

# Ferguson/Lindenwood Housing Survey Phase 2

- Purpose of the Study**
- Ferguson in the Saint Louis Region
- Data Acquisition
- Data Processing
- Age of Housing Stock
- Owner-Occupied vs. Renter
- Collection Process
- Analysis Phase 1 - Fall 2016
- Analysis Phase 2 - Spring 2017
- What's Next?

This study was conducted for the purposes of providing the city of Ferguson with geospatial information on where to invest in future neighborhood improvements.

A sidewalk survey was conducted on homes in the City of Ferguson based on a variety of factors including damage to the windows, roof and siding, presence of overgrown vegetation, and foundation type.

After data was collected, the findings would be presented to the City of Ferguson to apply for grant money to improve neighborhood housing stock.









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When initially designing this collection process, a general template was needed to get started. [New Orleans, Louisiana](#) served as a great example for the kind of questions we were asked and the information we were looking to find.

Parcel data for the Ferguson survey was download from the [STL County GIS Service Center](#).

The New Orleans study provided the following criteria:

Structure Present?  
 Damaged Siding?  
 Damaged Roof?  
 Damaged Windows/Doors?  
 Foundation Type?

A housing survey conducted in [Independence, MO](#) provided the overall rating structure:

- Overall Rating?
- Excellent
  - Good
  - Substandard
  - Seriously Deteriorated
  - Severely Deteriorated





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## Setting up an ArcGIS Collector interactive map:

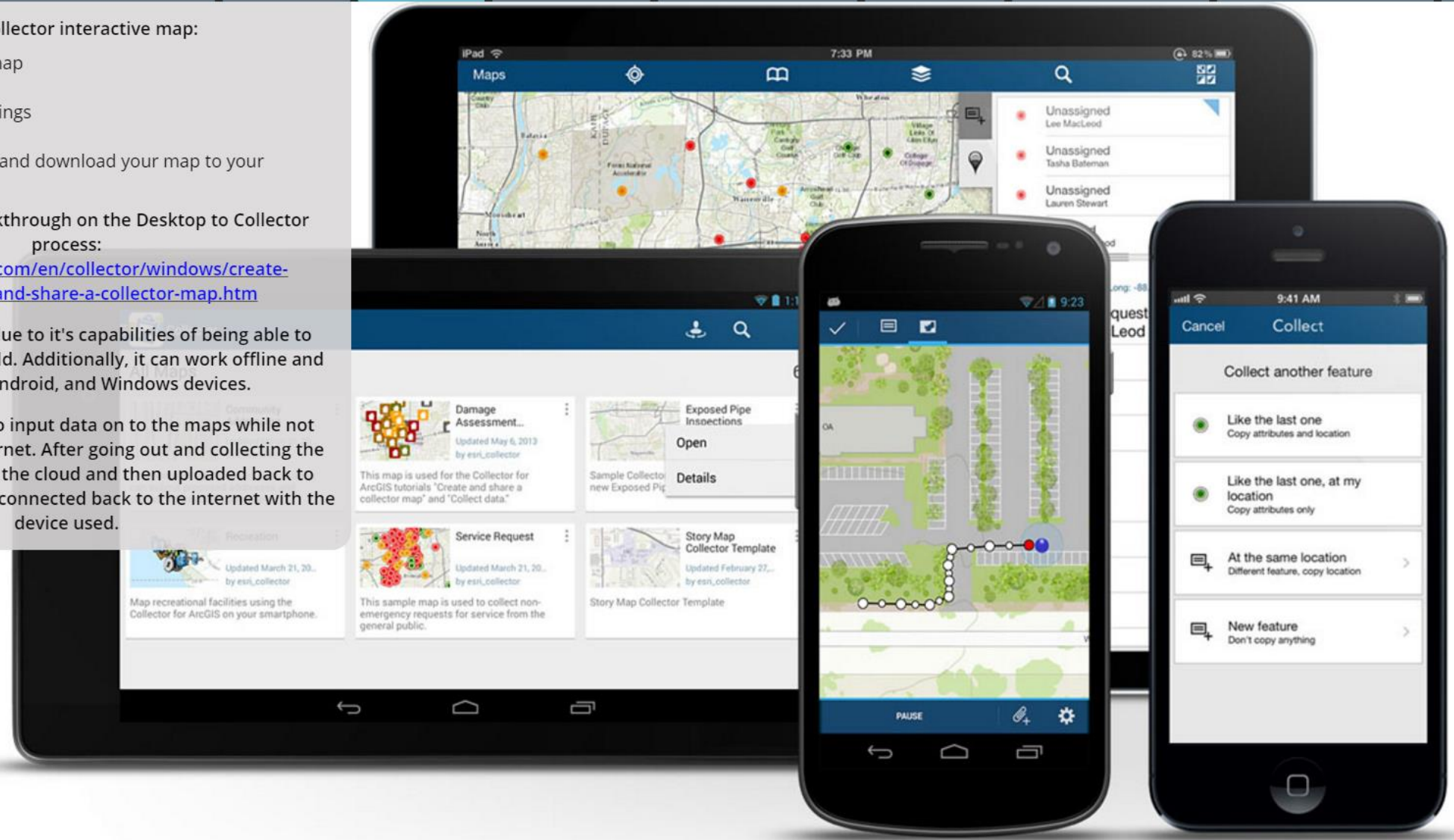
- Create a Desktop map
- Configure data
- Customize app settings
- Publish map
- Sign in to Collector and download your map to your phone

