Appendix A

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Pierce

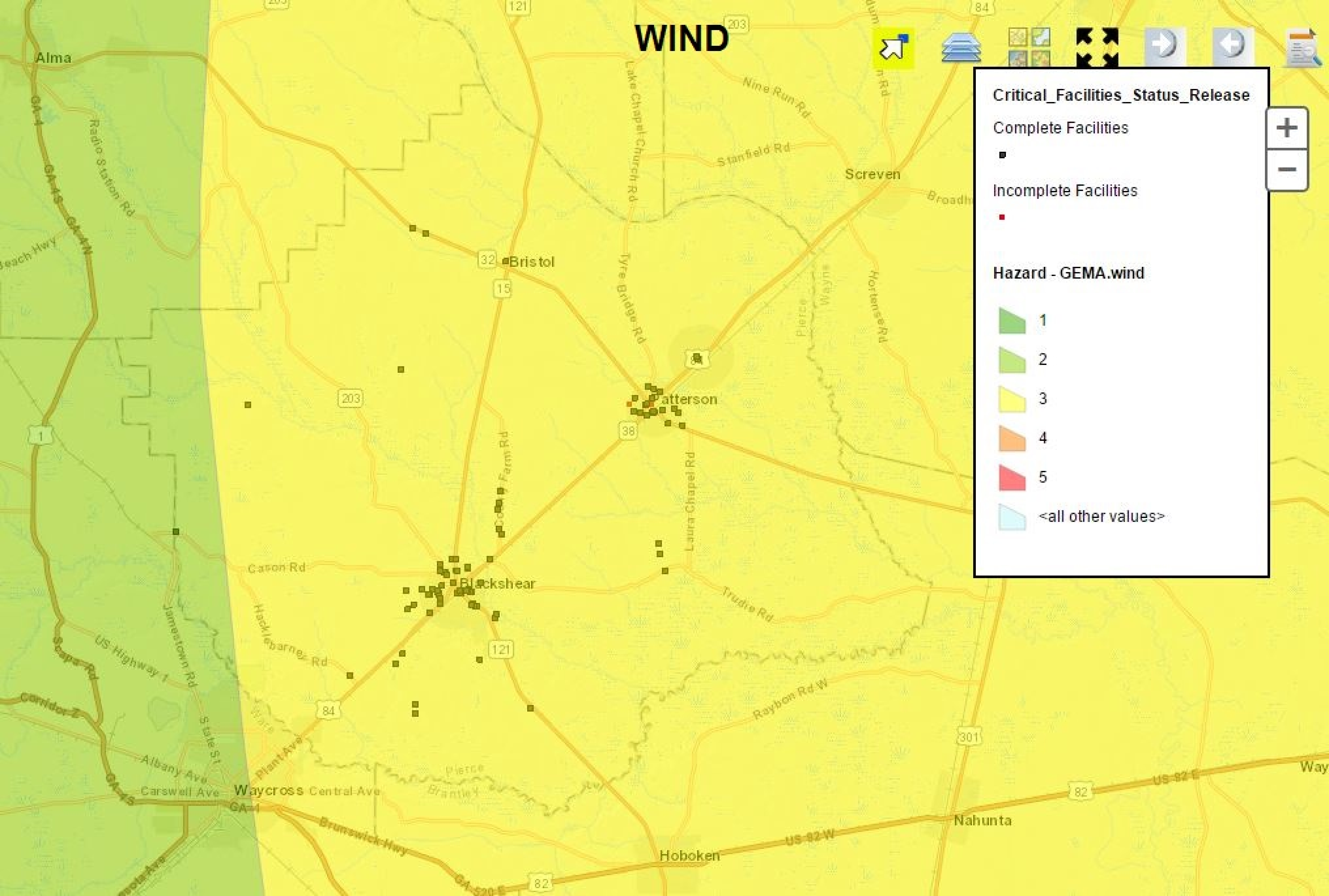
Hazard: Thunderstorms and Wind

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

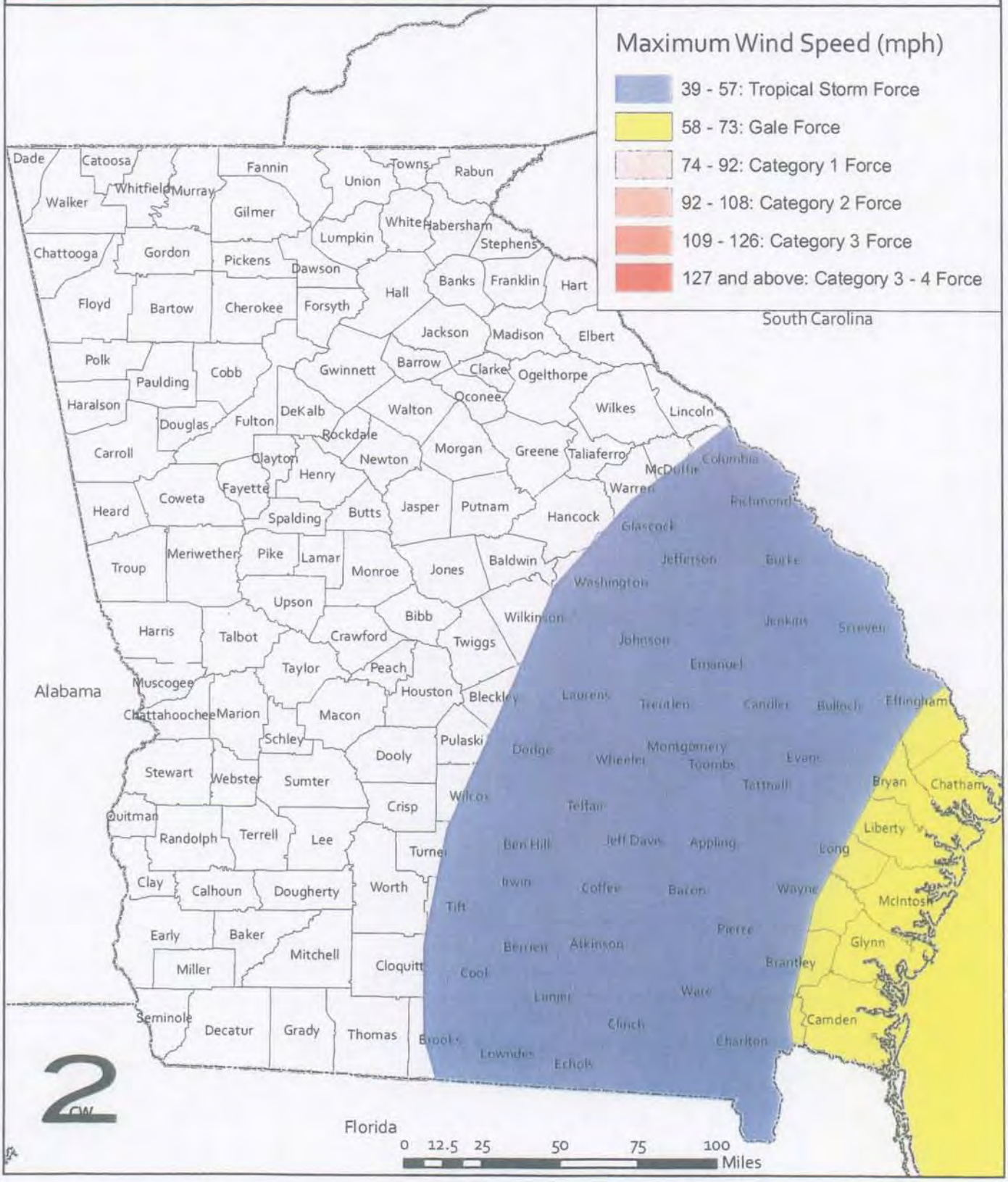
	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	


WIND
Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Hazard - GEMA.wind
1
2
3
4
5
<all other values>
Alma
Bristol
Patterson
Screven
Blackshear
Waycross
Nahunta
Hoboken
Nine Run Rd
Stanfield Rd
Lake Chapel Church Rd
Tyre Bridge Rd
Laura Chapel Rd
Cason Rd
Trudie Rd
Raybon Rd W
Hacklebarney Rd
Jamestown Rd
US Highway 1
Radio Station Rd
Corridor Z
Albany Ave
Carswell Ave
Central Ave
Plant Ave
State St
Brunswick Hwy
US 82 W
US 82 E
Pierce
Wayne
Brantley
Hortense Rd

Maximum Envelope of Wind

Georgia Coast Landfall - Category 1 Hurricane

Sustained Winds of 75 mph - Forward Speed of 9 mph



GEMA Worksheet #3a Inventory of Assets

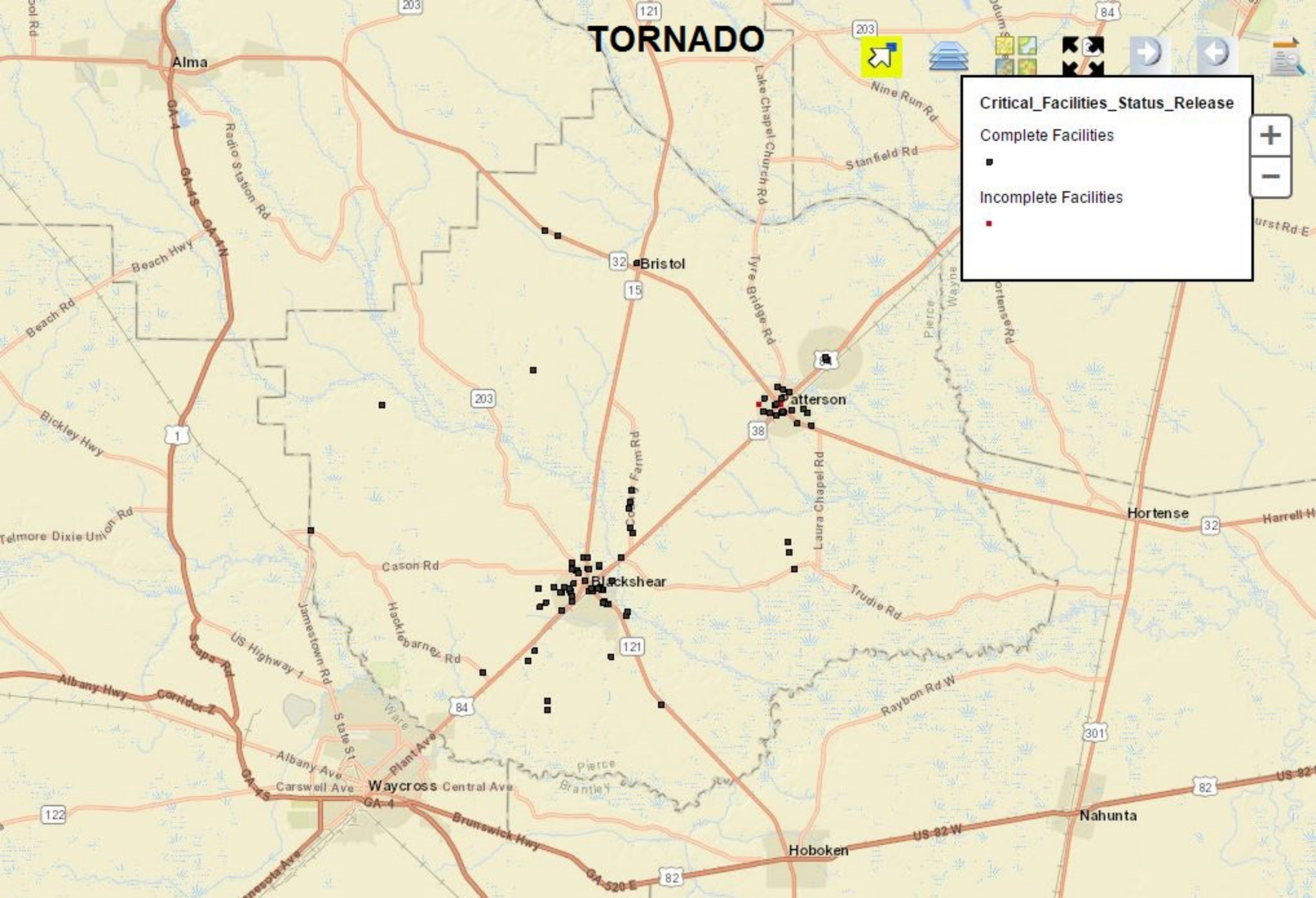
Jurisdiction: Pierce
Hazard: Tornado

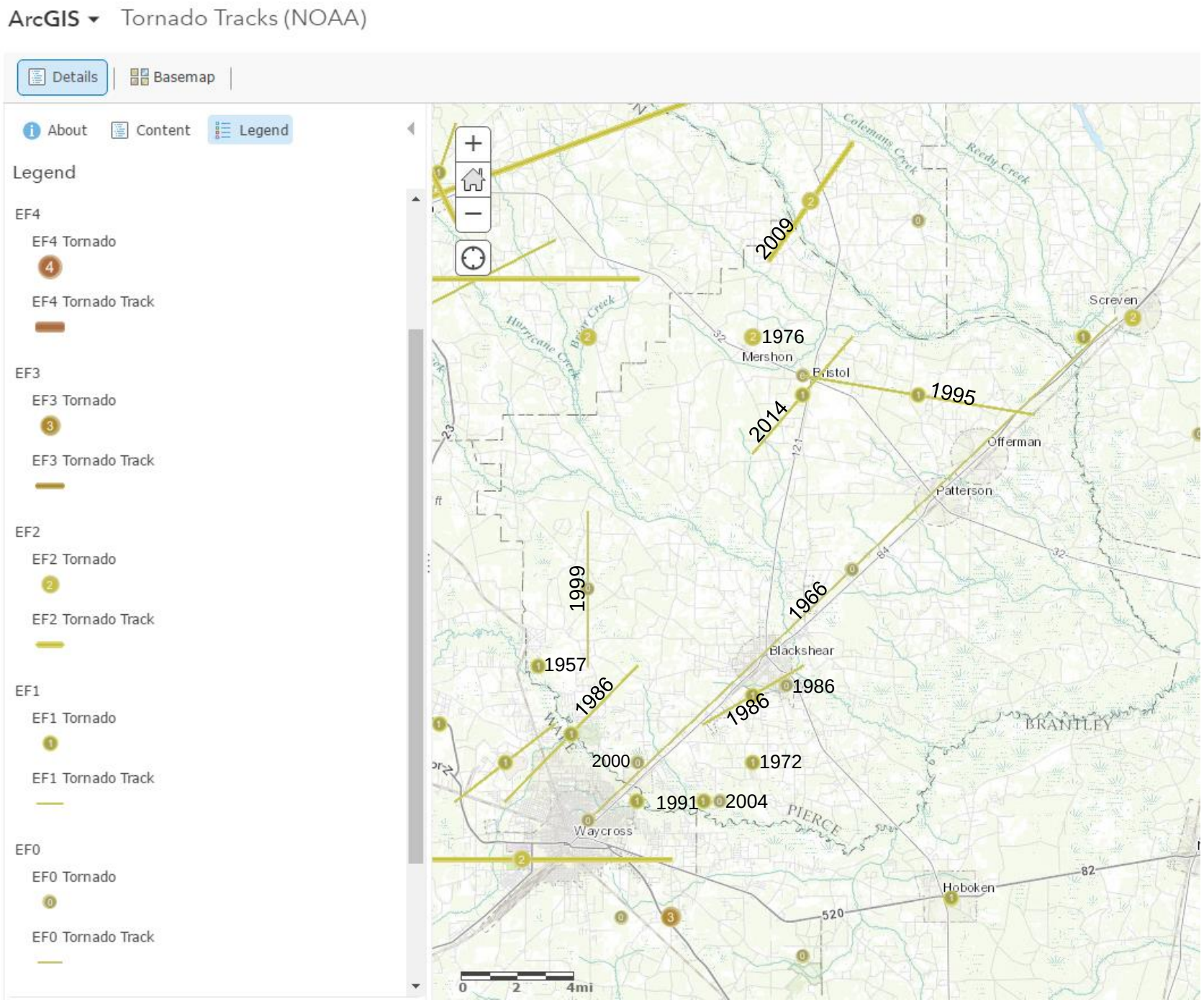
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	


