Home Repair and Weatherization: Moving towards green rehab

St. Johns Housing Partnership
Since 1995, the primary activity has been the improvement of substandard housing for low-income households of frail elderly and the disabled.
Home Repair Goals
A 3 fold approach

• Provide direct emergency home repair and weatherization services to low-income homeowners.
• Involve the community through volunteer recruitment, cash and material donations, and sweat equity with homeowners.
• Develop partnerships with local businesses and neighborhood associations.
To maximize impact and limited funds, SJHP recruits volunteers to use in rehab projects.

- We have long-term relationships with churches, service groups, vocational programs, local realty, development, and construction businesses, as well as SJC Building Services, Social Services, and the Housing Division.

- Volunteers reduce staff time and construction costs as well as increase community awareness of housing conditions.

- Funding from SJC gives SJHP additional capacity to access other funding opportunities.
### Repair Program Revenue

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</thead>
<tbody>
<tr>
<td>Rehab SHIP</td>
<td>$500,000</td>
<td>$600,000</td>
<td>$600,000</td>
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<tr>
<td>Neighborhood Rehab</td>
<td>300,000</td>
<td>195,000</td>
<td>75,000</td>
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<tr>
<td>Unrestricted</td>
<td>15,000</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Weatherization (ARRA*)</td>
<td>110,000</td>
<td>200,000</td>
<td>925,000</td>
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<tr>
<td>Rural Development</td>
<td>25,000</td>
<td>15,000</td>
<td>7,500</td>
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<tr>
<td>Homeowners</td>
<td>12,000</td>
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<tr>
<td>Health &amp; Human Services</td>
<td>85,100</td>
<td>85,100</td>
<td>85,100</td>
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<tr>
<td>United Way</td>
<td>38,000</td>
<td>38,000</td>
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<tr>
<td>MySafeFlorida</td>
<td>400,000</td>
<td></td>
<td></td>
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<tr>
<td>Fundraising</td>
<td>25,000</td>
<td>30,000</td>
<td>15,000</td>
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<tr>
<td>Buckingham Smith</td>
<td>75,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,585,100</strong></td>
<td><strong>$1,270,100</strong></td>
<td><strong>$1,832,600</strong></td>
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SJHP home repairs allow vulnerable elderly and disabled low-income homeowners to remain living independently in their homes and ensures that unsafe conditions do not negatively affect their health and well-being.

- Many in our community are living in poor, unsafe, and unsanitary conditions. Our waiting list averages 300 households annually. Addressing their needs with limited and increasingly reduced resources comes down to triage decision making or damage control.

- Upon completion of a specific home repair,
  - 75% of clients are satisfied with the repair but
  - 35% request assistance for other repairs.
St. Johns Housing Partnership

Before

Carter Kitchen

After

St. Johns Housing Partnership
Cole House Painting

Before

After

St. Johns Housing Partnership
St. Johns Housing Partnership

Before

Wilson Roofing

After

St. Johns Housing Partnership
The purpose of the weatherization work is to improve indoor air quality and energy efficiency.

A Future green rehab, post weatherization work, will focus on roof, impact windows, water conservation, exterior lighting and landscaping.
Southern Villas

St. Johns Housing Partnership
**Southern Villas** is a 30-year-old affordable housing complex in St. Augustine off State Road 207 east of State Road 312.

This rental complex houses local elderly residents and those with disabilities. All 60 units are currently occupied.
• Produce an Evaluation or NEAT — the National Energy Audit Tool
• Discuss leveraging for weatherization or other green features, if planned.
• Submit proposal to owner
1. Sealing to improve air infiltration and lessen general heat waste
   - Tighten building envelope—repair, caulk, and weather strip windows and doors; reduce air infiltration with minor wall-floor-ceiling repairs.

2. Attic insulation
   - Upgrade attic insulation to R-38, where possible.
   - Configure around attic units and other venting problems.
3. Dense-pack sidewall insulation
   - If specified in NEAT Audit

4. Solar window screens and film
   - If specified in NEAT Audit

5. Smart Thermostat
   - Request waiver for elderly tenants (ease of use).
6. Compact fluorescent light bulbs
   ▪ In all units and fixtures

7. Seal and insulate duct systems
   ▪ Improves air loss and indoor air quality

8. Refrigerator replacement
   ▪ Test for inefficiency, NEAT Audit review
9. Heating & cooling systems repair or replacement

- Critical goal: confirmation of savings-to-investment ratio (SIR) from NEAT program.

- Application of new technologies, i.e., duct and pressure diagnostics, moisture migration, transition strategies for changing environment, healthy homes, and system efficiency.

10. Water heater repair or replacement

- Replace depending on age and remaining budget funds
- May be addressed with pipe wrap and blanket insulation
Scope of Work

- Air sealing / tighten building envelope
- Add cellulose attic insulation to R-38
- Install Energy Star bath exhaust vents
- Smart Thermostat (request waiver for elderly tenants)
- Install compact fluorescent light bulbs
- Seal & insulate duct systems, testing required
- Replace refrigerator, when testing requires
- Replace heating & cooling systems, all duct work
A blower door tests for air leaks; reduce leaks by sealing openings in ceilings, floors, and exterior walls from plumbing, electrical, and HVAC elements.
Building Envelope (cont.)
Building Envelope (cont.)

St. Johns Housing Partnership
Insulation is based on climate zones; installation ensures adequate ventilation as well as seals off wiring and circuits.
Bath Exhaust Vents

Installing adequate ventilation helps control moisture, prevent mold and mildew, and remove objectionable odors.
If correctly set, programmable thermostats allow users to save energy by lowering temperatures when sleeping or away from home.
Compact Fluorescent Lights

Any lamp on more than one hour can save considerable energy by changing old incandescent bulbs to CFL bulbs.
For effective insulation, detect and seal leaks prior to insulation; mastic is the standard sealant used.
Age and appearance do not determine if a refrigerator needs to be replaced—only its energy efficiency determines that.
Home environments controlled to a comfortable temperature is the goal of proper sizing for Heating-Ventilation-Air-Conditioning systems.
Satisfied Tenant
Local Contacts

• Locate your local weatherization agency, contact info at:
  http://www.floridacommunitydevelopment.org/wap/index.cfm

• DCA Program Manager: Norm Gempel
  Tel: (850) 922-1846
  E-mail: norm.gempel@dca.state.fl.us
How Can You Get Involved?

- Search out your local housing officials in local government
- NSP, SHIP, CDBG, WAP, FHFC, HOME, USDA, HUD - Federal funds have GREEN handles - They need consultants, whether they know it or not.
- Third party Verification - Energy and Green
SJHP is a nonprofit 501(c)(3) community development organization committed to safe, decent, and affordable housing.

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