CRITICAL HOME REPAIR PROGRAM
HOUSING NEEDS SURVEY
of South Deschutes County
FINAL REPORT

November 2019

Prepared by:
CENTRAL OREGON INTERGOVERNMENTAL COUNCIL - 334 NE HAWTHORNE AVE, BEND, OR 97701
Executive Summary

Habitat for Humanity of La Pine-Sunriver is a key partner in meeting the housing needs of residents in the southern portion of Deschutes County, Oregon. In addition to building new housing, they also deliver a Critical Home Repair program in the area, aimed at keeping residents in their existing homes. Although this program is being utilized, Habitat suspected that the scale of need for these services far exceeded current demand for the program. Without many existing sources of data on the types and scale of housing repair needs for South County residents, Habitat began to explore the idea of collecting this data via survey. They were not only interested in understanding the need in their own service area, but in developing a pilot survey tool that could be used by other regional partners.

With grant support from the Central Oregon Health Council, Habitat contracted with the Central Oregon Intergovernmental Council (COIC) to collaboratively develop and deliver the survey through targeted outreach.

The primary goal was to survey owner-occupied households in South Deschutes County earning 50% or less of the county AMI to better understand the scale and type of housing needs. The published 2018 AMI of Deschutes County is $69,600, and published 50% AMI income levels vary by household size – ranging from $24,400 for a single-person household to $45,950 for an 8-person household. Secondary goals included expanding Habitat’s existing network in South County, developing new partnerships with local social service organizations, better publicizing the existing program, and understanding how best to expand the program going forward. COIC conducted targeted outreach using a combination of partnerships, media and social media advertisement, and in-person outreach.

Using census data to estimate the number of potentially-eligible households, COIC estimated a minimum sample data set of 91 households. By the close of the survey in October, 2019, 136 total households had participated, including 13 renters. Of the owner-occupied households, just under 50% reported an income below $30,000.

The results of the survey are detailed in the full report, but following are some highlight findings:

1. The biggest demonstrated need is among manufactured/mobile homeowners
2. The majority of structures are 31-50 years old
3. The greatest need is among homes between 1,000 and 1,500 square feet
4. Three-quarters of all homes are on septic systems
5. Weatherization, flooring and roof repairs are the most frequently-reported areas of need. See the table on page 26 for how these results might extrapolate to all eligible households.

Some of the most striking outcomes of the survey dealt with housing type and age of structure. Currently, the critical repairs program is only open to owner-occupied, stick-frame houses. However,
the survey results showed the greatest need among manufactured/mobile home owners. Across all housing types, the age of the structure most commonly fell between 31-50 years old. The number one type of repair need was weatherization, which can cover a variety of specific repairs such as new windows/doors, weather-stripping, gutter repair/install, upgrading heating systems, and insulation.

Although the data gathered is specific to the service area of Habitat of La Pine-Sunriver, the methodology and survey questions can easily be utilized by other regional partners to collect their own data. For those interested in conducting their own survey project, COIC recommends following these basics steps:

1. Analyze census data to determine appropriate sample size. This can be accomplished by obtaining a report from American Community Surveys at americanfactfinder.com (soon to be converting to data.census.gov). Cross-tab owner-occupied households with household income.
2. Review our survey questions, and refine as desired. Create an online link for your survey using Survey Monkey, Google forms, or other similar platform. Be careful to structure demographic questions to replicate Census questions, as much as possible.
3. Create a simple graphic ad for your survey, including the link.
4. Develop a list of partner organizations and reach out to explain your goal(s). Ask for help collecting surveys.
5. Develop a list of media and social media groups willing to advertise the survey. Send them your graphic.
6. Research and calendar existing community events scheduled during your collection period. Ask for permission to collect surveys at the event(s).
7. Routinely compare survey results to census data to track gaps in your outreach. Adjust targeted outreach as needed.
8. Analyze results.

This project met or exceeded both the primary and secondary goals. Habitat of La Pine-Sunriver now has more than 80 new contacts interested in their programs. New partnerships have been established, and more residents of the South County area are now aware of the Critical Home Repairs program, even if they are not currently eligible. With this new data, Habitat is better equipped to review their current program as they consider how best to expand in the future. Habitat regional partners, including the Central Oregon Health Council, also have access to new data on social determinants of health related to housing to help them make more informed decisions about service delivery and needs in South County.
Background
On behalf of Habitat for Humanity of La Pine-Sunriver, The Central Oregon Intergovernmental Council (COIC) conducted a Housing Needs survey from April to October, 2019. The primary goal was to survey owner-occupied households in South Deschutes County earning 50% or less of the county AMI, though most surveyed reside in La Pine. 136 total households participated, including 13 renters.

COIC, the Health Council, and Habitat for Humanity collaborated to develop the survey content, and COIC created the format. The survey was available online in both English and Spanish through Survey Monkey, and print copies were available at various La Pine business and social service locations. The final survey consisted of 22 questions, including an option to leave household name and contact information for follow-up.