TORNADO
Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Alma
Bristol
Patterson
Hortense
Blackshear
Waycross
Nahunta
Hoboken
Nine Run Rd
Stanfield Rd
Lake Chapel Church Rd
Tyre Bridge Rd
Beach Hwy
Beach Rd
Radio Station Rd
Bickley Hwy
Telmore Dixie Union Rd
Cason Rd
Jamestown Rd
Hackleburner Rd
Scapa Rd
US Highway 1
Albany Hwy
Corridor Z
State St
Plant Ave
Albany Ave
Carswell Ave
Central Ave
Brunswick Hwy
GA-520 E
US-82 W
Laura Chapel Rd
Trudie Rd
Raybon Rd W
Pierce
Brantley
Ware
GA-4
GA-4S
GA-4N
GA-15S
203
121
84
32
15
38
1
301
82
122



Source: NOAA data via ArcGis; https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=ae96a522f2824552b20cdcf53a30d3c1

GEMA Worksheet #3a Inventory of Assets

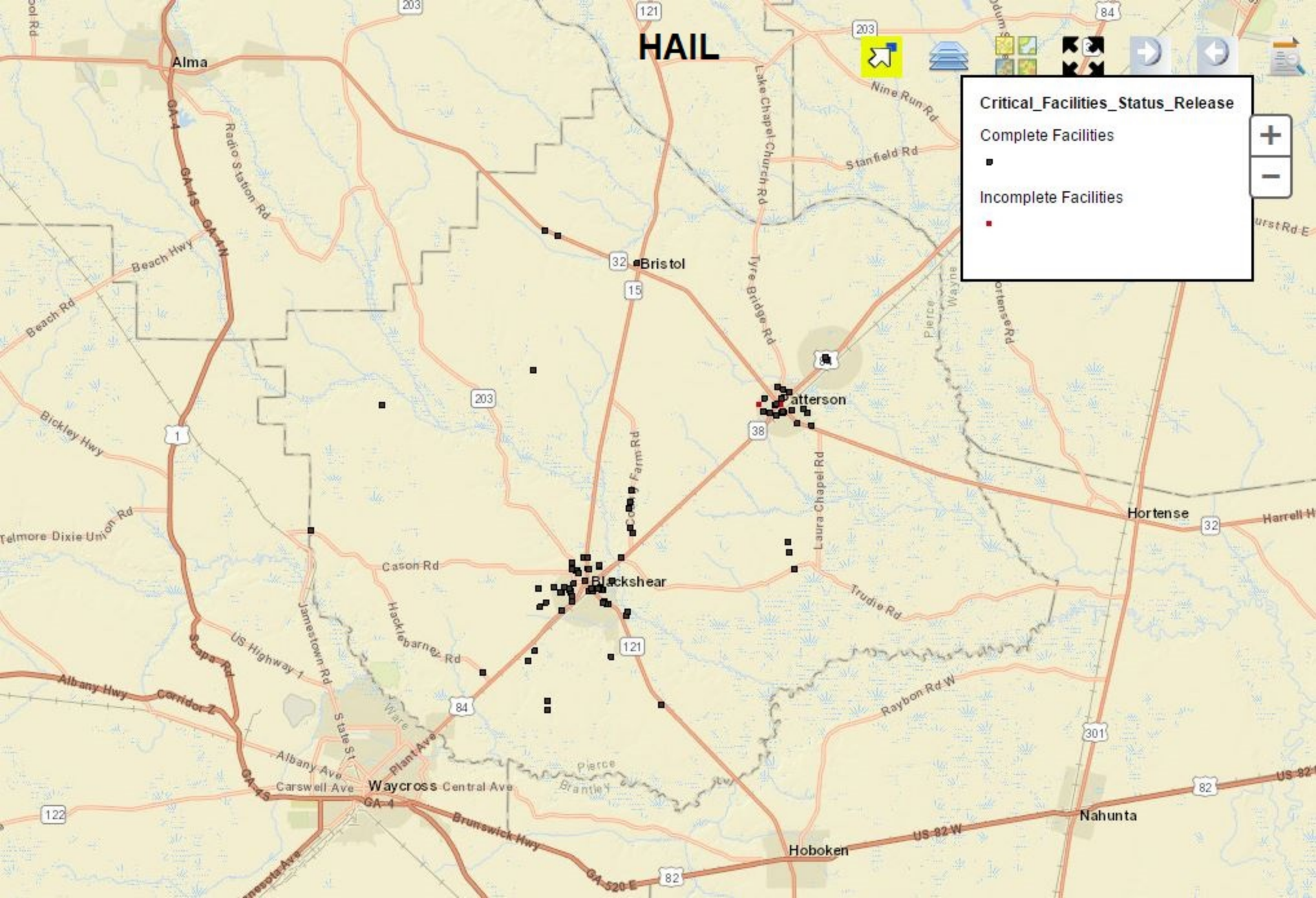
Jurisdiction: Pierce
Hazard: Hail

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	


HAIL
Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Alma
Bristol
Patterson
Hortense
Blackshear
Waycross
Nahunta
Hoboken
Nine Run Rd
Stanfield Rd
Lake Chapel Church Rd
Tyre Bridge Rd
Radio Station Rd
Beach Hwy
Beach Rd
Bickley Hwy
Telmore Dixie Union Rd
Cason Rd
Jamestown Rd
Hackleburner Rd
Laura Chapel Rd
Trudie Rd
Raybon Rd W
Albany Hwy
Corridor Z
Scapa Rd
US Highway 1
Albany Ave
Carswell Ave
Central Ave
Plant Ave
State St
Brunswick Hwy
GA-520 E
US-82 W
Pierce
Brantley
Ware
GA-4
GA-4S
GA-4N
GA-1S
GA-1
203
121
84
32
15
38
1
301
82
122

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Pierce
Hazard: Flood

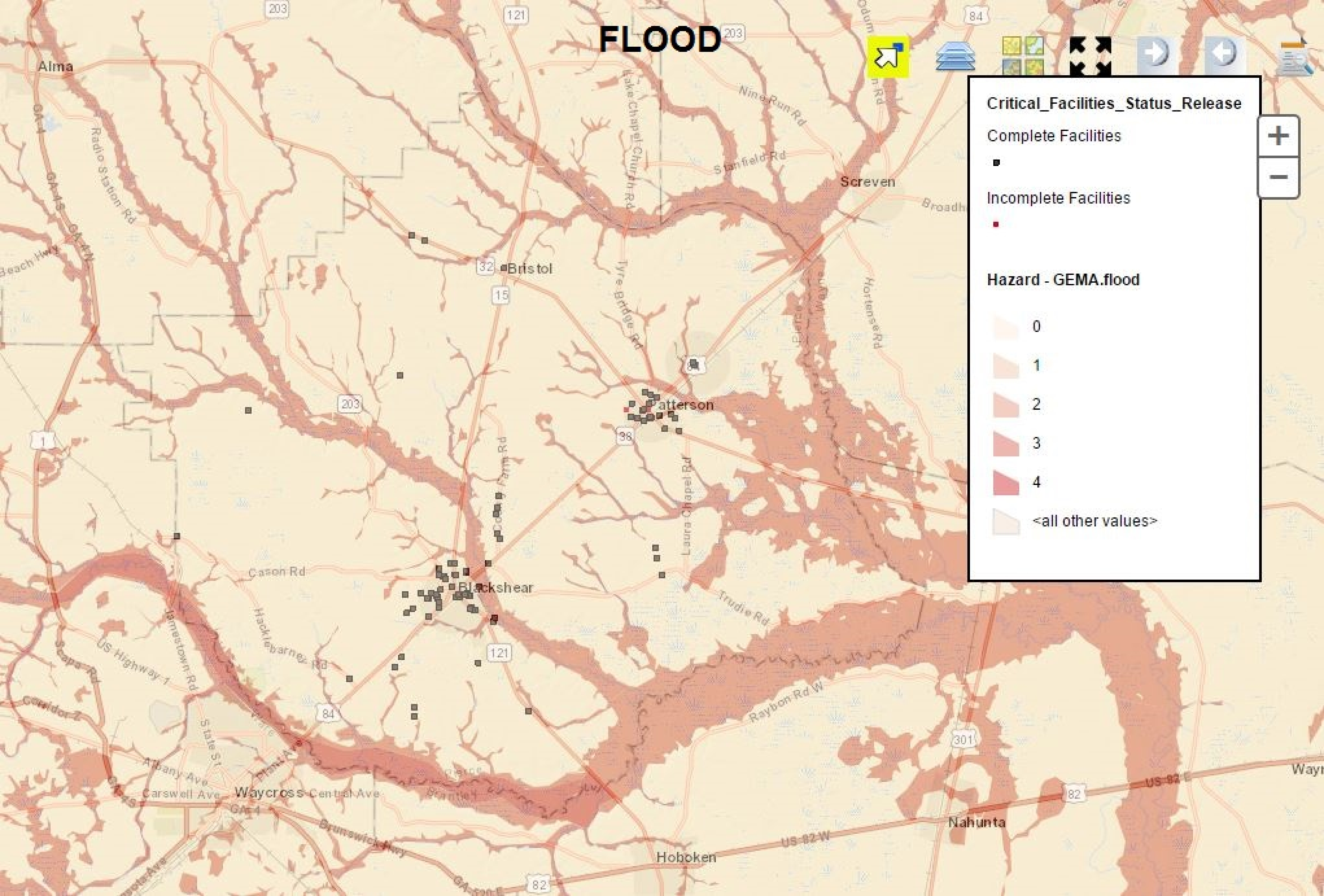
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	465	4.981%	207,940,361	10,358,036	4.981%	18,935	943	4.981%
Commercial	451	7	1.552%	43,241,481	671,154	1.552%	0	0	0%
Industrial	28	1	3.571%	14,184,654	506,595	3.571%	0	0	0%
Agricultural	1,820	330	18.132%	96,022,096	17,410,600	18.132%	0	0	0%
Religious/ Non-profit	156	2	1.282%	34,496,268	442,260	1.282%	0	0	0%
Government	103	4	3.883%	53,165,359	2,064,674	3.883%	0	0	0%
Education	9	0	0.000%	6,594,648	0	0.000%	0	0	0%
Utilities	9	0	0.000%	35,426,279	0	0.000%	0	0	0%
Total	11,911	809		491,071,146	31,453,319		18,935	943	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	

FLOOD


Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Hazard - GEMA.flood
0
1
2
3
4
<all other values>
Alma
Bristol
Screven
Patterson
Blackshear
Waycross
Nahunta
Hoboken
Radio Station Rd
Lake Chapel Church Rd
Nine Run Rd
Stanfield Rd
Tyre Bridge Rd
Hortense Rd
Laura Chapel Rd
Trudie Rd
Cason Rd
Hacklebarney Rd
Jamestown Rd
US Highway 1
Raybon Rd W
Albany Ave
Carswell Ave
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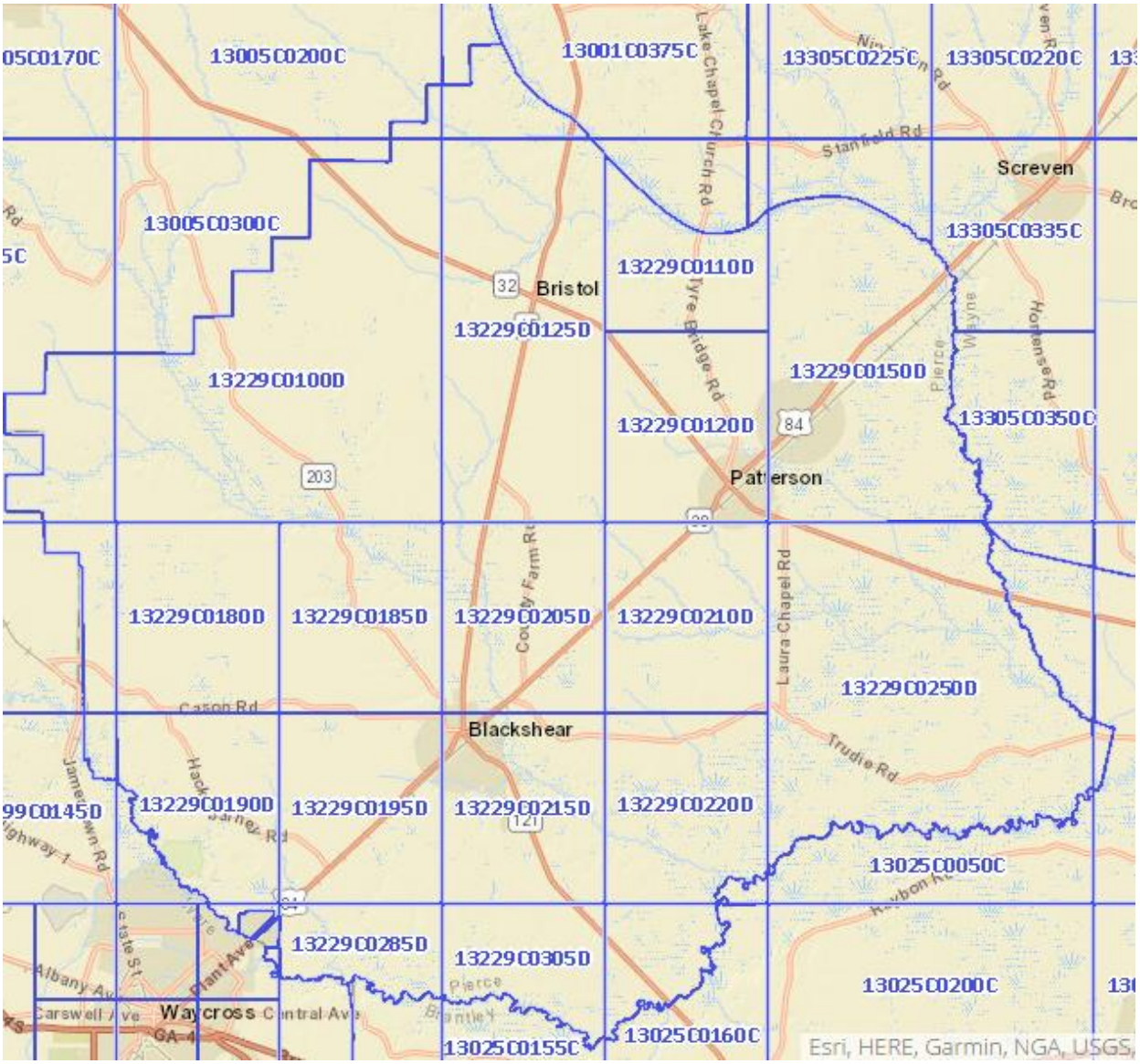


Flood Insurance Rate Maps for Pierce County and the Cities of Blackshear, Offerman, and Patterson. Data Source: FEMA website, msc.fema.gov.

