

# **Bowling Green Exterior Housing Evaluation Survey**

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Submitted by:

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## **Introduction**

In 1973, the Wood County Health Department adopted a housing code. The housing code was then revised in 1976. The purpose of the code was to allow the Health Department to inspect homes and correct unhealthy, unsafe, and deteriorating housing structures. The goal of the Health Department housing program is to protect occupants and the public from unsafe and unhealthy housing situations and to preserve the existing housing stock. In 1986, the “Wood County Health, Safety and Sanitation Regulations for Structures and Vacant Lots” superseded the Housing Code. This code incorporated the previous Housing Code but expanded the ability of the Health Department to deal with unsafe, unhealthy or deteriorating situations in all structures and vacant lots. The Health Department’s Structure Code has since been revised in 1988, 1995, 2000, 2004 and 2005.

A contract between the City of Bowling Green and the Wood County Health Department has enabled the Health Department to engage in a two-phase evaluation and enforcement Exterior Housing Inspection Program within the City of Bowling Green.

## **Purpose**

Once every five years, the Health Department performs an Exterior Housing Evaluation Survey (EHES) at the Request of the City of Bowling Green. This data gathering survey is used by the Wood County Health Department to identify the neighborhoods that have exterior housing structure, maintenance and sanitation problems. In addition, other city departments may use the data from the EHES.

The Wood County Health Department uses information obtained from the EHES in the second phase of the Exterior Housing Inspection Program, known as the Exterior Housing and Sanitation Inspections (EHSI). The EHSI is an enforcement activity used to correct housing and exterior sanitation problems in statistically significant neighborhoods. The neighborhoods in the city selected for EHSI is based on the findings of EHES.

## **Procedures**

In 1973, the Bowling Green Housing Commission recommended dividing Bowling Green into 43 neighborhoods. The Wood County Health Department used those 43 neighborhoods until 1985. The Bowling Green City Planning Department then recommended that the 43 neighborhoods be combined into 13 neighborhoods and a Downtown Business District. The City Planning Department developed boundaries for 13 neighborhoods based on the original boundaries of the 43 neighborhoods taking into consideration natural barriers, age of housing, type of housing, and applicable federal requirements. The Health Department adopted the 13 neighborhoods as recommended by the City Planning Department. For the 2006 and 2011 surveys, the city was defined as the five (5) neighborhoods that are used by the city in their Consolidated Plan based on census tracts. The City of Bowling Green is also broken down in to four (4) wards. The wards are used to establish definite areas for city council and the police. The City Planning Department suggested that the 2016 survey use the four (4) wards to establish neighborhood boundaries. The Wood County Health Department adopted the new neighborhood format for the 2016 Bowling Green EHES and continued the use of the four (4) wards in 2021.

In 1985, the EHES started. Since computers were available for doing the statistical analysis, the Health Department used most of 1985 for testing different methods of data gathering and computerization. The EHES data gathering began in earnest in 1986 and completed by December of 1988. The Downtown

Business District was not inspected primarily because most of the housing units are above commercial structures and are not easily inspected or clearly marked.

Before the EHES survey in 1988, 1991, 1996, 2001, 2006, 2011, 2016, and 2021 the City Planning Department and the Health Department met to determine categories to be included on these surveys. There were 25 categories of data collected in 1986, 28 categories in 1991, 29 categories in 1996, 23 categories of data in 2001 and 24 categories in 2006, 2011, 2016, and 2021. Criteria used for the 24 categories used in 2021 are found in Appendix A.

