Video Chat Inspections

Sara Bowles
Customer Energy Programs
Who is Tacoma Power

- Public Utility
- Unique service territory
- Shared with gas utility
- 155,000 customers
- 54% city / 46% rural
- 40% electric heat
- I-937
About Residential Conservation

2015 Projects

- 4 Residential Auditors
- Loans/Grants/Rebates
- 1,341 Incentive requests
- 695 Inspections

2015 Project Types

- Ductless Heat Pump: 45%
- Duct Sealing: 37%
- Weatherization: 9%
- Multiple Measures: 9%
Opportunity for Improvement

Time consuming for customers
• Multiple inspections
• Phone tag
• Lack of flexibility
• Limited times for inspections

Challenge for utility
• Auditors in-office & in-field
• Limited staff resources
• Environmental Action Plan
Can we leverage existing technology?

• Improve customer experience

• Improve internal process

• Improve approval/payment time
Anticipated Challenges
Data From Pilot

37 inspections

Testing:
- ✓ Ductless Heat Pumps
- ✓ Windows
- ✓ Insulation

<table>
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<tr>
<th></th>
<th>Inspection Time</th>
<th>Travel Time</th>
<th>Total</th>
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<tbody>
<tr>
<td>37 Video Inspections</td>
<td>240 minutes</td>
<td>none</td>
<td>240 minutes</td>
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<tr>
<td>37 On-Site Inspections</td>
<td>780 minutes</td>
<td>1,140 minutes</td>
<td>1,920 minutes</td>
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28 hours saved
VCI Pilot Savings

37 Video inspections Saved:

- 474 miles of driving
- 19 hours on road
- About $90 in gas
- Reduced carbon footprint
- No need to re-inspect
Lessons Learned

• Multiple software options
• Apple Vs Android
• Jargon
• Contractor skepticism
• New relationships
Benefits to Customers

• Less time off work
• Added time slots available
• Shorter inspections
• Added service from contractors
Benefits to Contractors

“We are seeing rebate payments hit our accounts within 5 business days from the install date”

Participating Contractor – Gregg S.
How a VCI Works

“Are you ready”

• Contractor VS Customer

Verify location

• Verbal

• Visual
Equipment and Specifications
Lights – Camera – Action

• https://youtu.be/8SRl9g8q_p4
Our VCI Scheduling Process

With Contractors

With Customers
Weekly Auditor Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Video Inspection Contact</th>
<th>Facetime contact #</th>
<th>Skype contact name</th>
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<td>Wednesday</td>
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<td>253-348-1949</td>
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<td>22-Feb</td>
<td>Jordan Whiteley</td>
<td>253-348-1937</td>
<td>jordan.tacoma.power</td>
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</tbody>
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Sent to Contractors
Remaining Challenges

Lighting limitations

On-Call

• Benefit for customer
• Drawback for auditors

Connectivity

• Rural areas
• Basements
2017-18 VCI Data

1,410 Completed Inspections

374 Completed with Video

~5,000 Less miles

Reduced Maintenance

Reduced fuel

~200 Less hours

Added office time

Added safety
Continued Innovation

Added Measures

• Central Heat Pumps
• Heat Pump Water Heater
Conclusion

WIN – WIN –WIN

• Improved customer experience
• Better relationship with contractors
• Increased output from staff
Questions

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