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Pierce
Hazard: Drought

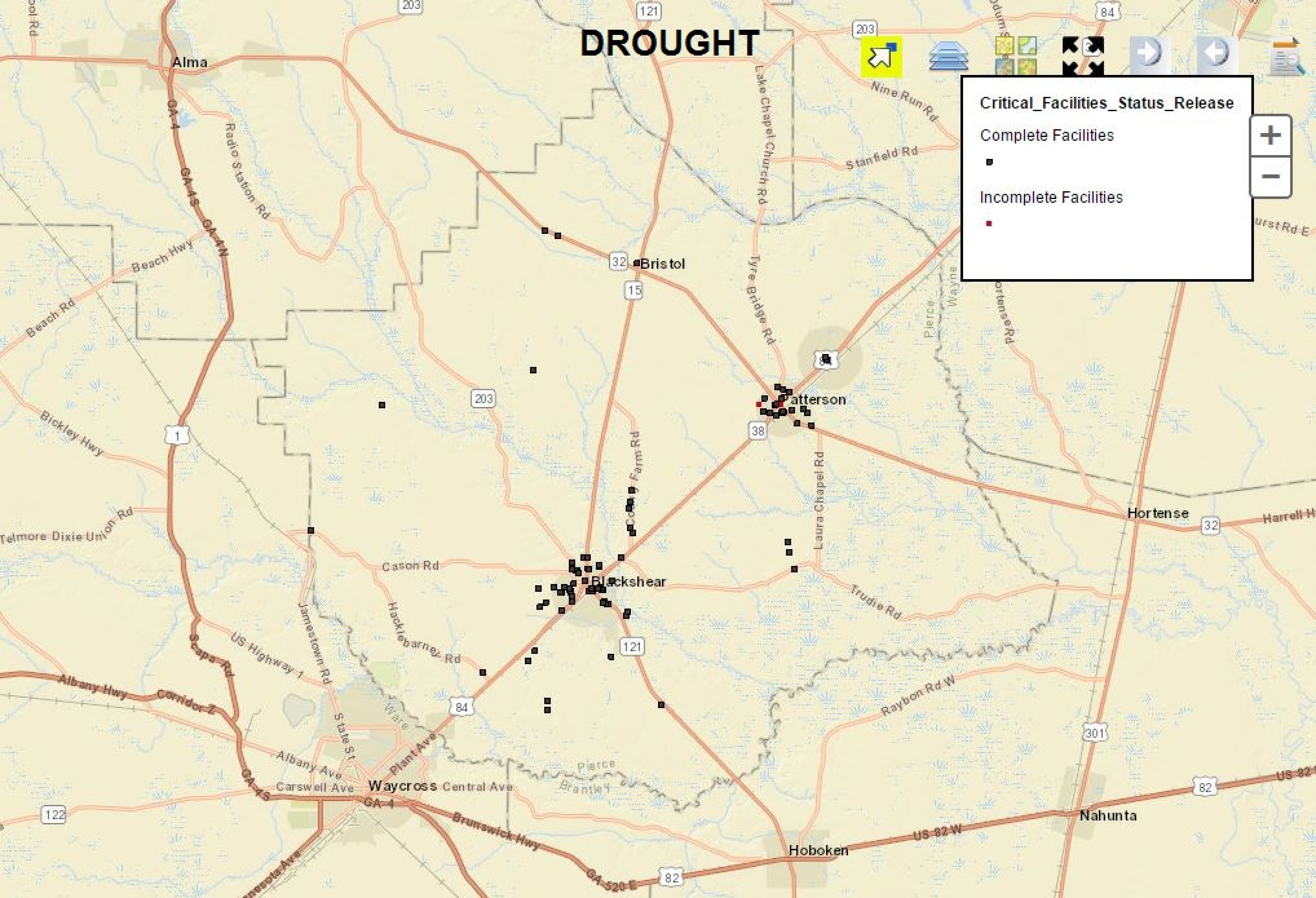
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	

DROUGHT


Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Alma
Bristol
Patterson
Blackshear
Hortense
Waycross
Hoboken
Nahunta
Beach Hwy
Beach Rd
Bickley Hwy
Radio Station Rd
Cason Rd
Hacklebarney Rd
Jamestown Rd
Laura Chapel Rd
Trudie Rd
Raybon Rd W
Tyre Bridge Rd
Lake Chapel Church Rd
Nine Run Rd
Stanfield Rd
Albany Hwy
Albany Ave
Carswell Ave
Central Ave
Plant Ave
State St
Brunswick Hwy
US Highway 1
Harrell H
Pierce
Brantley
Ware
Wayne

Map Service

Selected Map Information

Change Selection

Map Link

This is the link to your selected map.

http://droughtmonitor.unl.edu/data/jpg/20160726/20160726_ga_trd.jpg

HTML Code

Copy the following code into the HTML code of your page to display an image of this map.

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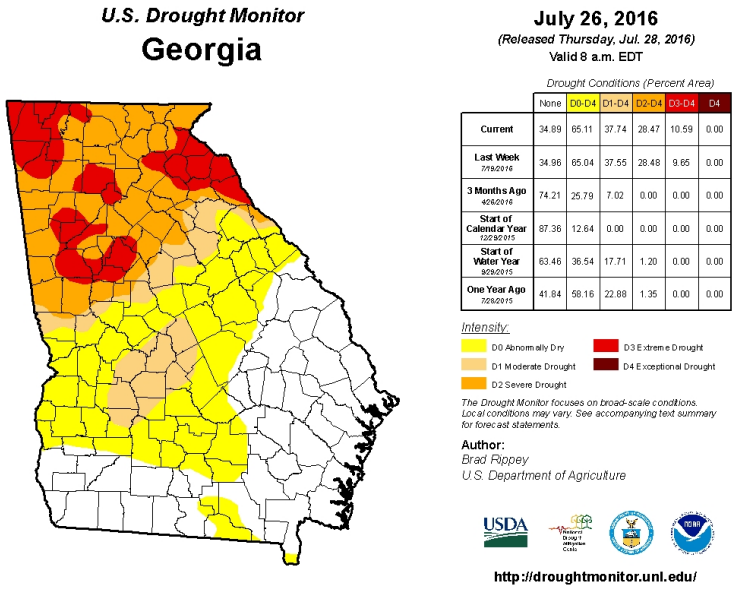
Copy the following code into the HTML code of your page to link to this map.

[insert your text here]

The map will look like this example below:



The National Drought Mitigation Center | 3310 Holdrege Street | P.O. Box 830988 | Lincoln, NE 68583–0988
phone: (402) 472–6707 | fax: (402) 472–2946 | **Contact Us** | **Web Policy**

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Pierce

Hazard: Severe Winter Storm

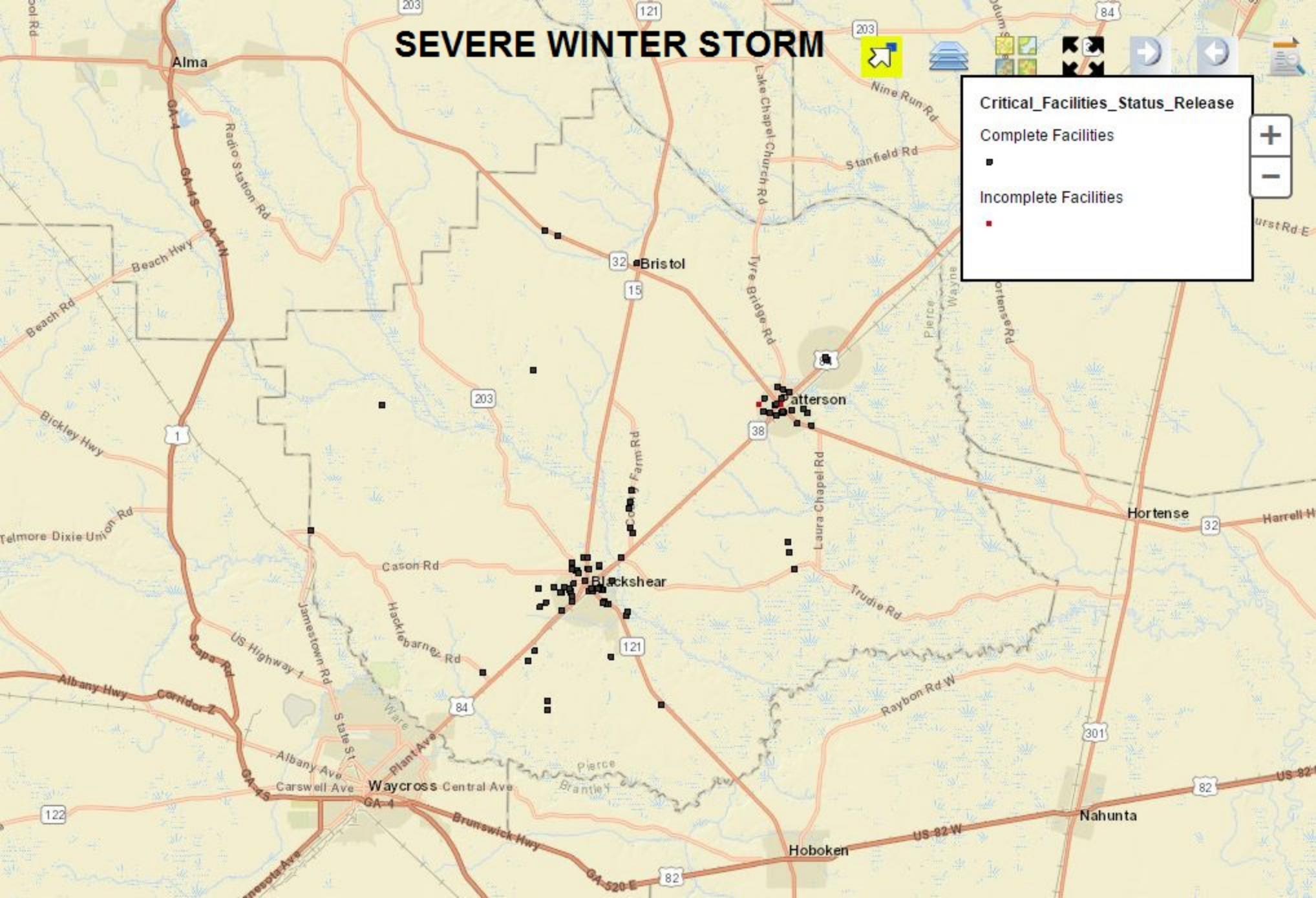
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	

SEVERE WINTER STORM



GEMA Worksheet #3a Inventory of Assets

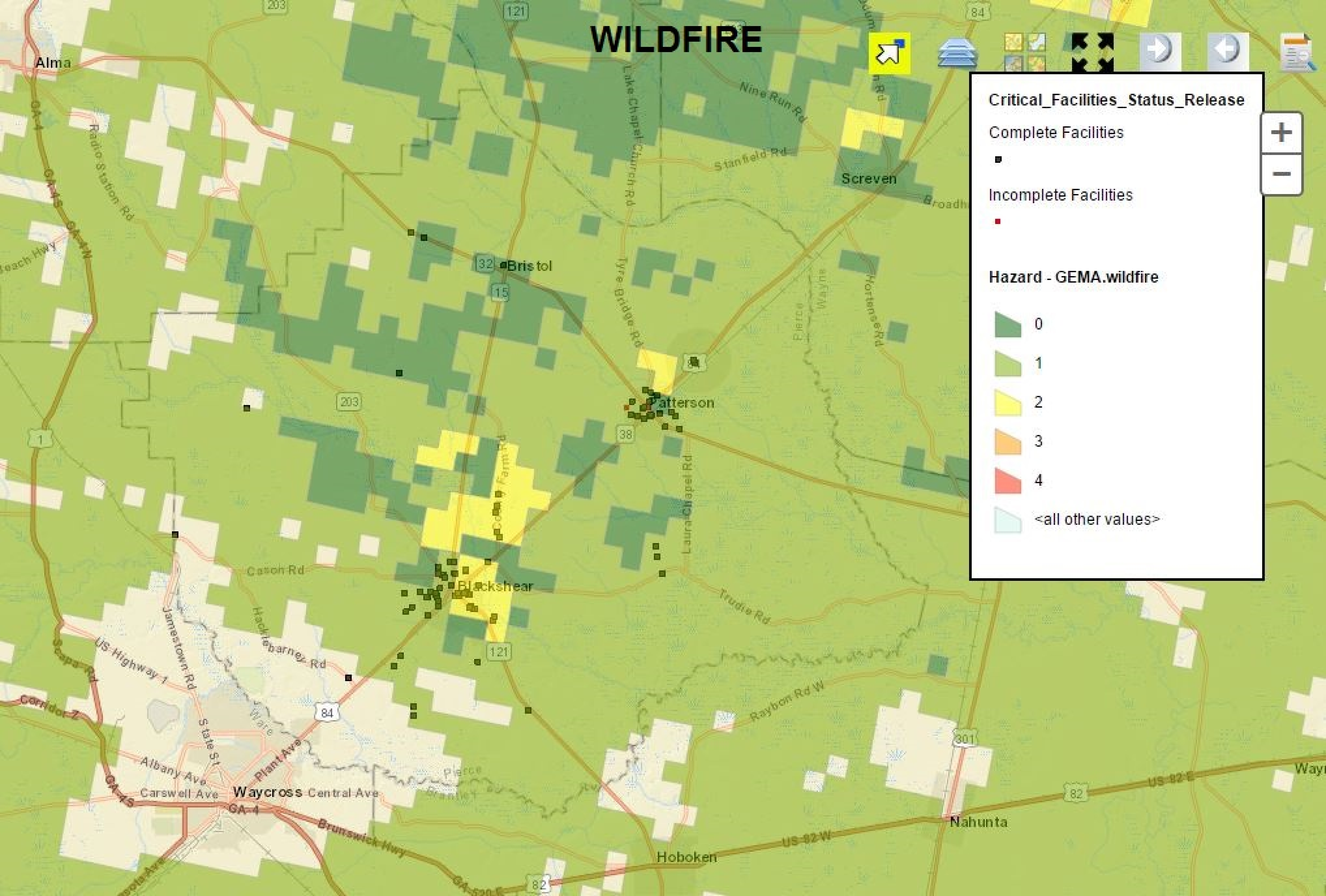
Jurisdiction: Pierce
Hazard: Wildfire

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	8,308	89.000%	207,940,361	185,066,921	89.000%	18,935	16,852	89.000%
Commercial	451	401	89.000%	43,241,481	38,484,918	89.000%	0	0	0%
Industrial	28	25	89.000%	14,184,654	12,624,342	89.000%	0	0	0%
Agricultural	1,820	1,620	89.000%	96,022,096	85,459,665	89.000%	0	0	0%
Religious/ Non-profit	156	139	89.000%	34,496,268	30,701,679	89.000%	0	0	0%
Government	103	92	89.000%	53,165,359	47,317,170	89.000%	0	0	0%
Education	9	8	89.000%	6,594,648	5,869,237	89.000%	0	0	0%
Utilities	9	8	89.000%	35,426,279	31,529,388	89.000%	0	0	0%
Total	11,911	10,601		491,071,146	437,053,320		18,935	16,852	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	