2021 Categories		Score Markings			
1.	Off Street Parking	S	U	N A	
2.	Public Walks	S	U	N A	
3.	Private Walks	S	U	N A	
4.	Accessory Structures	S	U	N A	
5.	Garage Conditions	S	U	N A	
6.	Attached Garage	S	U	N A	
7.	Grading and Drainage	S	U	N A	
8.	Exterior Sanitation	S	U	N A	
9.	Yard Maintenance	S	U	N A	
10.	Soffits and Roof Edges	S	U	N A	
11.	Roof	S	U	N A	
12.	Gutters and Downspouts	S	U	N A	
13.	Chimneys	S	U	N A	
14.	Siding Type	A	B	S	W
15.	Siding Condition	S	U	N A	
16.	Paint	S	U	N A	
17.	Porches and Steps	S	U	N A	
18.	Foundations	S	U	N A	
19.	Dumpsters	S	U	N A	
20.	Starlings and Pigeons	S	U	N A	
21.	Stairs and Railings	S	U	N A	
	(4 or more steps)				

22.	Doors	S	U	N A	
23.	Windows	S	U	N A	
24.	Address Posted (on House or Mailbox)	Y	N		

Key	
S-Standard	<u>Siding Type</u>
U-Substandard	A-Aluminum or Vinyl
NA – Not Applicable	B- Brick, Block, or Stone
	S- Shingles
Y-Yes	W – Wood
N-No	

For the EHES survey for 1988, 1991, 1996, 2001 the following ten primary categories were used to determine if the property was deficient, neglected, or neither based on the Wood County Health Department regulations.

**Ten Primary Categories**

- |                       |                             |
|-----------------------|-----------------------------|
| 1. Roofs              | 6. Doors                    |
| 2. Chimneys           | 7. Windows                  |
| 3. Siding Condition   | 8. Accessory Structures     |
| 4. Porches            | 9. Foundations              |
| 5. Stair and Railings | 10. Soffits and Roof Edging |

Based on Residential Rehabilitation Standards (RRS) required by the Ohio Department of Development four categories were added to 2006 EHES Survey totaling fourteen (14) primary categories. The added categories were.

- |                   |                         |
|-------------------|-------------------------|
| 11. Driveways     | 13. Public Walkways     |
| 12. Private Walks | 14. Exterior Sanitation |

If a house and property is substandard in two or three of these fourteen (14) primary categories, it is classified as “deficient”. If house and property is substandard in four or more of the fourteen (14) primary categories, it is classified as “neglected”. Data from the other ten (10) categories was collected to meet the needs of the Wood County Health Department and other city departments.

Survey Year	Surveyor
1988	Brad Espen
1991	Ted Hartwell
1996	Angela Windau
2001	Kelly Sattler
2006	Tom Rutter/Ted Hartwell
2011	Tom Rutter/Paul Hagen
2016	Julie Nye
2021	Kendra Wise/Julie Nye

## Materials

The 1988 survey was done by using a clipboard and hand marking each survey item. In 1991, 1996, 2001 a handheld Microflex PC was used to collect data. Data from the handheld was electronically transferred to the office server. In 2006 and 2011, a laptop computer and custom software were used. In 2016 and 2021, data was collected, then entered into the software.

## Methods

The following guidelines and assumptions were used during the inspection to determine whether a house being inspected was standard or substandard in a category.

1. Appendix A explains the criteria used for each category in the 2021 survey.
2. Any category not under the jurisdiction of the Health Department's Structure Code, but under the jurisdiction of the city was marked standard if in compliance with the City of Bowling Green's codes. A category was judged substandard if the City of Bowling Green's codes were not met.
3. If a category was not present or not visible, the item was marked as "Not Applicable".
4. If a house was on a corner and it faced or was numbered on the street perpendicular to the street currently being inspected, it was skipped until the perpendicular street was inspected. If a house on a corner did not have a street number, it was assumed to be on whichever street the house faced. Once the inspections for the day were done, the inspector used the Wood County Auditor Website to assign street numbers to unmarked addresses on the Data Forms.
5. Any category that came under the jurisdiction of the Health Department's Structure Code was judged standard if in compliance with the Housing Code. The category was judged substandard if the sanitarian would normally have written a violation notice for the correction of the situation in response to a complaint.