COIC conducted targeted outreach using a combination of partnerships, media & social media advertisement, and in-person outreach. Due to budget limitations, COIC did not attempt to design or deliver a truly randomized survey. This report provides a summary of the results of the survey, methodology involved, successes, challenges, and potential next steps.

Methodology
Why
La Pine-Sunriver Habitat for Humanity is interested in growing its housing rehabilitation program to improve health and human safety for low income, owner-occupied households in “South County” – which includes neighborhoods from Sunriver to the southern border of Deschutes County.

Habitat for Humanity contracted with the Central Oregon Intergovernmental Council (COIC) to co-design and deliver the survey to the target population. COIC’s Community Economic Development department has a mission to support local governments and community organizations in their work to build and improve economic development and community wellbeing. COIC has been involved with housing needs through a variety of projects, most recently as a convener of the Housing for All consortium.

COIC conducted outreach to the target population and assessed housing needs through community outreach, networking through local community groups, social service organizations, city staff, the faith-based community, and local business leaders. The outcomes have been evaluated and utilized to guide next steps in the housing rehabilitation process. Although the results of the survey are specific to the South County area and can’t be used to accurately draw conclusions or make informed decisions about other regions, the lessons learned from the methodology and delivery of this project may be applied to other parts of Central Oregon, or other regions.
How
COIC began by using census data to estimate the number of owner-occupied households with an income of 50% or less of area AMI in South Deschutes County. To reach +/- 10% statistical accuracy, we estimated a sample size of 91. Habitat decided not to exclude renters, but to isolate their responses so they would not affect our sample size.

COIC conducted targeted outreach using a combination of partnerships, media and social media advertisement, and in-person outreach. Many of our partners, primarily social service organizations in La Pine, actively collected surveys from their clients in addition to sharing the survey link to their networks via email. These organizations were the most vital links, and COIC successfully formed new partnerships during the course of the project, most notably with a local hospice organization and several local churches.

**Outreach type and organizations contacted by COIC:**

**PARTNERSHIPS**
COIC developed the following partnerships to collect paper surveys and/or share the survey link to personal networks:

- St. Vincent De Paul Social Services
- Heart and Home Hospice
- Family Relief Nursery
- Family Access Network
- La Pine Community Kitchen
- La Pine Family Care Clinic
- City of La Pine
- Thrive Central Oregon
- Latino Community Association
- Eastside Foursquare Church
- Holy Redeemer Church

**MEDIA**
- Ad in the August issue of the Newberry Eagle

**SOCIAL MEDIA PAGES**
- La Pine and Surrounding Communities
- La Pine Senior Activity Center
- La Pine Community Kitchen
- La Pine Parks and Recreation
- St. Vincent De Paul
- High Lakes Christian Center
• Faith Lutheran Church of La Pine
• Cornerstone Baptist Church of La Pine

IN PERSON OUTREACH
• COIC conducted in-person outreach to collect paper survey responses at:
  o La Pine Community Kitchen (2x)
  o La Pine Senior Activity Center (2x)
  o La Pine Rhubarb Festival

FLYERS
COIC posted flyers with the survey link in the following locations:
• La Pine Senior Activity Center
• Dollar General La Pine
• La Pine Grocery Outlet
• La Pine Community Health Clinic
• La Pine Habitat Restore
• St. Vincent De Paul
• La Pine Library
• La Pine Parks and Recreation

OTHER
COIC connected with local business leaders Kathy DeBone and Dan Varcoe to brainstorm a list of potential contacts. Kathy and Dan then sent a personal email invite with the survey link to the following contacts:

**St Vincent de Paul La Pine**
Jamie Smith <jamiebsvd@gmail.com>
MIKE EDSON <mbedson@msn.com>
Heather Loomis <info@lapinesvdp.org>
Corinne Martinez <cmart1942@crestviewcable.com>
Corinne Martinez <cmart1942@bendbroadband.com>
Linda Bauman <hairl73@aol.com>
Carl Jansen <carlj@searchna.com>

**La Pine Community Health Center**
Shelley McKittrick <mmckittrick@lapinehealth.org>
Charla Dehate <cdehate@lapinehealth.org>

**St Charles La Pine**
Kelly Michael klmichael@stcharleshealthcare.org
Danielle Baughman <dtbaughman@stcharleshealthcare.org>
La Pine Community Kitchen
James Fleming <9fngrs@gmail.com>
<director@lapinecommunitykitchen.org>
Mary Thorson <landmthor@aol.com>
Tammy Leseuer <tammy@bancorpinsurance.com>

Sunriver/La Pine Rotary
Bea Leach Hatler <beal1301@gmail.com>,
Cheri Martinen <cheri@bancorpinsurance.com>,
Ron J Schmid <ronschmid1@me.com>,

La Pine Park and Recreation
Karen Miller <karen.miller@lapineparks.org>
Chad Carpenter <chad@lapineparks.org>