WILDFIRE
Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Hazard - GEMA.wildfire
0
1
2
3
4
<all other values>
Alma
Bristol
Patterson
Screven
Blackshear
Waycross
Nahunta
Hoboken
Nine Run Rd
Stanfield Rd
Lake Chapel Church Rd
Tyre Bridge Rd
Laura Chapel Rd
Radio Station Rd
Cason Rd
Trudie Rd
Raybon Rd W
Jamestown Rd
Hacklebarney Rd
US Highway 1
Albany Ave
Carswell Ave
Central Ave
Plant Ave
State St
Brunswick Hwy
US 82 E
US 82 W
Corridor Z
Scapa Rd
Hortense Rd

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Pierce

Hazard: Hurricane/Tropical Storm

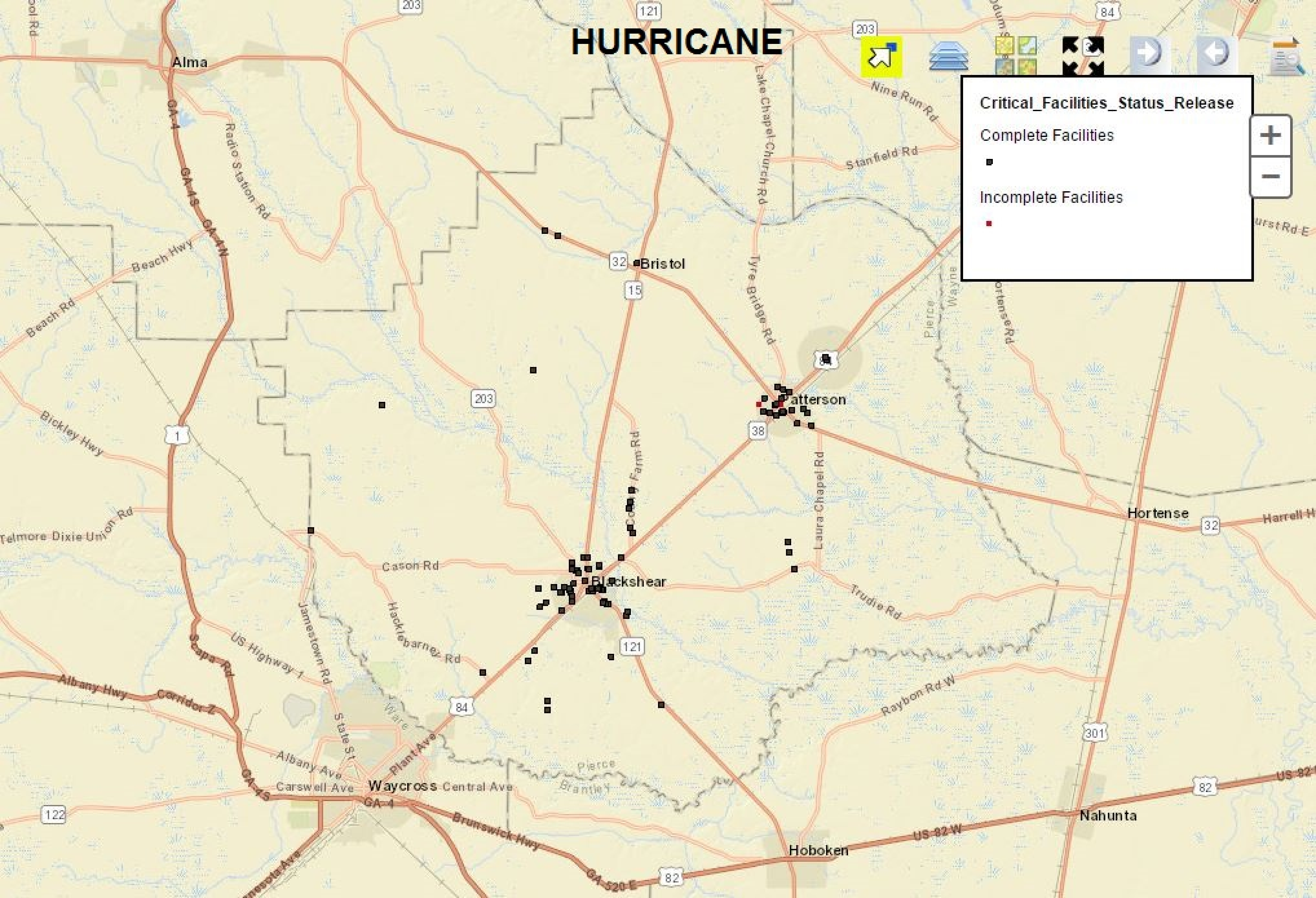
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	$ in Community or State	$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	9,335	9,335	100.000%	207,940,361	207,940,361	100.000%	18,935	18,935	100.000%
Commercial	451	451	100.000%	43,241,481	43,241,481	100.000%	0	0	0%
Industrial	28	28	100.000%	14,184,654	14,184,654	100.000%	0	0	0%
Agricultural	1,820	1,820	100.000%	96,022,096	96,022,096	100.000%	0	0	0%
Religious/ Non-profit	156	156	100.000%	34,496,268	34,496,268	100.000%	0	0	0%
Government	103	103	100.000%	53,165,359	53,165,359	100.000%	0	0	0%
Education	9	9	100.000%	6,594,648	6,594,648	100.000%	0	0	0%
Utilities	9	9	100.000%	35,426,279	35,426,279	100.000%	0	0	0%
Total	11,911	11,911		491,071,146	491,071,146		18,935	18,935	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	**N**
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	N	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	

HURRICANE

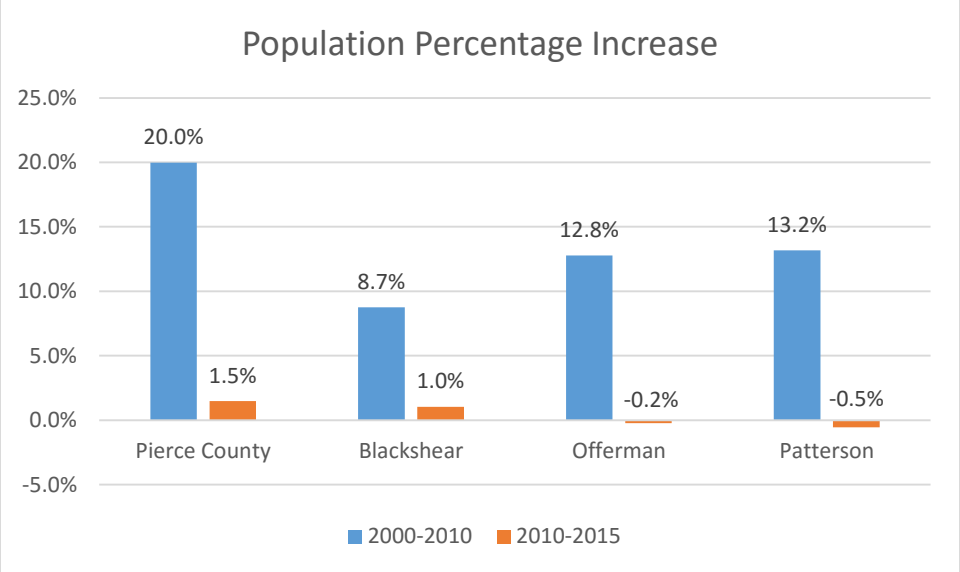


Critical_Facilities_Status_Release
Complete Facilities
Incomplete Facilities
Alma
Bristol
Patterson
Blackshear
Hortense
Waycross
Hoboken
Nahunta
Cason Rd
Trudie Rd
Laura Chapel Rd
Tyre Bridge Rd
Lake Chapel Church Rd
Nine Run Rd
Stanfield Rd
Radio Station Rd
Beach Hwy
Beach Rd
Bickley Hwy
Telmore Dixie Union Rd
Jamestown Rd
Hacklebarney Rd
US Highway 1
Albany Hwy
Corridor Z
Albany Ave
Carswell Ave
Central Ave
Plant Ave
State St
Brunswick Hwy
Raybon Rd W
US 82 W
GA-4
GA-520 E
Pierce
Brantley
Wayne

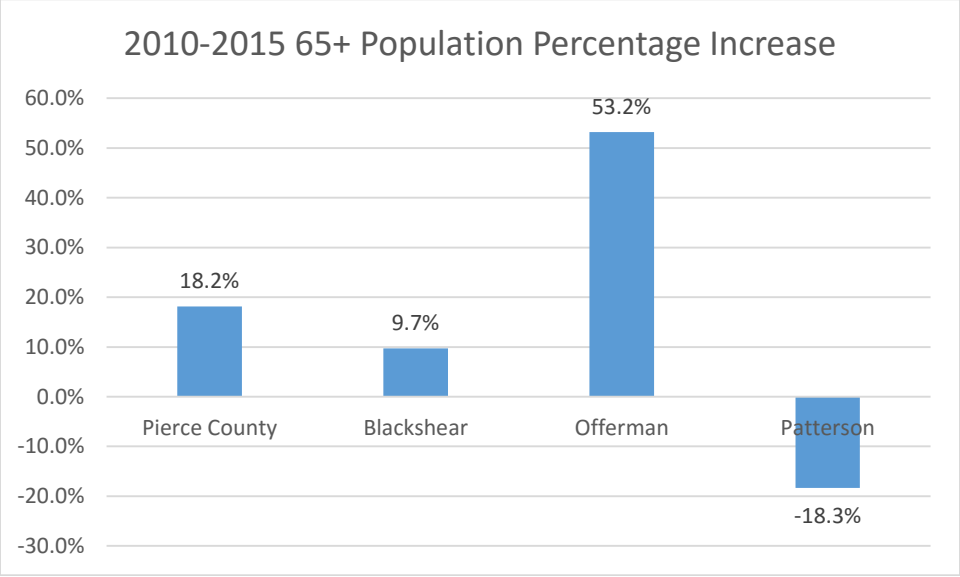
Appendix B

3. Analysis of Data and Information

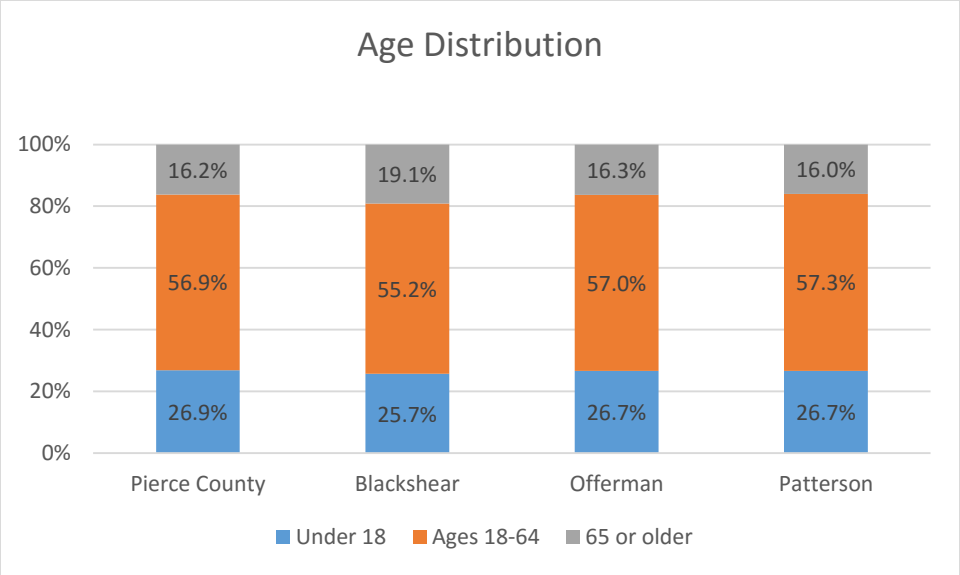
Data source: U.S. Census Bureau (www.census.gov)



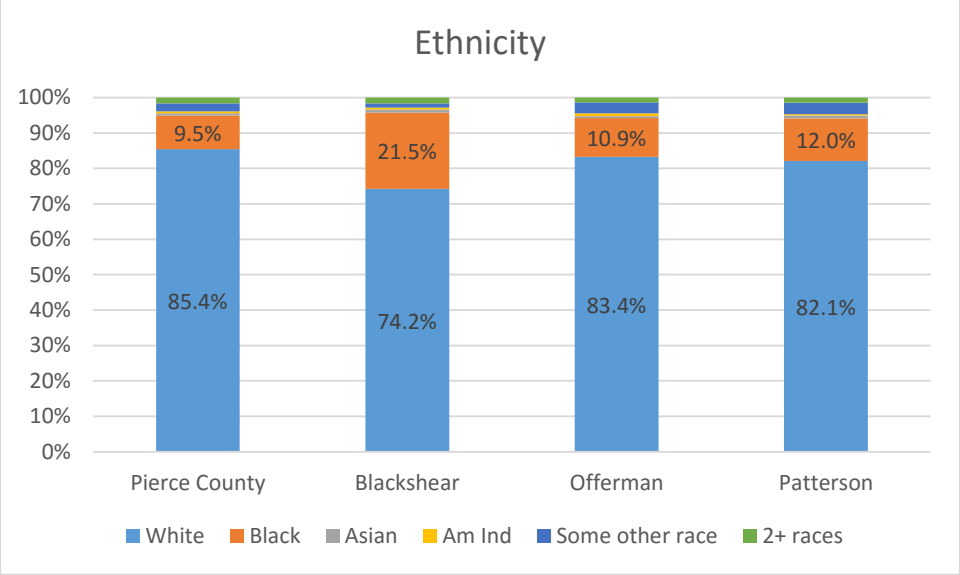
The 2015 population of Pierce County (the most recent figure currently available) is estimated at 18,934, a 1.5% increase since 2010. The 2015 population of Blackshear is estimated at 3,522, a 1.0% increase since 2010. The 2015 population of Offerman is 433, a decrease of 0.2% since 2010. The 2015 population of Patterson is 720, a 0.5% decrease since 2010. All jurisdictions gained population from 2000 to 2010 (20.0% for Pierce County, 8.7% for the City of Blackshear, 12.8% for the City of Offerman, and 13.2% for the City of Patterson).



