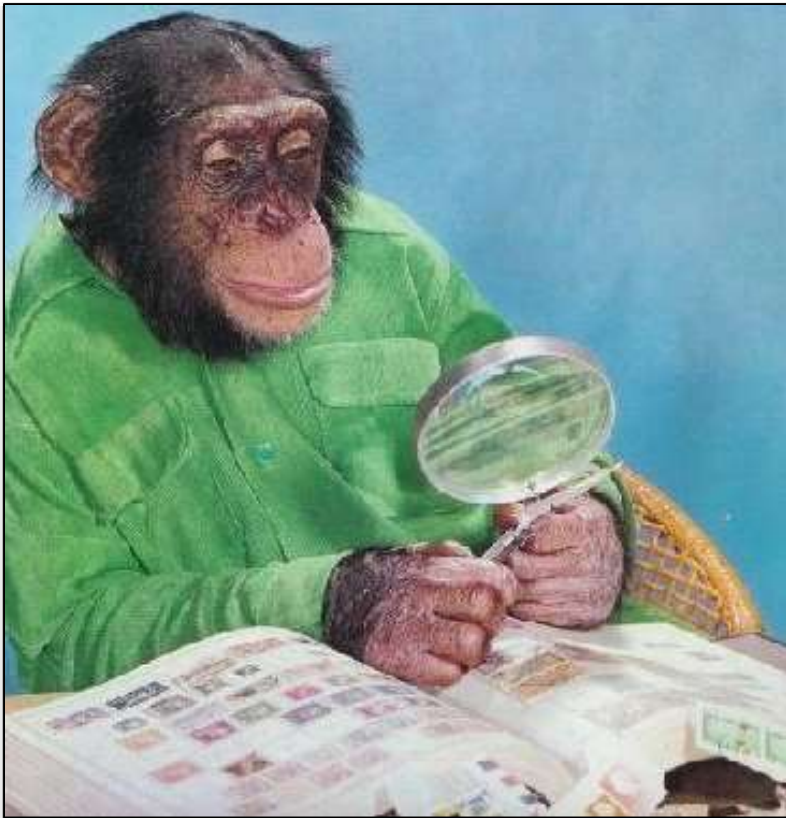
Over 75% of projects are simple inspections



Loans and grants account for over 75% of all projects



Can we use live videos to perform inspections?



Will it Enhance

- Customer experience
- Staff productivity

Research

- ACEEE
- E*Source
- Local utilities

Pierce County

- Uses Skype and Facetime
- Verify code compliance
- Finalize permits



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Benefits

Scheduling Video Chat Inspections



Standard Contractor

- Day scheduled a week in advance; actual time may vary
- Majority of inspections



Impromptu with Contractor

- Not scheduled
- Rare



Customer

- Scheduled outside of normal business hours; fixed time
- Increasing in popularity