## Results

- Report 1** Number of houses in the city as well as the total number of houses deficient in each of the fourteen (14) primary categories. There is also a table containing the seven categories with the most deficiencies.
- Report 2** Number of houses classified as ‘deficient’ or ‘neglected’. There is also a bar graph showing the count of homes with one or more deficiencies.
- Report 3** Deficient and Neglected homes by neighborhood.
- Report 4** Non-primary deficiencies by neighborhood. There is also a table containing the four categories with the most deficiencies. A table with a count of garages by size is also shown.
- Report 5** Historical comparison of surveys with the number of deficiencies for each category. There is also a historical comparison of ‘deficient’ and ‘neglected’ homes.

## Conclusion

Taking time to evaluate allows us to identify deficiencies and validates our achievements or failures as the case may be. The Exterior Housing Evaluation Survey is an essential element of any worthwhile community maintenance and improvement effort.

The evaluation techniques have improved somewhat over the years. The survey process changed significantly in 1988. The process is more standardized and the data format permits for reasonable comparisons between survey years. Therefore, the report refers to survey comparisons from 1988 forward.

When comparing the 2021 data with the 2016, the total number of houses with deficiencies in the 14 primary categories decreased from 627 to 307 (-51.03%). The overall total of deficiencies in the primary categories decreased from 795 to 366 (-53.96%). In addition, the number of properties with zero deficiencies increased from 4,919 to 5,570 (+13.23%). The number of houses surveyed in 2021 also increased to from 5,546 to 5,875 (+5.93%).

With city expansion, all neighborhoods increased in size.

As stated earlier, the data collected is useful to both the Wood County Health Department and the City of Bowling Green officials. Issues that are related to the survey and Health Department efforts are discussed at the City of Bowling Green council meeting.

The purposes of the survey from the health departments’ housing program prospective are:

1. To evaluate the status of individual housing structures using the fourteen (14) primary categories.
2. To evaluate the sanitation of the housing areas within neighborhoods.
3. To compare the level of improvement in housing and sanitation from one survey period to the next.
4. To identify neighborhoods in need of improvement toward achieving compliance with current housing standards.

## Report 1: Deficiencies in 14 Primary Categories

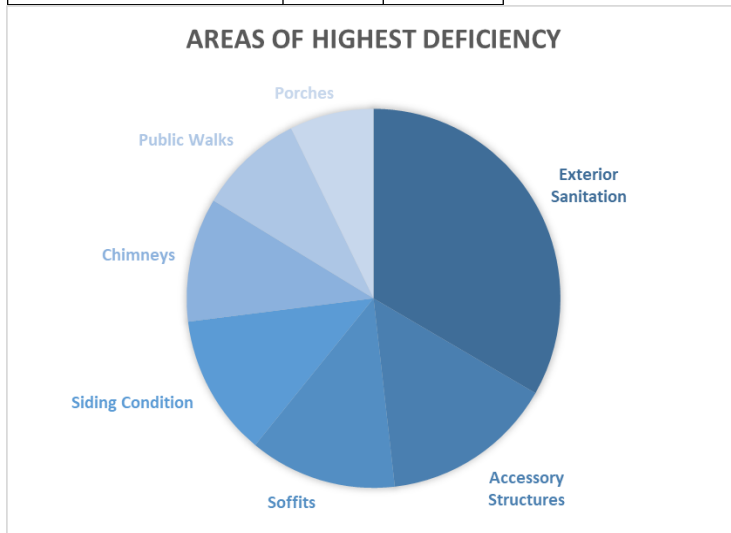
Neighborhood	1		2		3		4		All
Accessory Structures	7	1.5 %	19	1.9 %	12	0.7 %	11	0.4 %	49
Chimneys	11	2.3 %	10	1.0 %	8	0.5 %	6	0.2 %	35
Doors	0	0.0 %	1	0.1 %	0	0.0 %	0	0.0 %	1
Exterior Sanitation	28	5.9 %	50	5.0 %	14	0.9 %	18	0.6 %	110
Foundation	1	0.2 %	1	0.1 %	1	0.1 %	1	0.0 %	4
Off Street Parking	2	2.1 %	2	0.2 %	1	0.1 %	0	0.0 %	5
Porches	10	2.1 %	4	0.4 %	5	0.3 %	5	0.2 %	24
Private Walks	1	0.2 %	2	0.2 %	1	0.1 %	0	0.0 %	4
Public Walks	9	1.9 %	15	1.5 %	1	0.1 %	5	0.2 %	30
Roofs	2	0.4 %	1	0.1 %	0	0.0 %	0	0.0 %	3
Siding Condition	8	1.7 %	15	1.5 %	5	0.3 %	12	0.4 %	40
Soffits	9	1.9 %	16	1.6 %	8	0.5 %	9	0.3 %	42
Stairs & Railings	1	0.2 %	2	0.2 %	1	0.1 %	0	0.0 %	4
Windows	5	1.0 %	5	0.5 %	1	0.1 %	4	0.1 %	15
Total Deficiencies	94		143		58		71		366
Total Homes	47		1,00		1,62		2,77		5,87
	8		5		1		1		5