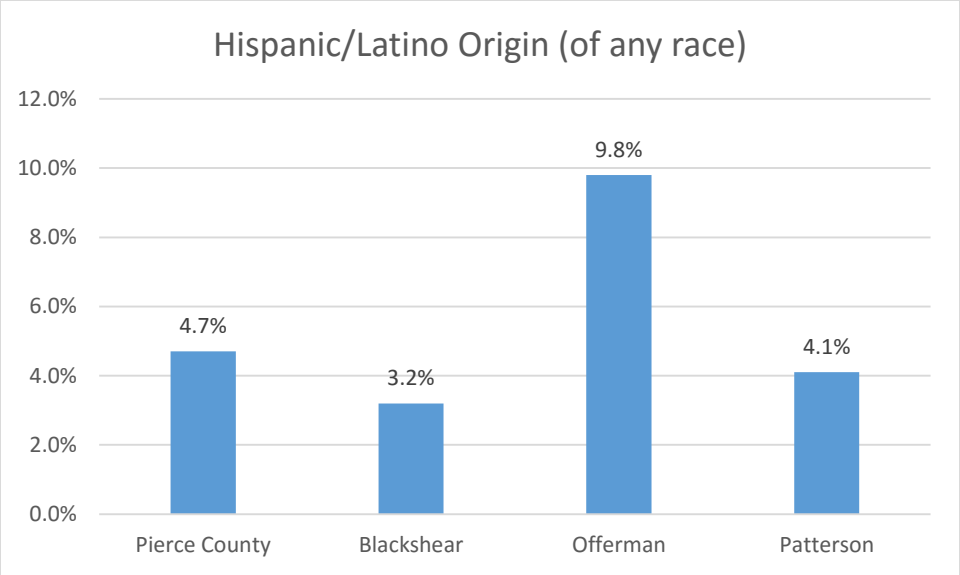
The percentage of the population aged 65 and older has increased in Pierce County and the City of Blackshear (18.2% and 9.7% respectively), has increased greatly (53.2%) in the City of Offerman, and has decreased by 18.3% in the City of Patterson.



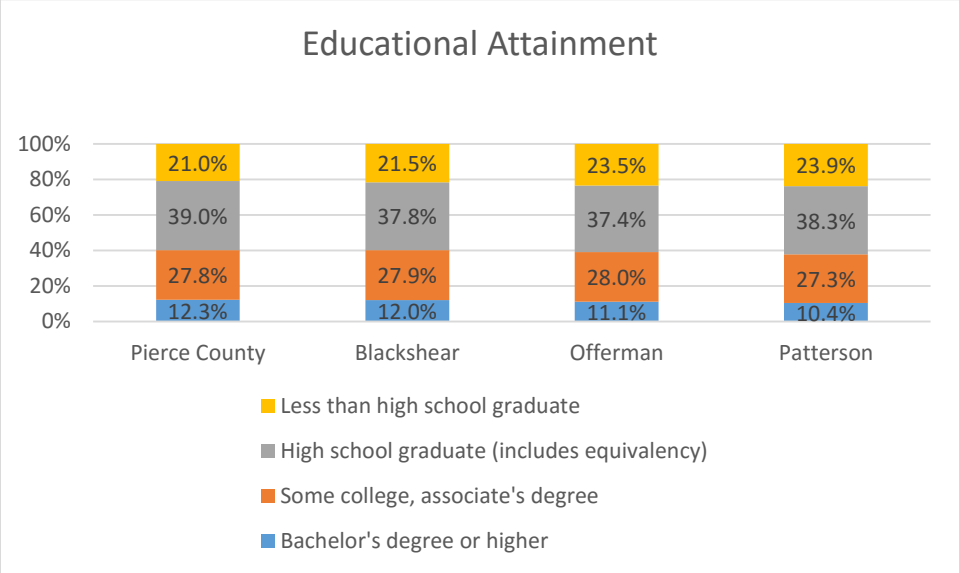
According to 2015 estimates, the age distribution in Pierce County is 16.2% over 65, 56.9% ages 20-64, and 26.9% under 20. In the City of Blackshear, the age distribution is 19.1% over 65, 55.2% ages 20-64, and 25.7% under 20. In the City of Offerman, the age distribution is 16.3% over 65, 57% ages 20-64, and 26.7% under 20. In the City of Patterson, the age distribution is 16.0% over 65, 57.3% ages 20-64, and 26.7% under 20.



The population of Pierce County is 85.4% White/Caucasian, 9.5% Black/African American, 2.3% some other race, 1.6% two or more races, 0.7% Asian, and 0.5% Native American. The City of Blackshear's population is 74.2% White/Caucasian, 21.5% Black/African American, 1.6% some other race, 1.2% two or more races, 0.9% Asian, and 0.6% Native American. The City of Offerman's population is 83.4% White/Caucasian, 10.9% Black/African American, 3.0% some other race, 1.4% two or more races, and 0.9% Native American. The City of Patterson's population is 82.1% White/Caucasian, 12.0% Black/African American, 3.2% some other race, 1.5% two or more races, 0.8% Asian, and 0.4% Native American.



Pierce County's population is 4.7% Hispanic/Latino, the City of Blackshear's population is 3.2% Hispanic/Latino, the City of Offerman's population is 9.8% Hispanic/Latino, and the City of Patterson's population is 4.1% Hispanic/Latino.



Among persons aged 25 or older, in Pierce County, 21.0% have no high school diploma, 39.0% are high school graduates (includes equivalency) with no further education, 27.8% have an associate's degree or some college, and 12.3% have a bachelor's or higher degree. Among persons aged 25 or older in the City of Blackshear, 21.5% have no high school diploma, 37.8% are high school graduates (includes equivalency) with no further education, 27.9% have an associate's degree or some college, and 12.0% have a bachelor's or higher degree. Among persons aged 25 or older in the City of Offerman, 23.5% have no high school diploma, 37.4% are high school graduates (includes equivalency) with no further education, 28.0% have an associate's degree or some college, and 11.1% have a bachelor's or higher degree. Among persons aged 25 or older in the City of Patterson, 23.9% have no high school diploma, 38.3% are high school graduates (includes equivalency) with no further education, 27.3% have an associate's degree or some college, and 10.4% have a bachelor's or higher degree.

Pierce County 5-Year Community Work Program Update
(2018-2022)

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
ECONOMIC DEVELOPMENT									
Develop programs to market the area and promote economic development in cooperation with the IDBA and Chamber of Commerce.	$200,000	Local	County/Cities/IDBA and Chamber of Commerce	1	x	x	x	x	x
Conduct County-wide recruiting efforts to attract appropriate employers.	Staff time	Local	County/Cities/IDBA and Chamber of Commerce	1	x	x	x	x	x
Conduct business analysis of the local economy composition and industry contribution of the Cities and the County.	Staff time	Local	County/Cities/IDBA and Chamber of Commerce	1	x	x			
Conduct a program that promotes the County's Work Ready status to all potential new businesses and industries.	$2,500 and staff time	Local	County/Cities/IDBA and Chamber of Commerce	1	x	x			
Conduct and support cultural activities and festivals in the Cities and County.	$75,000	Local	County and Cities	1	x	x	x	x	x
HOUSING									
Participate in the state's Georgia Initiative for Community Housing (GICH) program.	$5,000	Local and DCA	County and Cities	2	x	x	x	x	x
Update ordinances and codes to protect against insufficient and poor quality housing.	Staff time	Local	County	2	x	x	x	x	x
NATURAL RESOURCES									
Identify appropriate areas and funding sources for fee simple acquisition of environmentally sensitive lands.	$5,000	Local	County and Cities	3	x	x			
Evaluate ways to prioritize areas for additional greenspace acquisition/design.	Staff time	Local	County and Cities	3	x	x	x		
CULTURAL RESOURCES									
Establish an Historic District and create a Historic Resources Commission.	Staff time	Local and RC	County and Cities	4	x	x			

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
Establish historic resources protection ordinances within the County.	$3,500	Local	County	4	x	x	x		
Develop confederate prison war sites within Pierce County as local historical tourist areas.	Staff time	Grants	County	4	x	x	x	x	x
COMMUNITY FACILITIES & SERVICES									
Evaluate the feasibility of adopting capital improvement programs in each community.	Staff time	Local	County and Cities	5	x	x	x		
Evaluate financing methods for new infrastructure.	$2,000	Local	County and Cities	5	x	x	x	x	
Remodel vacant public buildings for community centers and public recreational use, as feasible.	$1 million	Local, CDBG, DNR, other grants	County and Cities	5	x	x	x	x	x
Implement improved recreational programs and facilities within the County.	$2.5 million	Local, State, Federal, Grants, DCA, Local Development Funds (LDF)	County and Cities	5	x	x	x	x	x
Implement public infrastructure projects that improve drainage and transportation systems, including maintaining and rehabilitating drainage canals in the County and all Cities.	$6 million	Local, GDOT, CDBG, other grants	County and Cities	5	x	x	x	x	x
Update the Blackshear/Pierce County/Patterson Volunteer Fire Department Master Plans, and conduct an ISO study.	$20,000	Local	County and Cities	5		x	x	x	x
Upgrade fire equipment in the Pierce County, Blackshear, Patterson and Offerman Volunteer Fire Department, as needed.	$1,000,000	Local/State/Federal	County and Cities	5	x	x	x	x	x
Explore areas where impact fee requirements would expedite infrastructure improvements.	Staff time	Local	County and Cities	5	x	x	x	x	x
Construct new jail with 200-225 person capacity	$14 million	Local/State/Federal/Grants	County	5		x	x	x	x

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
Centralize all recreational fields and facilities to maximize efficiency and convenience for all residents.	$2.5 million	Local/DNR/CDBG	County and Cities	5	x	x	x	x	x
Renovate vacant existing schools for reuse.	$19 million	Local	BOE	5	x	x	x	x	x
TRANSPORTATION									
Conduct traffic studies for new development in known congested areas.	$10,000 per intersection	Local, GDOT	County and Cities	5, 6	x	x	x	x	x
Work with GA DOT and others in developing a corridor congestion management plan.	$25,000	Local, GDOT	County and Blackshear	5, 6		x	x	x	
Organize a system for upgrading and modifying road design in order to increase public safety.	Staff time	Local	County and Cities	5, 6	x	x	x	x	x
Implement measures to improve traffic flow design and operations, specifically in congested areas.	$5 million	Local, GDOT, Grants	County and Cities	5, 6	x	x	x	x	x
Promote the existing rural transit system and seek additional funds in order to operate the system 7 days per week.	$5,000	Local	County and Cities	5, 6	x	x	x	x	x
Pave 75 miles of dirt roads	$22.5 million	Local, State, Federal	County and Cities	5, 6	x	x	x	x	x
Work with the DOT to establish a school zone at County Farm Road and Highway 84.	$5,000	GDOT	County and BOE	5, 6	x	x	x	x	x
Develop strong pedestrian/bicycle connections to encourage residents to walk/bike to work, shop, and other designations in the community.	$60,000	Local, GDOT, Grants	County and Cities	5, 6	x	x	x	x	x
LAND USE									
Adopt large-lot zoning (minimum 10-acre lots) to preserve the economic function of agriculture, livestock and forestry in Pierce County.	Staff time	Local	County	8	x	x			

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
Evaluate the benefits and costs of employing a conservation subdivision ordinance consistent with policy.	Staff time	Local	County and Cities	3, 8	x	x			
Adopt regulations allowing limited land splits for heirs.	Staff time	Local	County	8	x	x	x		
Update existing zoning ordinances and maps that will be administered through the Joint Planning Commission.	$50,000	Local	County and Cities	8	x	x			
Adopt ordinances to protect environmentally sensitive areas.	Staff time	Local	County and Cities	8	x	x	x	x	x
Access and review successful land planning and development concepts from other communities.	$3,000	Local	County and Cities	8	x	x	x	x	x
Update the public on new zoning laws and ordinances through Public Awareness measures.	$5,000	Local	County and Cities	8	x	x	x	x	x
Adopt a "right to farm" ordinance.	$5,000	Local	County	8	x				
Develop ordinances that will encourage infill and cluster development.	$7,500	Local	County	8	x	x	x	x	x
Evaluate the benefits and costs of prohibiting junkyards and equipment storage in areas that would be visible from the highway.	Staff time	Local	County	8	x	x	x		
Evaluate the benefits and costs of developing ordinances to guide the placement of mobile home parks and single family manufactured homes in the County and Cities.	Staff time	Local	County	2, 8	x	x	x	x	x
Develop and adopt a rights-of-way ordinance for future development, including commercial, industrial and residential.	$12,500	Local/DOT	County and Cities	8	x	x	x	x	x
Extend Money Hole Rd to Hwy 121	$10 million	Local/GDOT	County	8		x	x	x	x
INTERGOVERNMENTAL COORDINATION									
(none identified)									

City of Blackshear 5-Year Community Work Program Update
(2018-2022)

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
ECONOMIC DEVELOPMENT									
Conduct a program to recruit local and outside entrepreneurs to expand or locate in downtown Blackshear.	Staff time	Local governments, grants	City of Blackshear, Main Street, Chamber of Commerce, IDBA	1	x	x	x	x	x
Establish an Enterprise Zone or Opportunity Zone within the City to encourage redevelopment and infill.	$10,000	Local, RC	City of Blackshear	1	x	x	x		
HOUSING									
Establish a redevelopment strategy for identified declining areas in the City of Blackshear, and develop a Redevelopment Plan.	$15,000	Local	City of Blackshear	2	x	x	x	x	x
Redevelop housing in declining areas that will facilitate the provision of affordable housing to low and moderate income families.	$100,000	USDA/CHIP/CDBG	City of Blackshear	2	x	x	x	x	x
CULTURAL RESOURCES									
Nominate Downtown Blackshear for the National Register of Historic Places.	Staff time	Local and DDA	City of Blackshear	4	x				
COMMUNITY FACILITIES & SERVICES									
Evaluate current water distribution and sewage collection systems, determine and correct deficiencies (including new well/water tower), and maximize capacity for future growth areas.	$5 million	Local, USDA, CDBG, other grants/loans	City of Blackshear	5	x	x	x	x	x
Construct public safety building	$3 million	Local, grants, loans	City of Blackshear	5		x	x	x	
Purchase police cars	$150,000	Local, grants, loans	City of Blackshear	5	x		x		x
Renovate the old train depot	$500,000	Local, grants	City of Blackshear	5		x	x	x	
Purchase 25 acres for solid waste facility / yard debris disposal site	$150,000	Local, grants	City of Blackshear	5	x	x	x	x	

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
Construct wastewater treatment plant	$7 million	Local, USDA, CDBG, other grants/loans	City of Blackshear	5	x	x			
Install solar panels for wastewater treatment plant	$2.5 million	Local, grants	City of Blackshear	5	x	x			
TRANSPORTATION									
Repave and resurface streets	$150,000 per year	Local, LMIG	City of Blackshear	6	x	x	x	x	x
Repair sidewalks	$500,000	Local, SPLOST	City of Blackshear	6	x	x	x	x	x