City of La Pine
Connie Briese <Connie.briese@gmail.com>
Michael Harper <harper@hhbholdings.com>
Melissa Bethel <mbethel@lapineoregon.gov>
Kelly Notary <knotary@lapineoregon.gov>

FAN/Schools
Kathy Graves <kathy.graves@bend.k12.or.us>
Matt Montgomery <matt.montgomery@bend.k12.or.us>

La Pine Chamber of Commerce
Ann Gawith <director@lapine.org>
Teri Myers <teri@lapine.org>

Band of Brothers
Bob Seidenberg <rlseidenberg@gmail.com>
James Fleming <9fngrs@gmail.com>

NeighborImpact
Chad Carpenter <chad242@gmail.com>

Pastors Group/Churches
Pastor Ben <ben@highlakescc.org>
Father Paul <paulantao@yahoo.co.in>
Pastor Chad Carpenter <chad242@gmail.com>

La Pine Senior Center
Jamie Donahue <lapineseniorcenter@yahoo.com>
COIC also sent emails to a number of South County Churches, asking to have our Newberry Eagle Ad included in their weekly church bulletins. COIC received a response from Father Paul and Donna Pigman of Holy Redeemer stating they ran the ad in all of their church bulletins August 31st – September 1st. Other church leaders shared the ad or survey link via email with their congregations.

COIC gathered contact information and conducted outreach to La Pine and Sunriver area schools, including the principal, school liaisons, and the La Pine PTA. COIC sent emails to the principals, assistant principals, school liaisons, and PTA. COIC received an email response from Three Rivers School district, who indicated they had shared the survey with the Family Access Network. In addition to the Principal’s introduction to FAN, COIC reached out directly to the South County FAN representatives: Janet Likens, Kathy Graves, and Jennifer Reuter. Unfortunately, the FAN connection proved challenging. According to the FAN Director, the program exists to connect 0-18 year olds to services and resources they need, whether in school or not. It takes time to build trust and time with the youth is valuable, and FAN advocates were concerned that sending out an informational survey not directly tied to a resource could violate the trust and safety of their relationships with students.

**Survey Outcomes**

The Housing Needs Survey was comprised of 22 questions intended to gather data on household demographics, geography, composition, ability and health, income, home type, and home repair needs. COIC collected a total of 136 responses between April and October, 2019. June saw the most survey traffic with 79 respondents in 30 days. June outreach included the personalized invite by Kathy and Dan, along with in-person survey collection at the La Pine Senior Center and Community Kitchen.

**Ownership and Home Type**

The goal was to survey households that owned their home, but renters were not turned away. The majority of respondents do own their home, though the home is not necessarily stick-frame. More households reported living in a manufactured/mobile home than other type of housing (44.85%). Based on these results, Habitat may want to consider expanding the eligibility requirements to participate in the Critical Repairs Program to include manufactured/mobile homes.
Age of Home

Generally speaking, homes built after 1990 are considered “new stock” and likely require less maintenance or repairs. They are also more likely to have working smoke detectors, no lead paint, and suffer from fewer problems with weatherization. Most of the housing stock in La Pine was built before 1990, as reflected in the survey responses.

More than 80% of respondents live in a home that is at least 11 years old, and nearly 30% of survey respondents reported living in a 31-50-year-old home. Lead and asbestos are a known problem in homes built before the late 1970’s. Also with age comes degradation caused by things such as harsh winters, mold, or termites, and the likely need to update electrical, plumbing, or roofing systems. This is even more true when considering manufactured/mobile homes, which represent the most common type of home of survey respondents.
Size of Home
76% of survey respondents report their home size as between 500 – 2000 sq feet. More than 50 respondents (38.23%) indicated a home size between 1,000 and 1,500 sq ft. Again, the smaller home sizes could also be tied to the high incidence of manufactured/mobile homes represented in the survey results.

![Bar Chart: Size of Home]

Types of Home Repairs Needed
As noted in question 3, as houses age they are more likely to need major systems replaced or repaired. Survey respondents reported weatherization as their number one need. Weatherization can include insulation, new windows or doors, outdoor plumbing insulation, weather stripping, or upgraded heating systems. La Pine is a high-elevation community that often receives more snowfall than other parts of Central Oregon. The topography of the area could contribute to the high need for weatherization. Manufactured homes can also have poorer insulation/weatherization, particularly if the home does not sit on a permanent foundation or lacks skirting around the base.