For an in-depth walkthrough on the Desktop to Collector process:

<http://doc.arcgis.com/en/collector/windows/create-maps/create-and-share-a-collector-map.htm>

Collector was used due to it's capabilities of being able to update data in the field. Additionally, it can work offline and with all iOS, Android, and Windows devices.

This allowed for us to input data on to the maps while not connected to the internet. After going out and collecting the data it was added to the cloud and then uploaded back to ArcGIS when you were connected back to the internet with the device used.



Ferguson Houses by Year



**Legend**

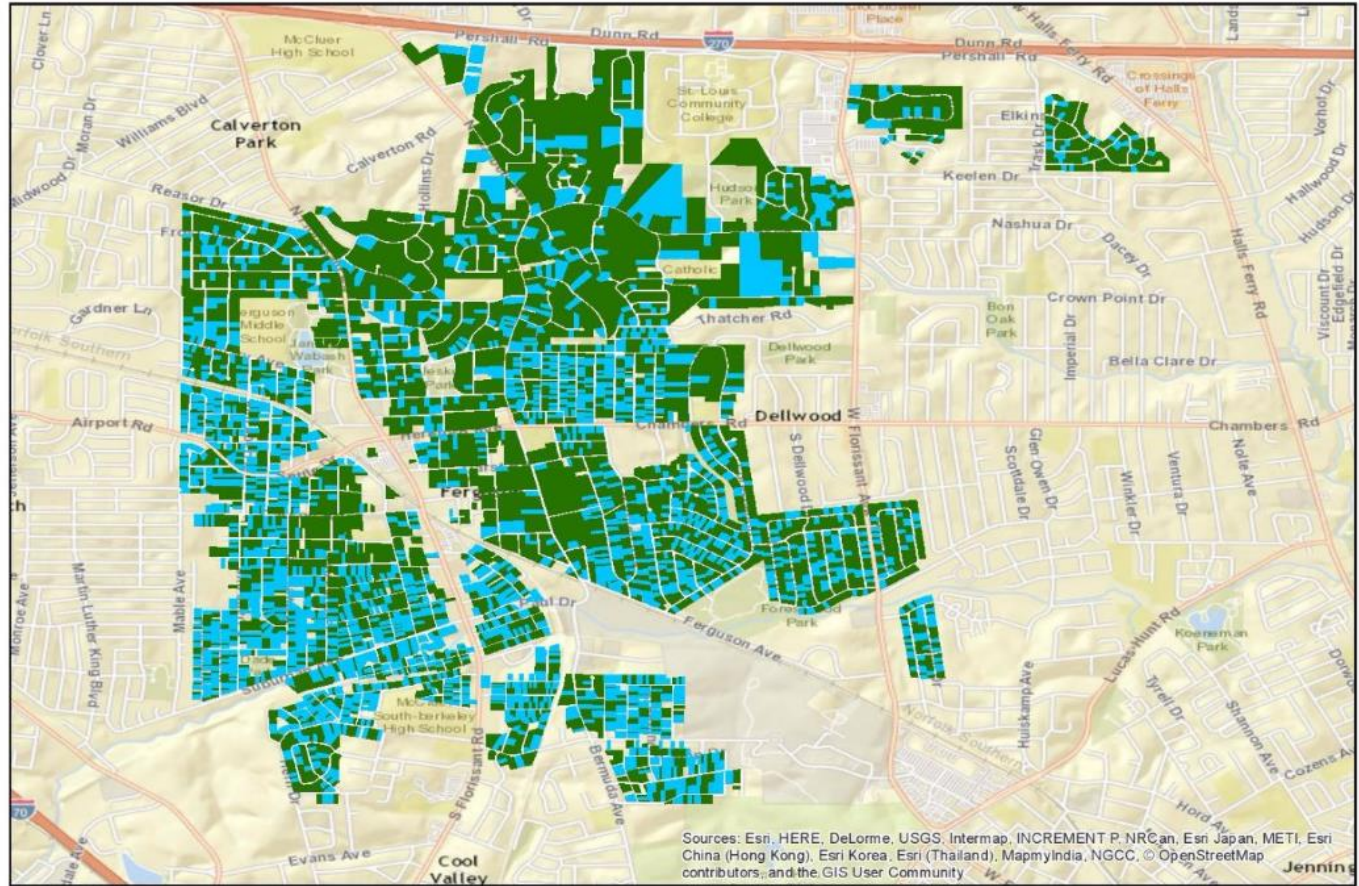
- ◆ 0
- ◆ 1 - 1875
- ◆ 1876 - 1894
- ◆ 1895 - 1905
- ◆ 1906 - 1915
- ◆ 1916 - 1924
- ◆ 1925 - 1933
- ◆ 1934 - 1943
- ◆ 1944 - 1951
- ◆ 1952 - 1958
- ◆ 1959 - 1966
- ◆ 1967 - 1979
- ◆ 1980 - 1989
- ◆ 1990 - 1997
- ◆ 1998 - 2013