Note 1: Percentages are of the homes in that particular neighborhood that are deficient in each category.

### Areas of Highest Deficiency



Deficiency	Count	Percent
Exterior Sanitation	110	30.1%
Accessory Structures	49	13.4%
Soffits	42	11.5%
Siding Condition	40	10.9%
Chimneys	35	9.6%
Public Walks	30	8.2%
Porches	24	6.6%



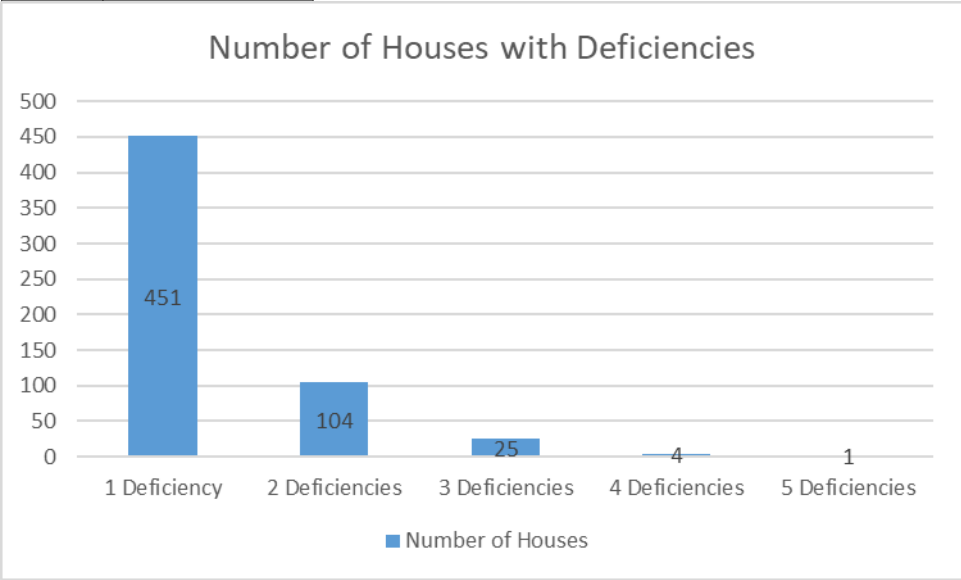
## Report 2: Houses Deficient in 14 Primary Categories

There were 129 houses classified as deficient, meaning they had 2-3 deficiencies in the primary categories.

There were 5 houses classified as neglected, meaning they had 4 or more deficiencies in the primary categories.

There were 5,290 houses with no deficiencies in the 14 primary categories.