City of Patterson 5-Year Community Work Program Update
(2018-2022)

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
ECONOMIC DEVELOPMENT									
Conduct a program to recruit local and outside entrepreneurs to expand or locate in downtown Patterson.	Staff time	Local governments, grants	City of Patterson, Main Street, Chamber of Commerce, IDBA	1	x	x	x	x	x
Establish an Enterprise Zone or Opportunity Zone within the City to encourage redevelopment and infill.	$10,000	Local, grants	City of Patterson	1	x	x	x		
Update website and create infrastructure to make Patterson a Camera-Ready Community.	Staff time	Local	City of Patterson	1	x	x			
Secure funding for economic development	$1,000,000	Local, State, Federal, grants	City of Patterson	1	x	x	x	x	x
HOUSING									
Develop a redevelopment plan	$5,000	Local, State, Federal, grants	City of Patterson	2		x	x	x	
Redevelop housing in declining areas that will facilitate the provision of affordable housing to low and moderate income families.	$200,000	USDA/CHIP/CDBG	City of Patterson	2	x	x	x	x	x
CULTURAL RESOURCES									
Nominate Downtown Patterson for the National Register of Historic Places.	Staff time	Local and DDA	City of Patterson	4	x				
COMMUNITY FACILITIES & SERVICES									
Evaluate current water distribution and sewage collection systems, determine and correct deficiencies, and maximize capacity for future growth areas.	$200,000	Local, State, Federal, grants	City of Patterson	5	x	x	x	x	x
Construct walking track/trail	$200,000	Local, State, Federal, grants	City of Patterson	5		x	x	x	x
Construct playground	$30,000	Local, grants	City of Patterson	5		x			

PROJECTS	ESTIMATED COST	FUNDING SOURCE	RESPONSIBLE PARTY	GOAL	FY 18	FY 19	FY 20	FY 21	FY 22
Repair tennis courts	$30,000	Local, grants	City of Patterson	5		x			
Renovate Downtown buildings	$1,000,000	Local, State, Federal, grants	City of Patterson	5		x	x	x	x
Complete renovation of Eagle Station	$330,000	Local, State, Federal, grants	City of Patterson	5	x				
Purchase 1 new fire truck	$200,000	Local, State, Federal, grants	City of Patterson	5	x				
Purchase 1 new police car	$50,000	Local, State, Federal, grants	City of Patterson	5	x				
TRANSPORTATION									
Install and/or repair sidewalks in needed places throughout the community.	$200,000	Local, State, Federal, grants	City of Patterson	6	x	x	x	x	x
Repair and/or resurface approximately 3 miles of roads (including drainage improvements), including Industrial Blvd. and Tyre Bridge Road.	$250,000	Local, State, Federal, grants	City of Patterson	6	x	x	x	x	x

Five Year Short Term Work Program

The STWP identifies specific implementation actions the local government intends to take during the interim planning period. The plan should include any ordinances, administrative processes, community improvements or investments, financing arrangements, or other programs or initiatives to be put in place to implement the plan. The STWP includes the following information for each listed activity:

A brief description of the events:

- Timeframe for undertaking the activity
- Responsible party for implementing the activity
- Estimated cost (if any) of implementing the activity
- Funding source if applicable

Short Term Work Program 2017-2021

HOUSING

Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
1. Policy 1.2.1 Provide funding for the building and code enforcement program.	$1000	Administrative and user fees	2017-2021	City and user fees

ECONOMIC DEVELOPMENT

Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
2. Policy 1.7.1 Provide funding for programs that attract businesses that are compatible with our goals, natural resources, and unique geological features.	$500	General Funds	2017-2021	City
3. Policy 1.7.1 Recruit new local businesses	$100	General Funds	2017-2021	City

COMMUNITY FACILITIES AND INFRASTRUCTURE

Project Number/Policy	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
4. Policy 1.5.1 Phase one: Collect funds for the constructing of a multipurpose building to provide educational services, senior center programs and after school programs. Also to be used as a public information center and for community events	$100,000	General Funds, CDBG, and SPLOST	2017-2021	City
5. Policy 1.4.6 Purchase land for future capital projects	$1,000	General Funds	2017-2021	City
6. Policy 1.5.1 Purchase recreational equipment for park	$500	DNR and General Funds	2017-2021	City
7. Policy 2.1.5 Drainage and Street Improvements	$25,000	General Funds, CDBG, and SPLOST	2017-2021	City
8. Policy Purchase equipment to help maintain streets and right-a-ways	$5,000	General Funds	2017-2021	City
9. Policy 1.4.2 Purchase equipment for fire department	$1,000	General Funds, Local assistance grants and Homeland Security Grants	2017-2021	City

10. Policy 2.1.1 Develop pathways or sidewalks to maintain community connectively	$2,000	General Funds	2017-2021	City and Developers

NATURAL AND HISTORIC RESOURCES ELEMENT

Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
11. Policy 1.8.1 Inventory structures that are at least 50 years of age to determine if they are of historical significant.	$100	General Funds	**2017-2021**	City

LAND USE ELEMENT

Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
12. Policy 1.6.1 Develop a base map with the parcel and land use layers.	$100	General Funds	**2017-2021**	City, volunteers, and staff
13. Policy 1.6.1 Require contractors to submit CADD and shapefiles when the project involves improvements on public property.	$100	General Funds	**2017-2021**	City

INTERGOVERNMENTAL COORDINATION

Project Number/Activity	Annual Estimated Cost	Funding Source	Implementation Year	Responsibility
14. Policy 1.1.1 Purse intergovernmental cooperation when cost effective.	N/A	N/A	2017-2021	City
15. Policy 1.1.2 Promote the sharing of services.	N/A	N/A	2017-2021	City
16. Policy 1.1.3 Participate in committees, groups, and organizations promoting intergovernmental cooperation.	N/A	N/A	2017-2021	City

Department of Revenue

Return

GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:PIERCE County #:113 Tax District:PIERCE COUNTY

Dist #: 00 Assessment %: 040 Tot Parcels:12419

RESIDENTIAL

Code	Count	Acres	40% Value
R1	19,738		174,638,465
R3	5,399	5,590.6	26,126,840
R4	3,953	13,564.92	27,627,182
R5	4	179.42	317,590
R6	8		10,237
R7			
R9	1	0	4,297
RA	1		7,000
RB	1,257		1,616,917
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL

Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC

Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL

Code	Count	Acres	40% Value
A1	2,474		21,791,677
A3			
A4	190	1,565.21	1,697,015
A5	544	38,426.87	20,019,657
A6	544		1,135,404
A7			
A9	1	0	38,304
AA			
AB			
AF	1		4,020
AI			
AZ			

PREFERENTIAL

Code	Count	Acres	40% Value

UTILITY

Code	Count	Acres	40% Value
U1			
U2	38	20.48	20,960,870
U3	1	1.14	0
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY

Code	Count	40% Value
E0		
E1	219	21,656,743
E2	299	6,686,647
E3	14	554,460
E4	22	144,123
E5		
E6	20	3,088,989
E7		
E8		
E9	5	13,124,229
TOTAL	579	45,255,191

HOMESTEAD AND PROPERTY EXEMPTIONS

Code	Count	M&O	Bond
S1	2,674	5,344,949	
SC	54	108,000	
S2	0	0	
S3	115	228,232	
S4	876	3,493,995	
S5	42	1,571,761	
SD	33	1,451,501	
SS	1	40,996	
SE	0	0	
SG	0	0	

P3			
P4			
P5			
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	341	5,503.06	6,162,411
V5	1,138	125,347.58	75,152,160
V6	681		1,325,467

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5	32	20,930.4	5,106,904
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5	32	20,930.4	5,773,815
F9			
Total	32	20,930.4	5,773,815

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	1,073		24,545,075
C3	323	287.15	4,998,248
C4	146	463.29	3,328,504
C5	1	202.24	120,000
C7			
C9			
CA			
CB	2		588
CF	580		13,618,920
CI	270		5,790,632
CP			
CZ			

INDUSTRIAL

Code	Count	Acres	40% Value
I1	162		7,823,982
I3	7	21.39	63,025
I4	20	168.91	533,040
I5	7	535.73	1,021,549

S6			
S7			
S8			
S9			
SF	17	18,508,649	
SA	0	0	
SB	0	0	
SP	1,375	1,018,705	
SH	0	0	
ST	0	0	
SV	1,479	55,024,445	
SJ	32	1,868,733	
SW	0	0	
SX			
SN	201	0	
DO NOT USE CODES L1-L9 ON STATE SHEET			
L1	1,733	0	
L2	0	0	
L3	103	0	
L4	824	0	
L5			
L6			
L7			
L8			
L9	1,542	11,274,573	
TOTAL	11,101	99,934,539	0

SUMMARY

Code	Count	Acres	40% Value
Residential	30,361	19,334.94	230,348,528
Residential Transitional			
Historical			
Agricultural	3,754	39,992.08	44,686,077
Preferential			
Conservation Use	2,160	130,850.64	82,640,038
Brownfield Property			
Forest Land Cons Use	32	20,930.4	5,106,904
Environmentally Sensitive			
Commercial	2,395	952.68	52,401,967
Industrial	248	726.03	44,006,772
Utility	39	21.62	20,960,870
Motor Vehicle	13,148		23,322,630
Mobile Home	1,873		10,172,814
Timber 100%	194	13,684	9,748,365
Heavy Equipment	0		0
Gross Digest	54,204	226,492.39	523,394,965
Exemptions Bond			
Net Bond Digest			523,394,965
Gross Digest	54,204	226,492.39	523,394,965
Exemptions-M&O			99,934,539
Net M&O Digest			423,460,426

I7		
I9		
IA		
IB		
IF	18	11,764,545
II	17	4,291,982
IP	17	18,508,649
IZ		

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	423,460,426	.000	0.00
BOND	523,394,965	.000	0.00

Return

Department of Revenue

Return

GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:PIERCE County #:113 Tax District:BLACKSHEAR

Dist #: 05 Assessment %: 040 Tot Parcels:3595

RESIDENTIAL

Code	Count	Acres	40% Value
R1	2,624		34,119,036
R3	1,658	897.09	6,761,383
R4	26	141.97	332,839
R5	1	54.72	118,982
R6			
R7			
R9			
RA			
RB	154		140,154
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL

Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC

Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL

Code	Count	Acres	40% Value
A1	3		7,702
A3			
A4	1	1	2,085
A5	1	25	13,831
A6			
A7			
A9			
AA			
AB			
AF			
AI			
AZ			

PREFERENTIAL

Code	Count	Acres	40% Value

UTILITY

Code	Count	Acres	40% Value
U1			
U2	9	1.62	2,644,907
U3			
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY

Code	Count	40% Value
E0		
E1	118	4,870,804
E2	113	4,203,056
E3	7	475,302
E4	1	54,672
E5		
E6	11	2,615,191
E7		
E8		
E9	2	56,343
TOTAL	252	12,275,368

HOMESTEAD AND PROPERTY EXEMPTIONS

Code	Count	M&O	Bond
S1	366	0	
SC			
S2			
S3			
S4			
S5	10	303,364	
SD	12	563,256	
SS	0	0	
SE	0	0	
SG	0	0	

P3			
P4			
P5			
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	1	18.38	38,318
V5	1	75.74	34,186
V6			

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5			
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5			
F9			
Total			

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	566		16,627,150
C3	218	177.73	3,580,742
C4	37	122.24	1,630,096
C5			
C7			
C9			
CA			
CB	1		120
CF	279		6,495,492
CI	152		3,559,785
CP			
CZ			

INDUSTRIAL

Code	Count	Acres	40% Value
I1	58		3,710,971
I3	3	11.44	48,029
I4	11	88.52	328,647

S6			
S7			
S8			
S9			
SF	7	2,691,123	
SA	0	0	
SB	0	0	
SP	265	221,154	
SH	0	0	
ST	0	0	
SV	2	50,057	
SJ	0	0	
SW	0	0	
SX			
SN	110	0	

DO NOT USE CODES L1-L9 ON STATE SHEET

L1			
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			
TOTAL	772	3,828,954	0

SUMMARY

Code	Count	Acres	40% Value
Residential	4,463	1,093.78	41,472,394
Residential Transitional			
Historical			
Agricultural	5	26	23,618
Preferential			
Conservation Use	2	94.12	72,504
Brownfield Property			
Forest Land Cons Use			
Environmentally Sensitive			
Commercial	1,253	299.97	31,893,385
Industrial	95	99.96	13,542,304
Utility	9	1.62	2,644,907
Motor Vehicle	1,476		2,896,380
Mobile Home	8		30,410
Timber 100%	0	0	0
Heavy Equipment	0		0
Gross Digest	7,311	1,615.45	92,575,902
Exemptions Bond			
Net Bond Digest			92,575,902
Gross Digest	7,311	1,615.45	92,575,902
Exemptions-M&O			3,828,954
Net M&O Digest			88,746,948

I5		
I7		
I9		
IA		
IB		
IF	8	5,619,590
II	8	1,143,944
IP	7	2,691,123
IZ		

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	88,746,948	11.990	1,064,075.91
BOND	92,575,902	.000	0.00

Return

Department of Revenue

Return

GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:PIERCE County #:113 Tax District:PATTERSON

Dist #: 10 Assessment %: 040 Tot Parcels:558

RESIDENTIAL

Code	Count	Acres	40% Value
R1	639		8,040,103
R3	409	359.64	1,266,977
R4	35	134.8	270,377
R5			
R6			
R7			
R9			
RA			
RB	49		27,568
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL

Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC

Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL

Code	Count	Acres	40% Value
A1	15		214,915
A3			
A4			
A5	6	337.71	195,941
A6			
A7			
A9			
AA			
AB			
AF			
AI			

UTILITY

Code	Count	Acres	40% Value
U1			
U2	10	5.35	1,010,315
U3	1	1.14	0
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY

Code	Count	40% Value
E0		
E1	22	494,042
E2	24	323,710
E3	1	4,879
E4	1	4,423
E5		
E6	2	355,624
E7		
E8		
E9		
TOTAL	50	1,182,678

HOMESTEAD AND PROPERTY EXEMPTIONS

Code	Count	M&O	Bond
S1	94	0	
SC			
S2			
S3			
S4			
S5	2	49,562	
SD	0	0	
SS	0	0	
SE	0	0	

AZ

PREFERENTIAL

Code	Count	Acres	40% Value
P3			
P4			
P5			
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	6	59.51	99,449
V5	5	345.56	229,519
V6	2		4,172

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5			
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5			
F9			
Total			

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	121		1,593,281
C3	57	44.64	978,233
C4	7	23.67	93,220
C5			
C7			
C9			
CA			
SG	0	0	
S6			
S7			
S8			
S9			
SF	2	0	
SA	0	0	
SB	0	0	
SP	67	37,330	
SH	0	0	
ST	0	0	
SV	11	252,661	
SJ	0	0	
SW	0	0	
SX			
SN	19	0	