Nicholas Naylor  
4/13/2017



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## Housing Ownership

- Renter Occupied
- Owner Occupied


**Collector**

**On Device** 3




**Ferguson Southwest Neighborhood**

Synced : 10/6/16 4:31 PM [Sync](#)



**OldWestNeighborhood\_South**

Synced : 10/6/16 4:32 PM [Sync](#)



**OldWestNeighborhood\_North**

Downloaded : Sep 8, 2016 [Sync](#)

**Ferguson Southwest Neighborhood**



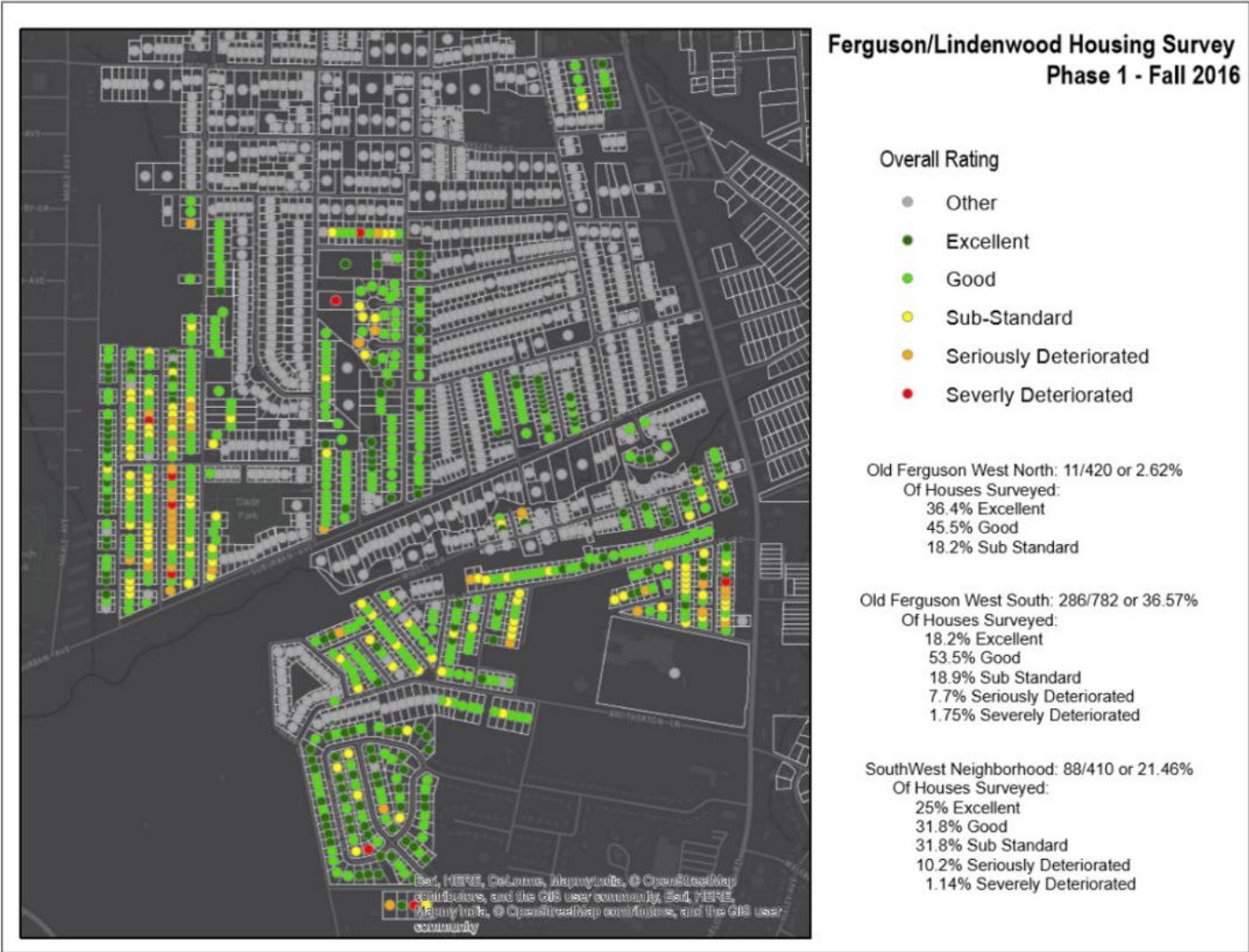
**Details**

- SouthwestFergusonNeighborhood: **Yes**  
long:-90.311620 lat:38.732417
- STRUCTUREPRESENT: **Yes**
- OVERGROWNVEGETATION: **Yes**
- DAMGEWALLSSIDING: **No**
- DAMAGEDOORSWINDOWS: **No**
- DAMAGEROOF: **Yes**
- FOUNDATIONTYPE
- OVERALLRATING: **Good**
- PARENT\_LOC: **12J320474**
- LOCATOR