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Benefits

Challenges We Thought We Had



Legal Concerns

- Public disclosure
- Records retention
- Invasion of privacy

IT Department Concerns

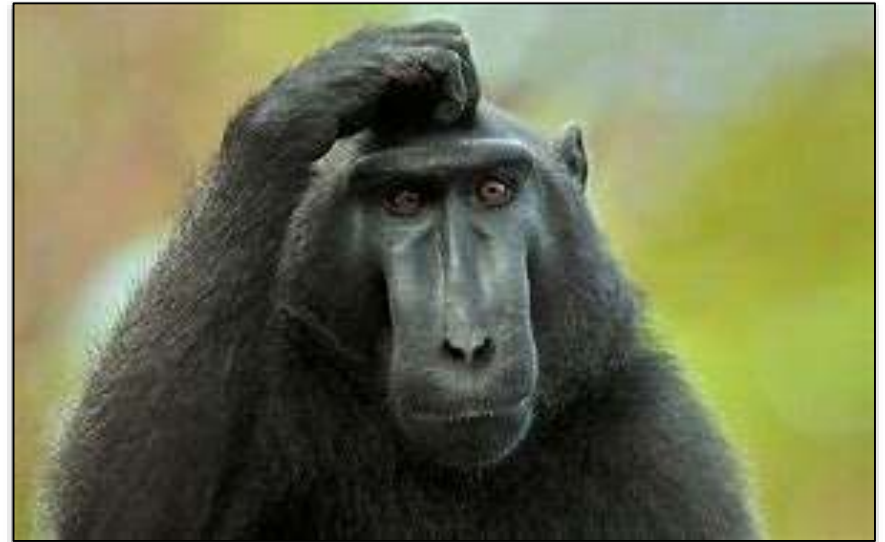
- Server space
- Added equipment cost

All non-issues because we use live video

Challenges We Did Not Anticipate

Technology

- Multiple software options
 - Skype
 - FaceTime
 - Facebook messenger
- Varied proficiency with video apps



Contractors

- Rough start to new relationships with Installers
- Skeptical of benefits

Customer Challenges



Clear Communication

- Identifying inspection points
- Use of technical terms
- Education

Safety First!

- Don't ask customers to climb ladders or crawl under homes

Technical Challenges

Not One Size Fits All

- Insulation
- Thermostats

Auditors are “On Call”

- Fluctuating completion times
- Cancellations

Connectivity / Cell Service

- Rural areas
- Basements





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Benefits

Customer Benefits

Convenient Inspections

- Availability outside normal business hours
- Less time per inspection

Payments

- 14 days faster

On-Site Corrections

- Failed inspection points can be corrected onsite in real time

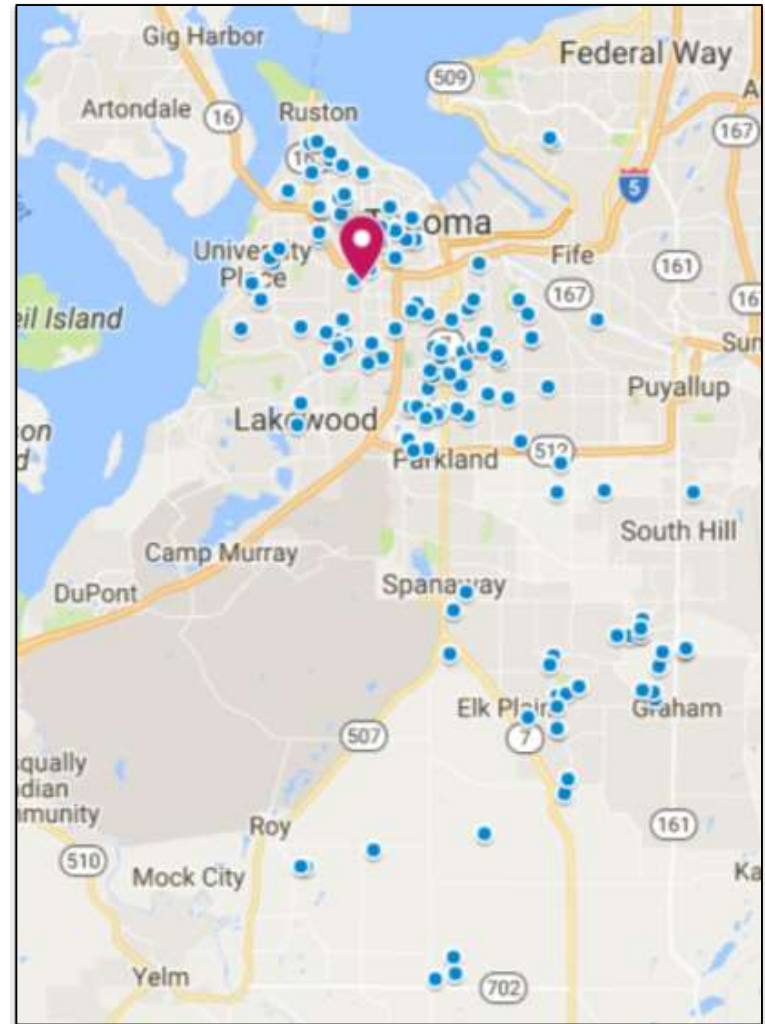


Utility Benefits

Avoided ~ 2,500 miles of driving
Avoided ~ 100 hours of drive time

Real Value to Tacoma Power

- Process more projects
- Lower fleet costs
- Reduced carbon footprint
- Added safety