Other top repair needs included roofing, flooring, plumbing, and electrical- all potentially high cost repairs. It may be worth exploring these needs further to understand the extent of repairs requested. For example, a new roof vs. a roof patch.
Infrastructure and Repair History
La Pine only recently incorporated as a city in 2006. This could explain the high incidence of septic system utilization among survey respondents. Less than one quarter of respondents are tied into a municipal sewer system. Some survey respondents had already replaced one or more major system, with a new roof being the most common, followed by a new furnace.
Geographic Hot Spots
Question seven asked survey respondents to give the name of their neighborhood or closest road/intersection. To represent the “geographic hot spots” that emerged, we’ve included a word cloud below. The larger the word, the more frequently it appeared in survey responses. The most obvious hot spot is the Day Road area. Other frequently mentioned neighborhoods include Antelope Meadows, Sun Forest Estates, Ponderosa Pines, Newberry Estates, Huntington Road, Lazy River South, Tall Pines, Round Up Trailer Park, Whispering Pines RV Park, and Finley Butte. Again, it’s worth noting that RV/Mobile home parks feature very prominently in survey responses.

Q7 What’s the name of your neighborhood (example: Huntington Meadows)? Or, what is the name of your closest road or intersection?

Household Size
The majority of survey respondents reported a household size of 1-3 people, with 2 being the most common. However, there were many households larger than this, up to 9 people. This could indicate a number of blended households, with multiple generations living on the property, or multiple people that are not necessarily related.
Household Age Composition

Almost 60% of individuals that completed the survey are aged 55 or older. COIC conducted targeted outreach at the Senior Center, various social service outlets, the La Pine Community Kitchen, and hospice organizations, which may have returned a larger number of responses among an older population. However, even if the survey-taker was 55+, the majority of households also include adults between the ages of 19-65.

Almost 60% of survey respondents reported no member of their household being under 18. However, over 35% reported at least one child in the household.
Household Demographics: Race/Ethnicity and Language

More than 90% of survey respondents identified as being White, and speak English only. A handful of respondents identified themselves as Native American or Hispanic/Latino Ethnicity. Responses labeled as “other” in the chart below did not fit into any census-designated categories for race or ethnicity, such as “human” or “American”. Languages other than English included Spanish, German, and Comanche.
Household Demographics: Ability and Veteran Status

Roughly one third of survey respondents shared that they themselves or someone in the household is a Veteran. Of the 136 households that completed the survey, 74 of them, or 56.92% report experiencing a disability or health condition that limits their daily life.

Some respondents reported collecting disability from the State or VA, while others stated their conditions were undiagnosed. Some reported physical disabilities, while others experience mental health conditions. Health conditions reported by respondents include: COPD, PTSD, cancer, prosthetic limb, stroke, and asthma.
Household Income
The primary project goal was to survey homeowners who earned 50% or less of Deschutes County AMI. The 2018 AMI of Deschutes County is $69,600; but 50% AMI actually varies by household size. Of the 130 respondents for this question, 62 (47.69%) reported an income below $30,000. Another 21 respondents (16.15%) reported an income between $30,000 and $40,000. Taken together, COIC loosely estimates that between 55-65% of survey respondents likely fall below 50% AMI (71-85 households). Only 36% reported incomes above $40,000 per year.

What was your combined household income last year?

- 0-10,000: 13
- 10,000-20,000: 28
- 20,000-30,000: 21
- 30,000-40,000: 21
- 40,000-50,000: 13
- More than 50,000: 34
Health and Wellness

Our partners at St. Charles requested COIC include a few questions that pertain more directly to the health and wellness of survey respondents. Housing instability or insecurity is a well-known factor in other health conditions. 116 respondents have seen a doctor in the last year for any reason, 34 have visited the emergency room, 21 had been hospitalized, and 12 experienced a medical incident that necessitated riding in an ambulance. This fairly high rate of medical system use may be tied to the high age of survey respondents (many over 65), but also reflects favorably on respondents’ access to health care services.

Self-perception of Safety and Access

Despite a fairly high rate of medical system use, 49% of respondents reported their homes are “mostly safe and healthy”, and another 29% find their home safe and healthy “all the time”. Although a small number of respondents reported difficulty getting in and out of their home, 91% reported no problems. We included this question to better understand how respondents felt about their home environment overall, despite the need for repairs or limiting health factors. It is encouraging to see that respondents generally rated their felt experience of safety and health as high.
Requested Cross-Tabs

To further understand the data results from the survey, Habitat and their Health Council partners requested several cross-tabbed reports. These tables show how respondents’ answers interact to give a deeper view of South County needs.
Home Repairs Needed by Disability Status

- No repairs needed
- Electrical
- Septic
- Plumbing
- Roof
- Bathroom remodel for accessibility
- Weatherization
- Pests
- Lack of heat
- Mold Issues
- Water leak
- Oven or stove
- Smoke detectors
- Lead paint or pipes
- Flooring
- Other

![Chart showing home repairs needed by disability status. The chart compares repairs needed for 'No Disability' vs 'Has a Disability.']
Home Repairs Needed by Participant Age

- No repairs needed
- Electrical
- Septic
- Plumbing
- Roof
- Bathroom remodel for accessibility
- Weatherization
- Pests
- Lack of heat
- Mold Issues
- Water leaks
- Oven or stove
- Smoke detectors
- Lead paint or pipes
- Flooring
- Other

Bar chart showing repair needs by age group: Under 18, 25-34, 35-44, 45-54, 55-64, 65+.
Comparison of South Deschutes County Demographics with Survey Respondent Demographics

In order to extrapolate survey findings, one has to determine the extent to which survey respondents are truly representative of whatever target population is being analyzed – in this case, owner-households at or below 50% Area Median Income in the South Deschutes County area. This section outlines the degree to which survey respondents do or do not conform to community demographics in the South Deschutes County area.