DO NOT USE CODES L1-L9 ON STATE SHEET

L1			
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			
TOTAL	195	339,553	0

SUMMARY

Code	Count	Acres	40% Value
Residential	1,132	494.44	9,605,025
Residential Transitional			
Historical			
Agricultural	21	337.71	410,856
Preferential			
Conservation Use	13	405.07	333,140
Brownfield Property			
Forest Land Cons Use			
Environmentally Sensitive			
Commercial	266	68.31	4,406,417
Industrial	22	16.82	1,021,352
Utility	11	6.49	1,010,315
Motor Vehicle	348		563,790
Mobile Home	20		52,094
Timber 100%	0	0	0
Heavy Equipment	0		0
Gross Digest	1,833	1,328.84	17,402,989
Exemptions Bond			
Net Bond Digest			17,402,989
Gross Digest	1,833	1,328.84	17,402,989
Exemptions-M&O			339,553

CB		
CF	58	1,253,547
CI	23	488,136
CP		
CZ		

INDUSTRIAL

Code	Count	Acres	40% Value
I1	14		317,492
I3	1	5.97	14,328
I4	2	10.85	26,040
I5			
I7			
I9			
IA			
IB			
IF	2		238,751
II	1		18,293
IP	2		406,448
IZ			

Net M&O Digest	17,063,436

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	17,063,436	8.881	151,540.38
BOND	17,402,989	.000	0.00

Return

Appendix C

APPENDIX C

Other Planning Documents

I

Community Wildfire Protection Plan

GEORGIA FORESTRY COMMISSION

Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Pierce County, Georgia

A Program of the Georgia Forestry Commission
with support from the U.S. Forest Service

JULY 12, 2012

Prepared by;
Donald James, Ranger II Pierce County
Will Fell CWPP Specialist
Georgia Forestry Commission
6047 E Main St
Patterson, GA 31557

The following report is a collaborative effort among various entities; the representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plan's contents:

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PLAN CONTENTS

Preface

The extreme weather conditions that are conducive to wildfire disasters (usually a combination of extended drought, low relative humidity and high winds) can occur in this area of Georgia as infrequently as every 10-15 years. This is not a regular event, but as the number of homes that have been built in or adjacent to forested or wildland areas increases, it can turn a wildfire under these weather conditions into a major disaster. Wildfires move fast and can quickly overwhelm the resources of even the best equipped fire department. Advance planning can save lives, homes and businesses.

This Community Wildfire Protection Plan (CWPP) includes a locally assessed evaluation of the wildland urban interface areas of the county, looking at the critical issues regarding access to these areas, risk to properties from general issues such as building characteristics and "fire wise" practices and response from local fire fighting resources. It further incorporates a locally devised action plan to mitigate these risks and hazards though planning, education and other avenues that may become available to address the increasing threat of wildland fire. The CWPP does not obligate the county financially in any way, but instead lays a foundation for improved emergency response if and when grant funding is available to the county.

The Plan is provided at no cost to the county and can be very important for county applications for hazard mitigation grant funds through the National Fire Plan, FEMA mitigation grants and Homeland Security. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities (counties) that seek grants form the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

This plan will:

- Enhance public safety
- Raise public awareness of wildfire hazards and risks
- Educate homeowners on how to reduce home ignitability
- Build and improve collaboration at multiple levels

The public does not have to fall victim to this type of disaster. Homes (and communities) can be designed, built and maintained to withstand a wildfire even in the absence of fire equipment and firefighters on the scene. It takes planning and commitment at the local level before the wildfire disaster occurs and that is what the Community Wildfire Protection Plan is all about.

I. OBJECTIVES

The mission of the following report is to set clear priorities for the implementation of wildfire mitigation in Pierce County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will protect this community and its essential infrastructure. It also includes a plan for wildfire suppression. Specifically, the plan includes community-centered actions that will:

- Educate citizens on wildfire, its risks, and ways to protect lives and properties,
- Support fire rescue and suppression entities,
- Focus on collaborative decision-making and citizen participation,
- Develop and implement effective mitigation strategies, and
- Develop and implement effective community ordinances and codes.

II. COMMUNITY COLLABORATION

The core team convened on October 27th, 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

Pierce County EMA
Pierce County Volunteer Fire Depts
Pierce County Board of Commissioners
City of Blackshear Fire Department
City of Patterson Fire Department
Georgia Forestry Commission

It was decided to conduct community assessments on the basis individual fire districts in the county. The chiefs of the fire departments in the county assessed their districts and reconvened on June 25th, 2012 for the purpose of completing the following:

Risk Assessment	Assessed wildfire hazard risks and prioritized mitigation actions.
Fuels Reduction	Identified strategies for coordinating fuels treatment projects.
Structure Ignitability	Identified strategies for reducing the ignitability of structures within the Wildland interface.
Emergency Management	Forged relationships among local government and fire districts and developed/refined a pre-suppression plan.
Education and Outreach	Developed strategies for increasing citizen awareness and action and to conduct homeowner and community leader workshops.

III. COMMUNITY BACKGROUND AND EXISTING SITUATION

Background

Covering 343 square miles in southeast Georgia, Pierce County is the state's 120th county, created in 1857 from Appling and Ware counties. It was named for Franklin Pierce, the fourteenth president of the United States and an anti-abolitionist from New Hampshire. The land was originally held by Creek Indians who were expelled from their territory by General David Blackshear under orders from the U.S. government after the start of the War of 1812 (1812-15). (Blackshear also directed the building of a military road through the area in 1814-15.) Parts of Pierce County were later appropriated to form Bacon County, in 1914, and Brantley County, in 1920.

The county seat is Blackshear, which was named by the state legislature before the town was created. In 1858 those responsible for choosing a site decided to build the community around a depot constructed in 1857 by the Atlantic and Gulf Railroad. The first courthouse in Blackshear was built in 1858. When it burned down in 1875, a new courthouse was constructed. This building, replaced in 1902 by the current courthouse, is now a private residence. Remodeled in the 1970s and provided with an addition in 1975, the current courthouse was placed on the National Register of Historic Places in 1980. In addition to Blackshear, two other incorporated towns, Offerman and Patterson, are found in Pierce County.

The Civil War (1861-65) began soon after Pierce County was formed, with the result that many of its healthy young men went to war before they could join in the formation of communities. The few townspeople who remained in the county's 333 households found themselves hosts to a temporary Confederate prisoner-of-war camp from November 1864 through January 1865. Nearly 5,000 Union captives were brought to Blackshear to prevent their release by Union general William T. Sherman as he marched through the state; the prisoners were subsequently sent on to Savannah for the same reason.

During the nineteenth century, agriculture was the primary occupation in Pierce County. The county's lush pine forests were tapped for both timber and turpentine. The timber industry brought new residents to work in the county's forests and sawmills and contributed to its growth. Businesses developed to serve those who came, and railroad lines were brought in to transport people and products. Cotton was also a major product until the 1920s, when a boll weevil infestation devastated much of Georgia's harvest. Many of Pierce County's cotton planters shifted to tobacco culture, which was the county's major agricultural product from the 1920s until late in the twentieth century.

Blackshear Presbyterian Church, built in 1874, is the oldest Presbyterian church in the county. The Reverend I. S. K. Axson of Savannah (grandfather of U.S. president Woodrow Wilson's first wife, Ellen Axson) performed the dedication service, and the church's first pastor, the Reverend Richard Quarterman Way, was a retired missionary from China. Shiloh Primitive Baptist Church and its cemetery, which is the oldest in the county, was first used in the 1830s. Civilians as well as veterans of all American conflicts through the Vietnam War (1964-73) are buried there.

Other historic sites include the Brantley Brick Warehouse. Dating from around 1900, it is one of the oldest brick tobacco warehouses in Georgia and has been converted into retail and office space. The site of the temporary Confederate prison camp is indicated by a historical marker on the outskirts of Blackshear. The Pierce County Jail, built in 1894, was added to the National Register of Historic Places in 1980. Used until the 1920s and garnering the nickname "Hanging Jail" because of its high tower, it was the third of the county's five jails.

The Heritage Museum, located in the Blackshear Depot, mounts displays pertaining to the lives of the early settlers in the county, with exhibitions on agriculture, church histories, and the Civil War. It also has a large photograph and document collection as well as a genealogical library. The Pierce County Chamber of Commerce is housed in an Atlantic Coast Line Railroad depot, which was added to the National Register of Historic Places in 2000.

The Marian Anderson Library Rosenwald School, in Blackshear, was completed in 1926. This school was one of many Rosenwald schools built in Georgia. Currently used for storage by a local business, it once served as a school for the area's African American children and housed a collection of books and paintings relating to the African American experience. The collection was moved in the 1950s to the Lee Street Resource Center, which today offers youth mentoring programs.

Pierce County shares the Little Satilla Wildlife Management Area with Wayne County.

According to the 2010 U.S. census, the population of Pierce County was 18,758, an increase from the 2000 population of 15,636.

Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia

Existing Situation

Pierce County in south east Georgia, is still 51% forested, despite a strong agricultural presence in the county. Perhaps with the exception of the large blocks of woodlands on the eastern side of the county, there are homes and communities scattered throughout. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county even on the edges of the three incorporated cities.

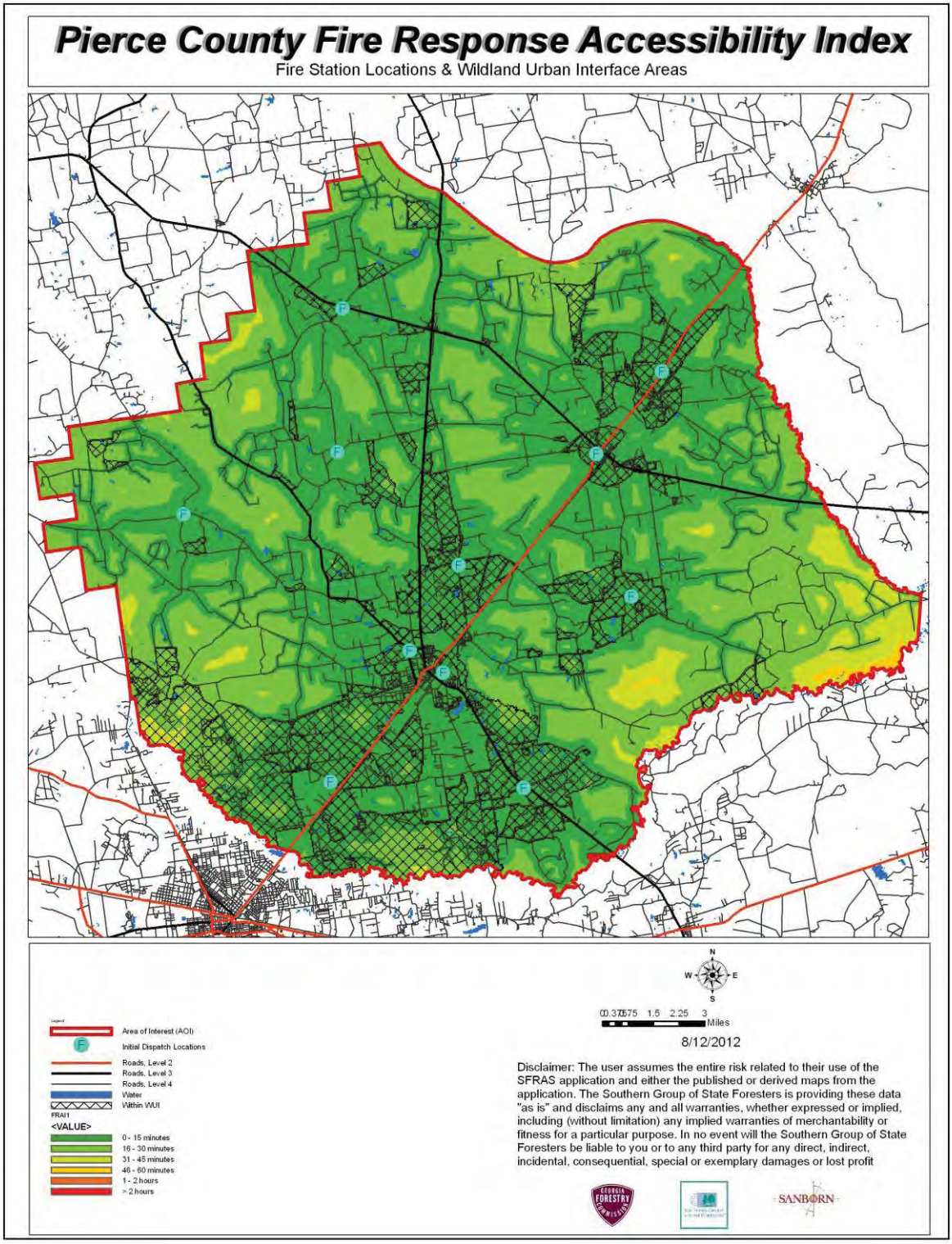
Pierce County is protected by 11 organized volunteer fire departments located in Blackshear (2 stations), Patterson, Offerman, Hacklebarney, Sunset, Walkerville, Northside, Southside and Bearville. The Georgia Forestry Commission maintains a county protection unit located one mile east of Patterson on GA Hwy 32 to respond to wildfires throughout the county. The cities of Blackshear, Patterson and Offerman are serviced by pressurized water systems with hydrants available.

Over the past 54 years, Pierce County has averaged 64 reported wildland fires per year, burning an average of 261 acres per year. Using more recent figures over the past 20 years, this number has dropped somewhat to an average of 56 fires per year burning on average 182 acres annually. The marked decrease in acres may be due to better detection and equipment over the years. The occurrence of these fires during this later period shows a pronounced peak during the months of January, February, March, and April accounting for 54% of the annual fires and 67% of the average acreage burned. There is a significant decrease during the remainder of the year, particularly during the fall months.

Over the past 20 years, the leading causes of these fires, was debris burning causing 48% of the fires and 53% of the acres burned. Over the past six years records show that over 40% of the debris fires originated from residential burning.

Georgia Forestry Commission Wildfire Records show that in the past seven years, ten homes damaged by wildfire in Pierce County resulting in estimated loss of $253,000 along with 17 outbuildings valued at $77,200. According to reports during this period 98 homes have been directly or indirectly threatened by these fires. Additionally three vehicles valued at $2,500 and seven other pieces of mechanized equipment valued at $10,300 were lost. This is a significant loss of non timber property attributed to wildfires in Pierce County.

IV. COMMUNITY BASE MAP



V. COMMUNITY WILDFIRE RISK ASSESSMENT

The Wildland-Urban Interface

There are many definitions of the Wildland-Urban Interface (WUI), however from a fire management perspective it is commonly defined as an area where structures and other human development meet or intermingles with undeveloped wildland or vegetative fuels. As fire is dependent on a certain set of conditions, the National Wildfire Coordinating Group has defined the wildland-urban interface as a set of conditions that exists in or near areas of wildland fuels, regardless of ownership. This set of conditions includes type of vegetation, building construction, accessibility, lot size, topography and other factors such as weather and humidity. When these conditions are present in certain combinations, they make some communities more vulnerable to wildfire damage than others. This "set of conditions" method is perhaps the best way to define wildland-urban interface areas when planning for wildfire prevention, mitigation, and protection activities.