Count	Category
5,290	0 Deficiencies
451	1 Deficiency
104	2 Deficiencies
25	3 Deficiencies
4	4 Deficiencies
1	5 Deficiencies
5,875	<b>Totals</b>



## Report 3: Deficient and Neglected Homes

Deficient Homes: 2-3 deficiencies

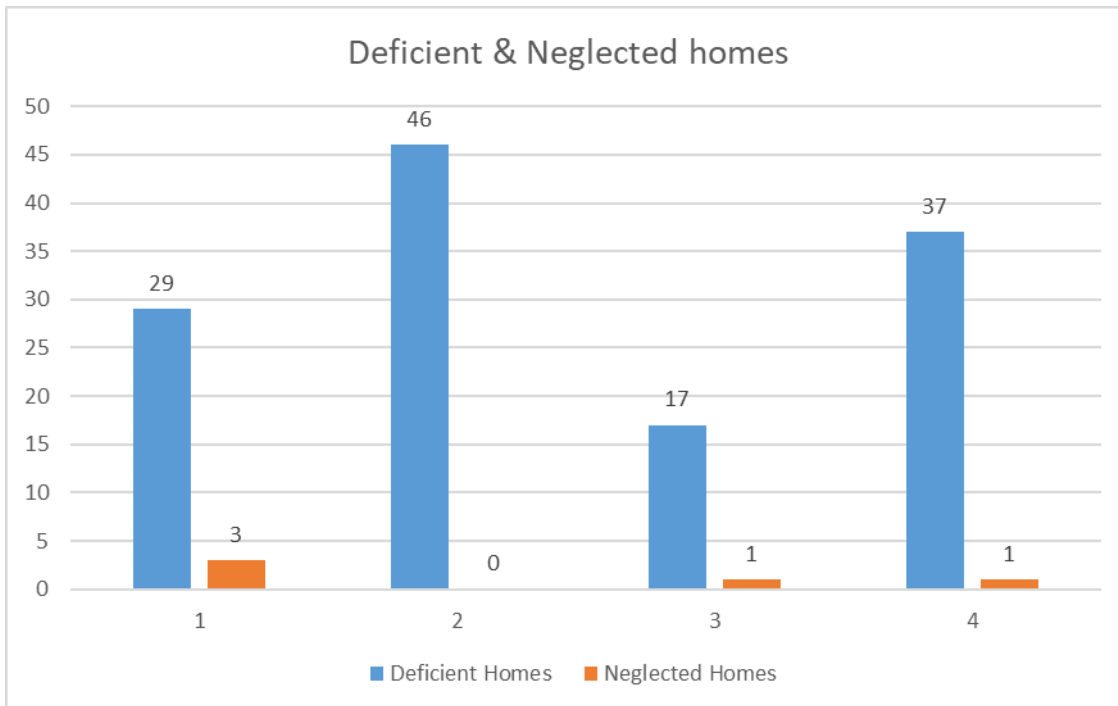
Neglected Homes: 4 or more deficiencies

### Deficient Homes by Neighborhood

Neighborhood	1	2	3	4	All
Number of Homes	29	46	17	37	129
Percent of Total Homes	6.07%	4.58%	1.05%	1.33%	2.20%

### Neglected Homes by Neighborhood

Neighborhood	1	2	3	4	All
Number of Homes	3	0	1	1	5
Percent of Total Homes	0.63%	0.00%	0.06%	0.04%	0.09%