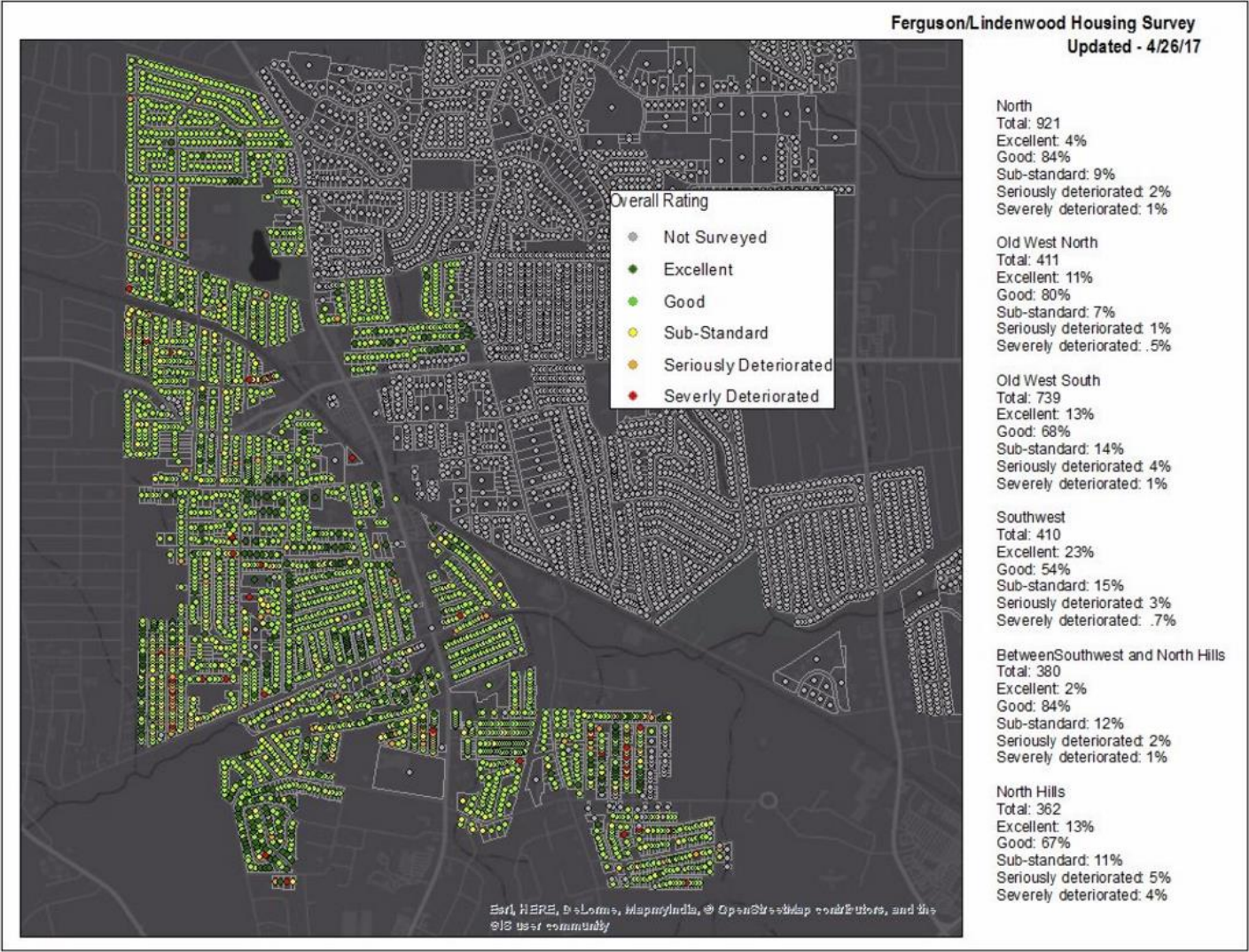


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Ferguson/Lindenwood Housing Survey

Updated - 4/26/17



North  
 Total: 921  
 Excellent: 4%  
 Good: 84%  
 Sub-standard: 9%  
 Seriously deteriorated: 2%  
 Severely deteriorated: 1%

Old West North  
 Total: 411  
 Excellent: 11%  
 Good: 80%  
 Sub-standard: 7%  
 Seriously deteriorated: 1%  
 Severely deteriorated: .5%

Old West South  
 Total: 739  
 Excellent: 13%  
 Good: 68%  
 Sub-standard: 14%  
 Seriously deteriorated: 4%  
 Severely deteriorated: 1%

Southwest  
 Total: 410  
 Excellent: 23%  
 Good: 54%  
 Sub-standard: 15%  
 Seriously deteriorated: 3%  
 Severely deteriorated: .7%

Between Southwest and North Hills  
 Total: 380  
 Excellent: 2%  
 Good: 84%  
 Sub-standard: 12%  
 Seriously deteriorated: 2%  
 Severely deteriorated: 1%

North Hills  
 Total: 362  
 Excellent: 13%  
 Good: 67%  
 Sub-standard: 11%  
 Seriously deteriorated: 5%  
 Severely deteriorated: 4%



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## Moving Forward

1. Continue data collection
2. Educate staff in order to continue housing project
3. Continued evaluation/reworking of the data collection process
4. Internship!

Credits -  
Advanced Topics in GIS Fall 2016 - Aaron Azkoul, Eric Button, Abigail Kindler, Katlyn Loesche, Gwyneth Vollman  
Advanced Topics in GIS Spring 2017 - Genevieve Cameron, Mikayla Mathews, Nicholas Naylor, Jillian Schuyler, Katherine Wiesehan