Geographic Area

After reviewing maps with Dwane Krumme from Habitat for Humanity of La Pine Sunriver, we determined that census tracts 200 and 300 in Deschutes County were the best approximation of the service area for critical home repairs. This excludes census tract 100, which is essentially all of Deschutes County east of highway 97 – a very lightly-populated area – but which also extends into southeast Bend (and therefore most of the households are outside the service area). It also excludes census tract 402 which is essentially contiguous with Sunriver, an area deemed unlikely to have many income-eligible households. The map below shows the location of Deschutes County census tracts 200 and 300 (shaded):

*Census Tracts 200 and 300 (shaded), Deschutes County*
Data Limitations
Where possible, COIC has compared the demographic data collected in the survey to the larger community of South Deschutes County using census tract data. COIC followed up with data experts at Portland State University to confirm that there is no other available Census data to help us characterize the target population further than what we have done below.

The next section provides a methodology and outcomes for extrapolating one survey question (type of needed critical home repairs) from the survey respondents to potentially-eligible households in census tracts 200 and 300 in south Deschutes County. In reality, in order to extrapolate data within a specified margin of error and degree of statistical confidence, one must:

a) Collect surveys via a truly random sampling method; and
b) Be able to compare survey respondent demographics with target population demographics.

In order to achieve random sampling, Habitat would need to invest in utilizing phone banks and strict eligibility criteria to eliminate respondents, at a significantly higher cost (estimated project cost: $30,000). In order to work within our more modest budget, COIC and Habitat agreed to utilize targeted outreach as an alternative to random sampling.

Furthermore, the researchers were stymied in our ability to truly define target population demographics due to the unavailability of a depth of information on the target population in rural areas such as south Deschutes County. For instance, while there are tables showing owner-occupied households by total household income for census tracts 200 and 300, the income ranges do not conform to the 50% AMI income ranges published by HUD. Nor are these households further characterized by household size (e.g. 1-person, 2-person, etc. households), which is the key factor in determining which 50% AMI income figure to use.

**Owner-occupied households**

<table>
<thead>
<tr>
<th>Owner Occupied</th>
<th>Survey Respondents</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit is Occupied by Owner</td>
<td>123</td>
<td>4,200</td>
</tr>
<tr>
<td></td>
<td><strong>90.44%</strong></td>
<td><strong>74.62%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>136</strong></td>
<td><strong>5,627</strong></td>
</tr>
</tbody>
</table>

Of the 136 total survey respondents, 123 were owner-occupied households, or 90.44%. This is a higher ratio than census data indicates for the larger community at just under 75%. Again, this is likely due in part to the targeted outreach, which aimed to reach more owner-occupied households than renters, although renters were not excluded from participating in the survey.
**Household Size and Composition**

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>824</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>423</td>
</tr>
<tr>
<td>3</td>
<td>45</td>
<td>2554</td>
</tr>
<tr>
<td>4+</td>
<td>40</td>
<td>399</td>
</tr>
<tr>
<td></td>
<td><strong>131</strong></td>
<td><strong>4200</strong></td>
</tr>
</tbody>
</table>

The size of household among survey respondents is larger than census data, with households reporting four or more people comprising over 30% of survey responses, versus just 9.5% in the census. However, it is worth noting that the survey question differed significantly in phrasing from the census question; the survey asked “how many people live on the property?” versus “what is your household size?”. This question was designed to capture information about properties that may be supporting more than one household or family, perhaps in more than one dwelling unit. However, this difference makes it hard to compare accurately.

<table>
<thead>
<tr>
<th>Children</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more children living in household</td>
<td>45</td>
<td>35.43%</td>
</tr>
<tr>
<td></td>
<td><strong>127</strong></td>
<td><strong>4,200</strong></td>
</tr>
</tbody>
</table>

Among survey respondents, there were also significantly more households that reported children living in the household, at 35.43% versus just 12.62% according to the census data.

**Household Age and Income**

To compare age and income of household to the larger population, COIC had to exclude all survey responses from non-owner-occupied households. This allows us to compare age and income to the corresponding census data, which is only available for owner-occupied households.