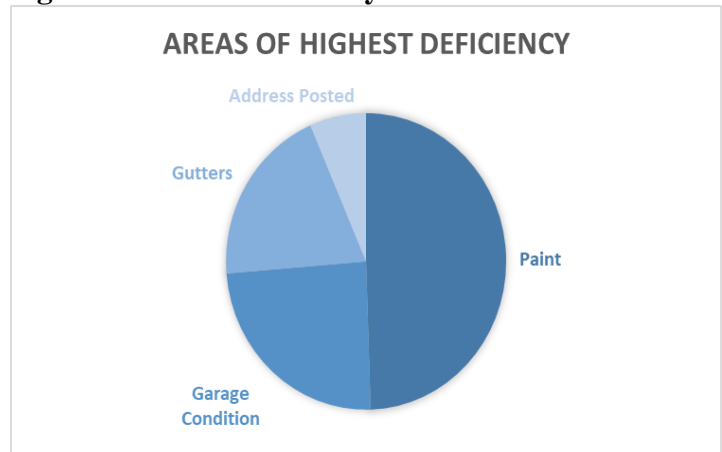


## Report 4: Houses Deficient in Non-Primary Categories

Neighborhood	1	2	3	4	All
Address Posted	3	7	7	8	25
Dumpsters	0	1	1	2	4
Garage Condition	16	28	27	22	93
Grading & Drainage	1	1	1	0	3
Gutters & Downspouts	22	21	10	23	76
Paint	54	54	28	54	190
Starlings & Pigeons	0	0	0	0	0
Yard Maintenance	4	4	8	7	23
Total Deficiencies	10	116	82	116	414
Total Homes	47	1,005	1,621	2,771	5,875

Deficiency	Count	Percent
Paint	190	45.9%
Garage Condition	93	22.5%
Gutters	76	18.4%
Address Posted	25	6.0%

### Highest Areas of Deficiency



### Number of Garages by Size

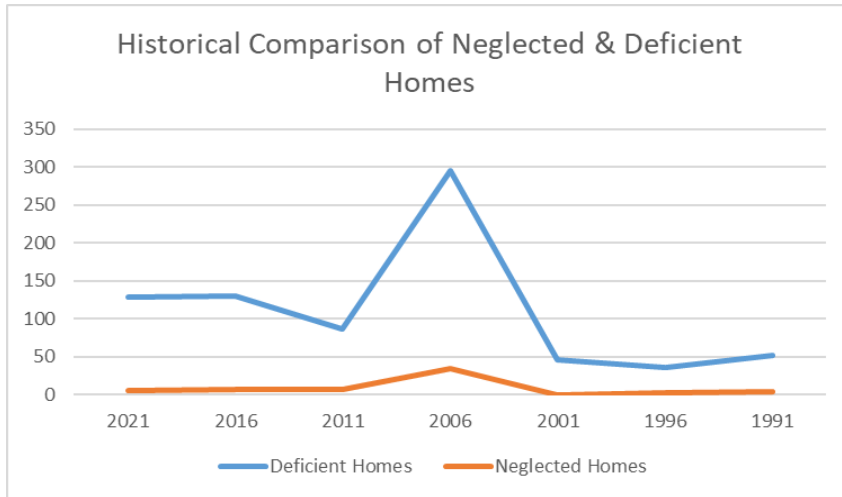
Neighborhood	1	2	3	4	All
1-Car Garage	107	272	329	401	1,109
2-Car Garage	104	297	965	2,099	3,465
3-Car Garage	5	11	89	61	166
4+-Car Garage	0	2	33	44	79
No Garage	262	423	205	166	1,056
Total Houses	478	1,005	1,621	2,771	5,875

## Report 5: Historical comparison of surveys

Survey Year	2021	2016	2011	2006	2001	1996	1991	1988
<b>Number of Homes</b>	5,875	5,546	5,524	5,305	4,915	4,380	4,315	4,232
<b>Soffits &amp; Roof Edges</b>	42	64	54	238	257	74	na	na
<b>Roofs</b>	3	34	54	129	64	16	50	263
<b>Stairs &amp; Railings</b>	4	76	70	223	64	12	9	324
<b>Siding Condition</b>	40	103	49	165	29	35	161	62
<b>Accessory Structures</b>	49	40	51	169	17	24	55	193
<b>Porches</b>	24	82	120	262	11	29	30	214
<b>Chimneys</b>	35	100	43	152	11	54	46	239
<b>Windows</b>	15	12	15	39	1	10	11	843
<b>Doors</b>	1	6	9	11	0	9	8	69
<b>Foundations</b>	4	155	14	44	0	10	6	152
<b>Private Walks</b>	4	15	25	24	14	27	71	286
<b>Public Walks</b>	30	8	37	99	200	280	411	724
<b>Off Street Parking</b>	5	18	36	56	na	3	727*	1,068*
<b>Exterior Sanitation</b>	110	82	51	123	12	97	na	211
<b>Gutters &amp; Downspouts</b>	76	68	63	152	na	73	100	211

\*Prior to the 1996 survey, driveways were considered deficient if they were not paved. Beginning with the 1996 survey and continuing to the present, unpaved driveways in good condition were not considered deficient.