Future of VCI's

Currently Testing

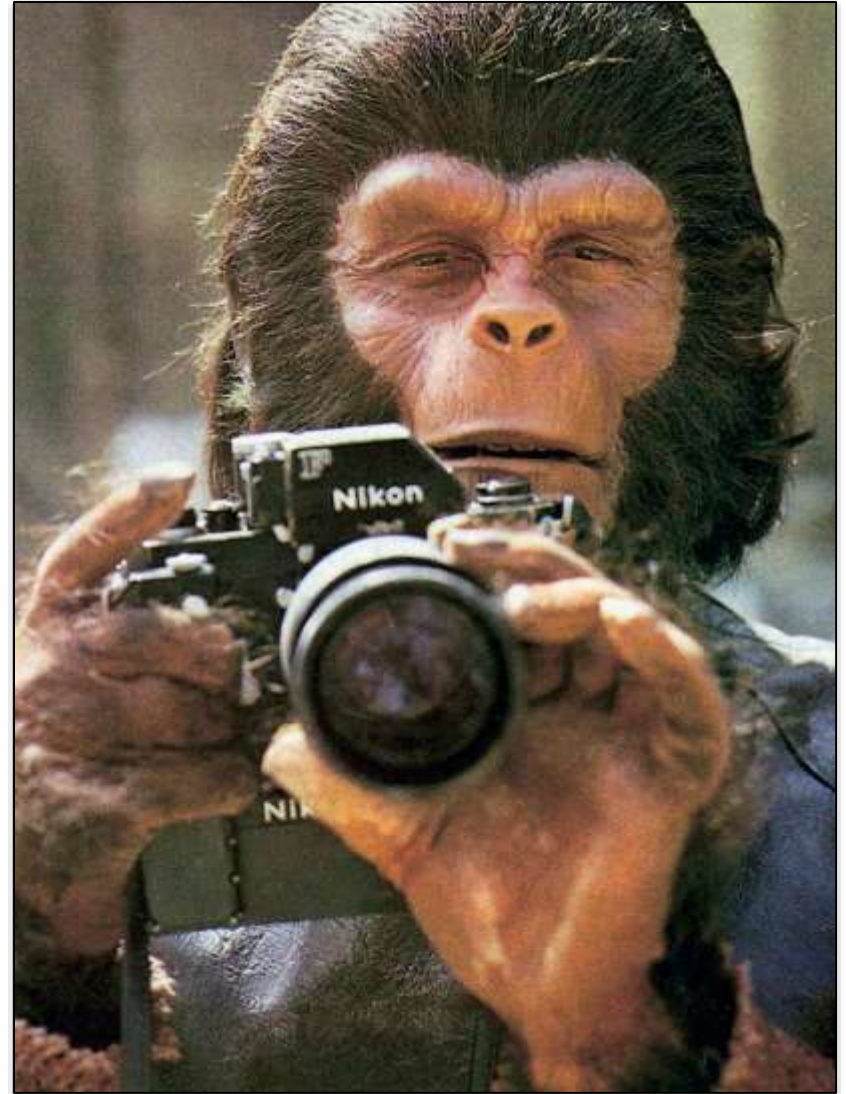
- Central heat pumps
- Windows
- Heat pump water heater
- Thermostats
- Duct sealing

Other Uses

- Verifying main heating source
- Addressing high bill concerns
- Conducting home energy audit

Promote Video Chat Inspections

- Educate customers
- Training contractors



Questions