<table>
<thead>
<tr>
<th>Age of Householder (Owner-Occupied)</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 35 years</td>
<td>5</td>
<td>212</td>
</tr>
<tr>
<td>35-44 years</td>
<td>20</td>
<td>353</td>
</tr>
<tr>
<td>45-54 years</td>
<td>17</td>
<td>540</td>
</tr>
<tr>
<td>55-64 years</td>
<td>36</td>
<td>1,149</td>
</tr>
<tr>
<td>65+ years</td>
<td>41</td>
<td>1,956</td>
</tr>
<tr>
<td></td>
<td><strong>119</strong></td>
<td><strong>4,200</strong></td>
</tr>
</tbody>
</table>

The age of householder among survey takers skewed a bit younger than among the general population, with 16.81% of survey takers between the ages of 35-44, versus just 8.4% according to census data. The census data indicates that there are more householders over 65 than our survey results showed, although it is worth noting that in raw numbers the 65+ age category still captured
the largest number of survey respondents. The other age category ratios were fairly consistent with census data.

<table>
<thead>
<tr>
<th>Income Bracket (owner-occupied)</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - 10,000</td>
<td>10</td>
<td>377</td>
</tr>
<tr>
<td>$10,000 - 20,000</td>
<td>26</td>
<td>375</td>
</tr>
<tr>
<td>$20,000 - 50,000</td>
<td>50</td>
<td>1,410</td>
</tr>
<tr>
<td>$50,000+</td>
<td>31</td>
<td>1,314</td>
</tr>
</tbody>
</table>

Income of owner-occupied households was fairly consistent between survey responses and census data for the larger community. The only major difference is seen in the $10-20K range. Survey respondents in this bracket represented 22.22% of all owner-occupied households, versus just 10.79% in the census data. Again, this could be due to the nature of the targeted outreach employed, with much heavier outreach to and more partnerships with social-service organizations and their clients.

**Age of Structure**

Unfortunately, the age of structure among survey respondents and the general public is also difficult to compare accurately due to slight differences in the categories of age selected. However, the categories are close enough to draw general conclusions, even if we cannot compare directly. In both the survey responses and census data, the houses in South Deschutes County tend to be older, most built between 11 and 60 years ago. This could indicate a larger need for the Critical Repair program in this part of the county, as the housing stock continues to age and requires more maintenance.

<table>
<thead>
<tr>
<th>Year Structure was Built / Age of Structure</th>
<th>Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 or later / 0-5 years old</td>
<td>9</td>
</tr>
<tr>
<td>2009-2013 / 6-10 years old</td>
<td>7</td>
</tr>
<tr>
<td>1999-2008 / 11-20 years old</td>
<td>41</td>
</tr>
<tr>
<td>1989-1998 / 21-30 years old</td>
<td>30</td>
</tr>
<tr>
<td>1969-1988 / 31-50 years old</td>
<td>40</td>
</tr>
<tr>
<td>1968 or before / More than 50 years old</td>
<td>8</td>
</tr>
</tbody>
</table>

135
Survey respondents overwhelming self-reported their race as White (one race) and ethnicity as White Alone (not Hispanic or Latino), at 90.11%. However, the survey results actually reflected slightly more diversity than the census data indicates for the larger community.

Three of 91 respondents self-reported their race as American Indian/Native American/Alaska Native. Another 3 self-reported as Two or More races, and 3 self-reported their ethnicity as Hispanic or Latino Origin. Again, these numbers are higher than the census data in all three cases.

Data on language spoken at home was also hard to compare due to the difference in question phrasing. While the survey asked “Do you speak English, or another language?” the census asked for “Language spoken at home”. This means that the survey data is less likely to indicate primary language, and indeed survey respondents indicated they may speak a second language other than English (German was the most popular) but this does not necessarily mean that English is not their first language, or not the primary language spoken in the home.
### What language do you speak?

<table>
<thead>
<tr>
<th>Language</th>
<th>Survey Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>English only</td>
<td>122</td>
<td>94.57%</td>
</tr>
<tr>
<td>English and Spanish</td>
<td>8</td>
<td>6.20%</td>
</tr>
<tr>
<td>Spanish only</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3.88%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>129</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Language spoken at home

<table>
<thead>
<tr>
<th>Language</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>English only</td>
<td>12,947</td>
</tr>
<tr>
<td>Language other than English</td>
<td>430</td>
</tr>
<tr>
<td>Spanish</td>
<td>202</td>
</tr>
<tr>
<td>Other Indo-European languages</td>
<td>174</td>
</tr>
<tr>
<td>Asian and Pacific Islander languages</td>
<td>0</td>
</tr>
<tr>
<td>Other languages</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,377</strong></td>
</tr>
</tbody>
</table>

### Disability and Veteran Status

Both disability and veteran status were self-reported in the survey. Veteran status is easier to compare, since the question was very straight-forward. The survey reached a very high number of veterans, more than twice the ratio indicated by the census data! Again this is likely due to the targeted outreach methods, which included partnerships with veteran outreach organizations.