Survey Year	2021	2016	2011	2006	2001	1996	1991
Number of Homes	5,875	5,546	5,524	5,305	4,915	4,380	4,311
Number of Primary Categories	14	14	14	14	10	10	10
Deficient Homes	129	130	86	295	46	36	52
Neglected Homes	5	7	7	34	0	2	4



## Appendix A - Criteria Used For the 2016 Survey

<b>Address of Property</b>	Substandard if no address could be found on mailbox or house.
<b>Off Street Parking</b>	Not applicable, standard of substandard if not paved or if paving material was badly deteriorated.
<b>Public Walks</b>	Not applicable, standard, or substandard if there were tripping or fall hazards caused by heaving, sinking or sloping of more than one inch (1"). In addition, public walk were judged substandard if badly deteriorated or overgrown with bushes or trees.
<b>Private Walks</b>	Not applicable, standard or substandard if there were tripping or fall hazards caused by heaving, sinking, or sloping of more than one inch (1"). Also, private walks were judged substandard if badly deteriorated or overgrown with bushes or trees.
<b>Accessory Structures</b>	Not applicable, standard or substandard if any non-attached structure was not judged to be used as a garage. If the roof, siding or foundation did not meet code, the structure was judged substandard.
<b>Number of Car Garage</b>	The number of cars that the garage was built to house was entered into the computer.
<b>Attached Garage</b>	Yes, No, or Not Present.
<b>Grading &amp; Drainage</b>	Standard or substandard if it was obvious that water would pond or flow toward the house.
<b>Exterior Sanitation</b>	Standard or substandard if trash and garbage was evident and presented a health hazard.

<b>Yard Maintenance</b>	Standard or substandard if yard showed visible signs of neglect, such as long grass and untrimmed bushes and trees.
<b>Soffits &amp; Roof Edges</b>	Standard or substandard if showed signs of deterioration and/or peeling paint.
<b>Roof</b>	Standard or Substandard if evidence of missing shingles or roofing materials, large amounts of tar, or other patches.
<b>Gutters &amp; Downspouts</b>	If gutters were present on a house, they were judged standard if they were intact along the roofline and along the downspouts to the ground. If the gutters and downspouts were rusted, damaged, or overgrown, they are judged substandard.
<b>Chimneys</b>	Standard or substandard if there is evidence of deteriorated mortar joints or bricks missing.

<b>Siding Types</b>	<p>A - Aluminum or vinyl  B = Brick, block, or stone  S = Shingles  W = Wood  All types of siding present were recorded.</p>
<b>Siding Condition</b>	Standard or substandard if several broken or missing areas were noted. Also, substandard if in need of some form of protective treatment.
<b>Paint</b>	Standard or substandard if windows, trim, or wooden area were in need of protective treatment.
<b>Porches</b>	Not applicable, standard or substandard if there was evidence of structural failure or danger of injury.
<b>Foundations</b>	Standard or substandard if evidence of severe cracks, failed to support the intended structure, or severe evidence of mortar joint deterioration.
<b>Dumpsters</b>	Not applicable, standard or substandard if dumpsters were not sealed tightly, had no lids, or if they were overflowing.
<b>Starlings &amp; Pigeons</b>	Yes, if observed evidence of roosting or nesting of more than six (6) birds, otherwise, no.
<b>Stairs &amp; Railings</b>	Not Applicable, standard or substandard if four (4) or more steps were present, and evidence of deterioration of treads or support structure. Also, if no railing was present on stairs, they were marked as substandard.
<b>Doors</b>	Standard or substandard if broken or contained visible cracks or holes.
<b>Windows</b>	Standard or substandard if broken or contained visible cracks or holes.