<table>
<thead>
<tr>
<th>Veteran Status</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-identified as a veteran*</td>
<td>36</td>
<td>1,350</td>
</tr>
<tr>
<td>Total survey respondents/total population</td>
<td><strong>129</strong></td>
<td><strong>11,786</strong>*</td>
</tr>
</tbody>
</table>

Disability status is harder to compare because the survey question was broader by design than the census question. The survey asked “Do you or any of the people who live with you have a disability or health condition that limits daily life?” This question was designed this way with input from our partners at St. Charles, who were concerned that asking about disability status alone would not capture the full range of limiting health conditions that may affect daily life. The census data on disability status is based on self-reporting of a “serious difficulty” in at least one of several specific categories. Likely as a result of these differences in phrasing, our survey respondents reported much higher levels of disability than the census data indicates.

<table>
<thead>
<tr>
<th>Disability Status</th>
<th>Survey Responses</th>
<th>Census Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported living with a disability*</td>
<td>74</td>
<td>3,049</td>
</tr>
<tr>
<td>Total disability*</td>
<td><strong>130</strong></td>
<td><strong>13,743</strong>*</td>
</tr>
</tbody>
</table>

---

*Note: Census data reflects self-reported data.
Survey Findings Extrapolated to Potentially-Eligible Households in South Deschutes County

In order to extrapolate the findings of this survey to eligible households in South Deschutes County, we had to perform a few statistical exercises to develop an estimate of the total number of potentially-eligible households. Here are the steps we followed:

1. Identify the number of owner-occupied households in the target area using the most-recent Census data (2013-2017 5-year estimates): 4,200
2. Determine the average household size for the service area (Census, same source): 2.298
3. Create an estimated maximum eligible household income for the average household in the service area, based on average household size and the relevant HUD 50% AMI household income table:
   - Note: the HUD tables are not structured for an “average household size”, so we created a “pro-rated” maximum allowable household income, based on the average household size in the service area: $28,892
4. Estimate the number of owner-occupied households that would be eligible for Habitat’s critical home repairs program, assuming an income threshold of 50% AMI: 1,257.
   - The Census provides tabulations of numbers of owner-occupied households by total household income, but the income ranges do not conform to our estimated “average maximum household income” figure ($28,892). So, we again “pro-rated” households in the highest income range ($25,000-$34,999) to remove those households that have total income that is likely over our maximum household income.
5. Using 1,257 as the likeliest number of households that would be eligible for Habitat’s critical home repairs program, extrapolate the findings from the survey to the population at large.

The table on the next page summarizes these steps, and provides the extrapolated findings, by critical home repair type, to the potential service population.
## Critical Repairs Needs Extrapolated to Potentially-Eligible Owner-Occupied Households in South Deschutes County, 2017-2019

<table>
<thead>
<tr>
<th>Critical repairs needs, by type, by frequency</th>
<th># of responses</th>
<th>% of respondents</th>
<th>Extrapolation to all eligible HHs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weatherization</td>
<td>53</td>
<td>47.7%</td>
<td>600</td>
</tr>
<tr>
<td>Roof</td>
<td>36</td>
<td>32.4%</td>
<td>408</td>
</tr>
<tr>
<td>Flooring – including substructure repairs</td>
<td>25</td>
<td>22.5%</td>
<td>283</td>
</tr>
<tr>
<td>Smoke detectors missing or not working</td>
<td>23</td>
<td>20.7%</td>
<td>260</td>
</tr>
<tr>
<td>Plumbing</td>
<td>21</td>
<td>18.9%</td>
<td>238</td>
</tr>
<tr>
<td>Electrical</td>
<td>21</td>
<td>18.9%</td>
<td>238</td>
</tr>
<tr>
<td>Pests</td>
<td>19</td>
<td>17.1%</td>
<td>215</td>
</tr>
<tr>
<td>Water leaks</td>
<td>18</td>
<td>16.2%</td>
<td>204</td>
</tr>
<tr>
<td>Bathroom repair/remodel</td>
<td>16</td>
<td>14.4%</td>
<td>181</td>
</tr>
<tr>
<td>Mold</td>
<td>14</td>
<td>12.6%</td>
<td>158</td>
</tr>
<tr>
<td>Other-exterior repair</td>
<td>17</td>
<td>15.3%</td>
<td>192</td>
</tr>
<tr>
<td>Lack of heat</td>
<td>11</td>
<td>9.9%</td>
<td>125</td>
</tr>
<tr>
<td>Other-interior repair</td>
<td>6</td>
<td>5.4%</td>
<td>68</td>
</tr>
<tr>
<td>Septic</td>
<td>7</td>
<td>6.3%</td>
<td>79</td>
</tr>
<tr>
<td>Oven or stove not working</td>
<td>4</td>
<td>3.6%</td>
<td>45</td>
</tr>
<tr>
<td>Other- Yard care/landscaping</td>
<td>4</td>
<td>3.6%</td>
<td>45</td>
</tr>
<tr>
<td>Lead paint or pipes</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>No repairs are needed</td>
<td>25</td>
<td>22.5%</td>
<td>283</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.9%</td>
<td>11</td>
</tr>
</tbody>
</table>


### Factors to Consider When Using this Data

The extrapolated figures should be considered to be a very rough estimate of the demand for critical home repairs in South Deschutes County. As outlined in the previous section, the survey was not performed utilizing a random sampling technique, and the survey respondents differ in some significant ways from the general population in census tracts 200 and 300 due in large part to the targeted outreach:

- Survey respondents have higher incidences of children living at home than the general population
- Survey respondents were somewhat younger than the general population
• Survey respondents are more likely to be veterans than the general population
• Survey respondents reported a higher incidence of disability than the general population.
• Survey respondents were more likely to own a manufactured home than the general population.

Due to Census data limitations we are unable to determine if these differences are also present between survey respondents and the actual target population of households that are at or below 50% AMI in the service area. It could be that the above differences are in fact more similar to the target service population.

Challenges, Success and Potential Next Steps

Challenges & Lessons Learned
Throughout the survey process, COIC experienced a reluctance on behalf of respondents to ask for help. Individuals at La Pine Community Kitchen living on just a few hundred dollars a month shared a sense of pride in their self-sufficiency and a feeling of shame around asking for help. This was perhaps most apparent among the Veteran population.

Residents of South County are a tight knit community and are reluctant to trust those perceived to be “outsiders”. COIC had much greater success working through partnerships with local place-based organizations, including the faith-based community, local business leaders, and social service organizations.

Collecting surveys in-person at the Community Kitchen or Senior Activity Center could be seen as an interruption to other programs, and some respondents expressed that they felt the nature of some of the questions was invasive. Although we didn’t collect a large number of surveys at the Rhubarb Festival, we found this type of outreach was especially helpful in de-stigmatizing the survey.

In some cases, we encountered a negative perception of Habitat, primarily among respondents who had previously applied for and not received services or housing. COIC had an especially difficult time with manufactured/mobile home owners who had previously applied for the critical repairs program and been turned down due to their housing type.

Community infrastructure also proved challenging, forcing COIC to focus our outreach efforts in La Pine. Although there are several other communities in the South County area, few offered infrastructure such as social service organizations, food banks, senior centers, etc. that would enable in-person outreach or new partnerships.

COIC was disappointed that we were not able to develop a closer partnership with the area schools or FAN advocates. See Methodology section for more details. We also didn’t have much luck with our Spanish-language survey (zero respondents). Based on census data, we believe that the Spanish-speaking population of the South County area is a small percentage of the population. Regardless, we
hope that future projects would find more success in reaching this population, and commit to translating survey materials into other languages as represented by their community demographics.

Early response rates were low, as COIC and Habitat worked to build awareness of and trust in the survey process. There was some initial confusion about the purpose of the survey: was it purely informational or an application for the program? For any survey respondents who indicated an immediate critical repair need, COIC forwarded their contact information and type of need right away to Habitat for urgent assessment of eligibility. Nonetheless, some respondents reached back out to COIC to express frustration that Habitat had not already followed up on their “application”. COIC became more adept at explaining the informational nature of the survey over time, and response rates picked up. However, to reach our goal of 91 households, we decided to extend the length of the survey collection period an additional three months.

Successes
With 136 total respondents, participation in the survey exceeded our expectations and provides a strong foundation for continued outreach to this community. COIC and Habitat’s regular presence in La Pine community gathering places and at La Pine events started to build trust and familiarity, and contributed to the positive perception of Habitat in South County. Most people were very excited about the prospect of an expanded Critical Repairs program, and more than half left their contact information for follow-up. This has added more than 80 new contacts to Habitat’s network, and given them plenty of leads to follow up on as they consider how they will expand their programming.

Potential Next Steps
With the successful conclusion of this outreach and survey project, Habitat is in a solid position to move forward with their planned expansion of the Critical Home Repairs program in South Deschutes County. Based on our data and experience, COIC recommends the following as potential next steps:

- Re-examine the current eligibility requirements for the Critical Repairs program, and consider expanding eligibility to include manufactured/mobile homes and incomes up to 50% of AMI, or even higher.
- Consider publishing an article in the local paper(s) featuring an interview with a past participant in the program, to further de-stigmatize the program and encourage South County residents to ask for help without shame. Considering the high number of Veterans residing in the area, COIC recommends featuring a Veteran if possible!
- Continue outreach to communities of color in the South County area, in an effort to strengthen partnerships and be a better resource for all residents. Habitat might consider hosting a Spanish-language outreach event in the future, or partnering with the Redmond Habitat for Humanity Critical Repairs program to host an event in both areas of the county.
- Work with COHC to consider how Habitat’s partners in community health care could utilize the data for their own programming.
- Conduct additional targeted outreach to the “geographic hot spots” identified in this report to further build trust and establish type of need in these high-demand areas.
COIC would like to express our gratitude to Habitat for Humanity of La Pine Sunriver and the Central Oregon Health Council for supporting this project. We hope that the results of this project will continue to inform Habitat and their regional partners in ongoing efforts to meet the housing needs of their service area(s).