There are three major categories of wildland-urban interface. Depending on the set of conditions present, any of these areas may be at risk from wildfire. A wildfire risk assessment can determine the level of risk.

1. "Boundary" wildland-urban interface is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.

2. "Intermix" wildland-urban interface areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.

3. "Island" wildland-urban interface, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands.
(courtesy *Fire Ecology and Wildfire Mitigation in Florida* 2004)

Wildland Urban Interface Hazards

Firefighters in the wildland urban interface may encounter hazards other than the fire itself, such as hazardous materials, utility lines and poor access.

Hazardous Materials

- Common chemicals used around the home may be a direct hazard to firefighters from a flammability, explosion potential and/or vapors or off gassing. Such chemicals include paint, varnish and other flammable liquids, fertilizer, pesticides, cleansers, aerosol cans, fireworks, batteries and ammunition. In addition, some common household products such as plastics may give off very toxic fumes when they burn. Stay out of smoke form burning structures and any unknown sources such as trash piles.

Illicit Activities

- Marijuana plantations or drug production labs may be found in the wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered.

Propane Tanks

- Both large (household size) and small (gas grill size) liquefied propane gas (LPG) tanks can present hazards to firefighters, including explosion. See the "LPG Tank Hazards" discussion for details

Utility Lines

- Utility Lines may be located above and below ground and may be cut or damaged by tools or equipment. Don't spray water on utility lines or boxes.

Septic Tanks and Fields

- Below ground structures may not be readily apparent and may not support the weight of engines or other equipment.

New Construction Materials

- Many new construction materials have comparatively low melting points and may "off-gas" extremely hazardous vapors. Plastic decking materials that resemble wood are becoming more common and may begin softening and losing structural strength at 180 degrees F, though they normally do not sustain combustion once direct flame is removed. However if they continue to burn they exhibit the characteristics of flammable liquids.

Pets and Livestock

- Pets and livestock may be left when residents evacuate and will likely be highly stressed making them more inclined to bite and kick. Firefighters should not put themselves at risk to rescue pets or livestock.

Evacuation Occurring

- Firefighters may be taking structural protect actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property and firefighters may need to disengage from fighting fire to contact law enforcement officers for assistance. In most jurisdictions firefighters do not have the authority to force evacuations. Firefighters should not put themselves at risk trying to protect someone who will not evacuate!

Limited Access

- Narrow one-lane roads with no turn around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized up and an evacuation plan for all emergency personnel should be developed.

The wildland fire risk assessments conducted in 2012 by the Pierce County Fire Departments returned a number of areas in the moderate to high range. The risk assessment instrument used to evaluate wildfire hazards to Pierce County's WUI was the Hazard and Wildfire Risk Assessment Checklist. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard scores for Pierce County:

- Unpaved roads and private driveways with inadequate culverts.
- Narrow roads without drivable shoulders and inadequate overhead clearance
- Dead-end roads without "turnarounds"
- Access blocked by railroads
- Lack of uniform address signs
- Minimal defensible space around structures
- Homes with wooden siding
- Lack of pressurized or non-pressurized water systems available outside of cities.
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

Area/ Community	Community Access	Surrounding Vegetation	Bldg Construction	Fire Protection	Utilities	Add. Factors	Score	Hazard Rating
Blackshear	3	15	0	4	1	5	28	Low
Patterson	3	15	0	4	4	5	31	Low
Offerman	14	20	0	20	7	15	76	High
Hacklebarney	14	20	0	12	4	10	60	Moderate
Walkerville	14	20	0	18	7	15	74	Moderate
Otter Creek	14	20	0	8	7	20	69	Moderate
Bearville	14	20	0	12	7	19	62	Moderate
Sunset	14	20	0	18	7	15	74	Moderate
Southside	14	20	0	12	7	12	65	Moderate
Northside	14	20	0	18	7	15	74	Moderate

Southern Fire Risk Assessment System Maps.

The attached maps were generated from a computerized Geographical Information System (GIS) program developed by the Sanborn Company under contract from the Southern Group of State Foresters to model the various risks to life and property within the southeastern US. The program is known as the Southern Fire Risk Assessment System (SFRAS). It utilizes multiple layers of data developed cooperatively from the various states and the US Forest Service under the Southern Wildfire Risk Assessment (SWRA)

Wildland Urban Interface maps are developed using data from the SILVIS Lab at the University of Wisconsin at Madison. WUI is composed of both interface and intermix communities. In both interface and intermix communities, housing must meet or exceed a minimum density of one structure per 40 acres. Intermix communities are places where housing and vegetation intermingle. In intermix, wildland vegetation is continuous, more than 50 percent vegetation, in areas with more than one house per 40 acres. Interface communities are areas with housing in the vicinity of continuous vegetation. Interface areas have more than one house per 40 acres, have less than 50 percent vegetation, and are within 1.5 miles of an area (made up of one or more contiguous Census blocks) over 1,325 acres that is more than 75 percent vegetated. The minimum size limit ensures that areas surrounding small urban parks are not classified as interface WUI.

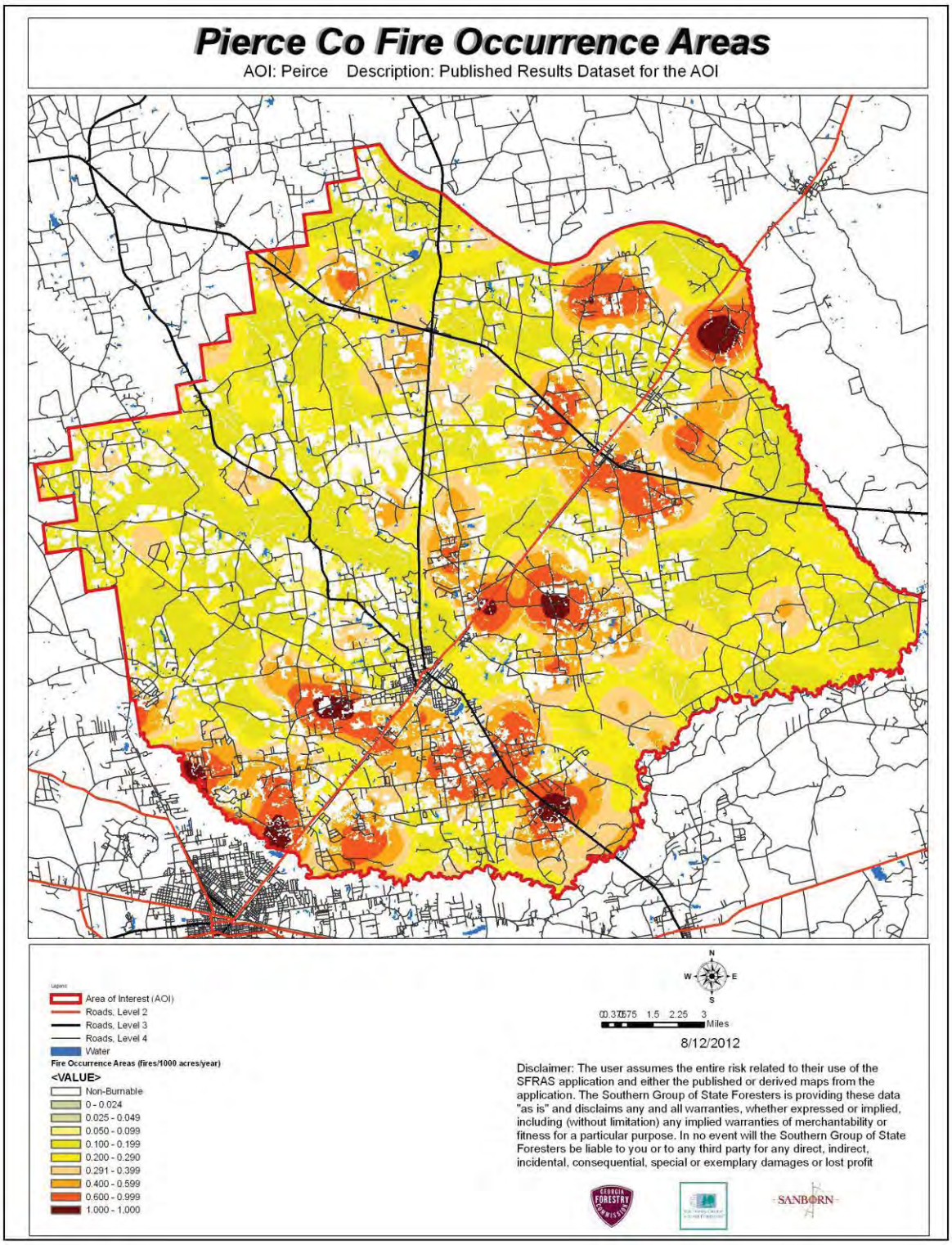
Fire Response Accessibility Index is a relative measure of how long it would take initial attack resources to drive from their station to various areas of the county. This index is derived from assigning average speeds to the various road classes in the county. For the purpose of this analysis the following speeds were assigned: 55 mph for level 1 roads, primarily interstates and four lane open highways, 45 mph for level 2 roads, primarily state and federal highways, 40 mph for level 3 roads, primarily paved two lanes collector roads and 20 mph for level 4 roads, mainly city streets and rural roads, paved and unpaved. For areas away from roads a travel speed of 2 mph is assigned as it is assumed travel will be by foot or extremely slow moving equipment.

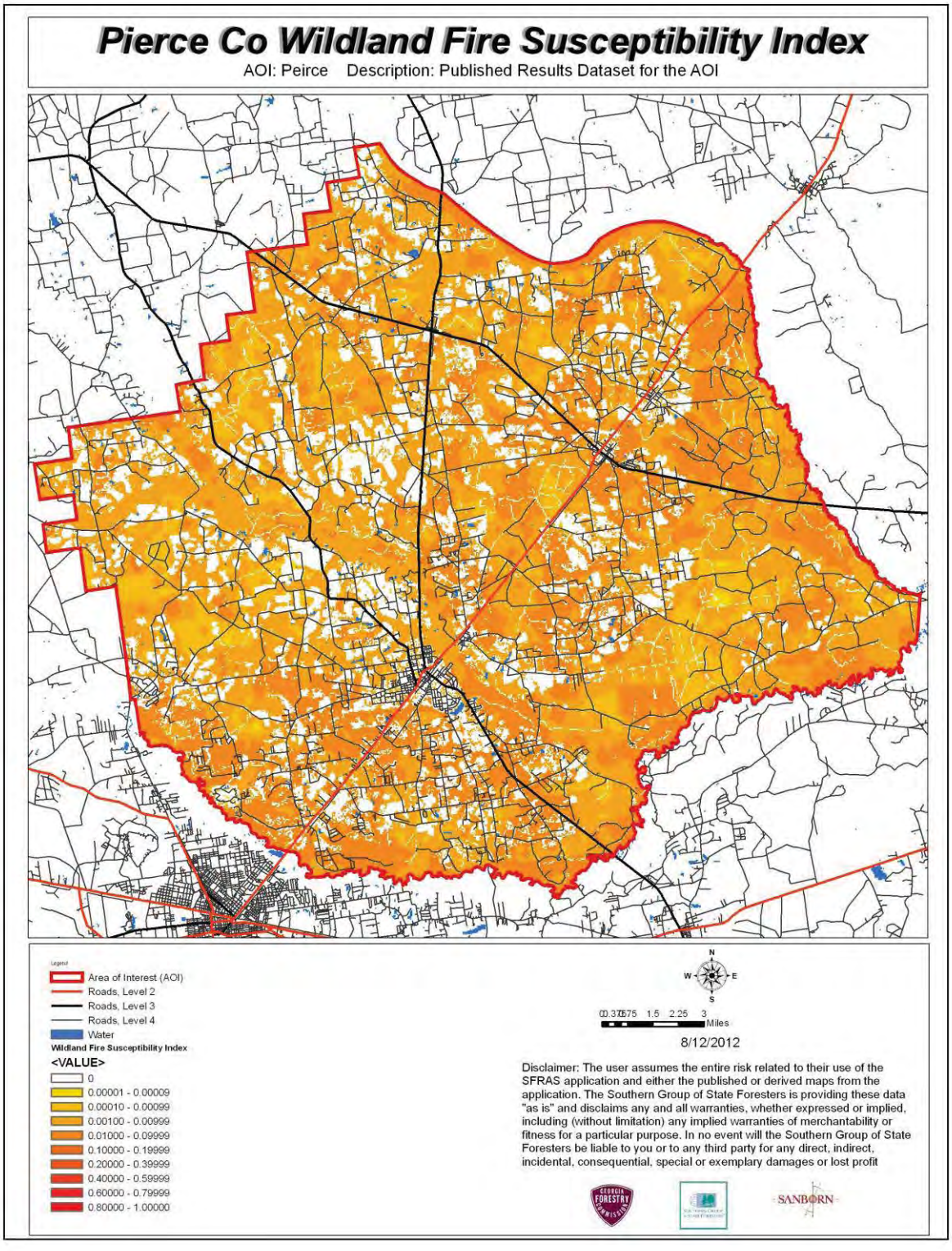
Fire Occurrence Areas maps use data from wildfire reports over the period from 1997-2002. The fire occurrence rates mapped are the probability of the number of fires occurring per 1000 acres per year base on this historic information.

Wildland Fire Susceptibility maps show an index value between 0 and 1 and are developed by a mathematical calculation process for determining the probability of an acre burning and the expected final fire size. Many layers of data are used in developing this calculation including historic fire data, wildland fuels and rate of spread, canopy attributes (closure, height and density), weather influences, topography, soils and fire suppression effectiveness.

Level of Concern maps are a complex calculation using the Wildland Fire Susceptibility Index (previously described) and the Fire Effects Index which is calculated using data layers of transportation and infrastructure, urban interface and timber values along with suppression difficulty ratings. This provides an output categorizing the expected levels of concern from low to high.

VI. COMMUNITY HAZARDS MAPS




Pierce Co Wildland Fire Susceptibility Index
AOI: Peirce Description: Published Results Dataset for the AOI
Legend
Area of Interest (AOI)
Roads, Level 2
Roads, Level 3
Roads, Level 4
Water
Wildland Fire Susceptibility Index
<VALUE>
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0.00010 - 0.00099
0.00100 - 0.00999
0.01000 - 0.09999
0.10000 - 0.19999
0.20000 - 0.39999
0.40000 - 0.59999
0.60000 - 0.79999
0.80000 - 1.00000
N
W
E
S
0 0.375 1.5 2.25 3
Miles
8/12/2012
Disclaimer: The user assumes the entire risk related to their use of the SFRAS application and either the published or derived maps from the application. The Southern Group of State Foresters is providing these data "as is" and disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the Southern Group of State Foresters be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit
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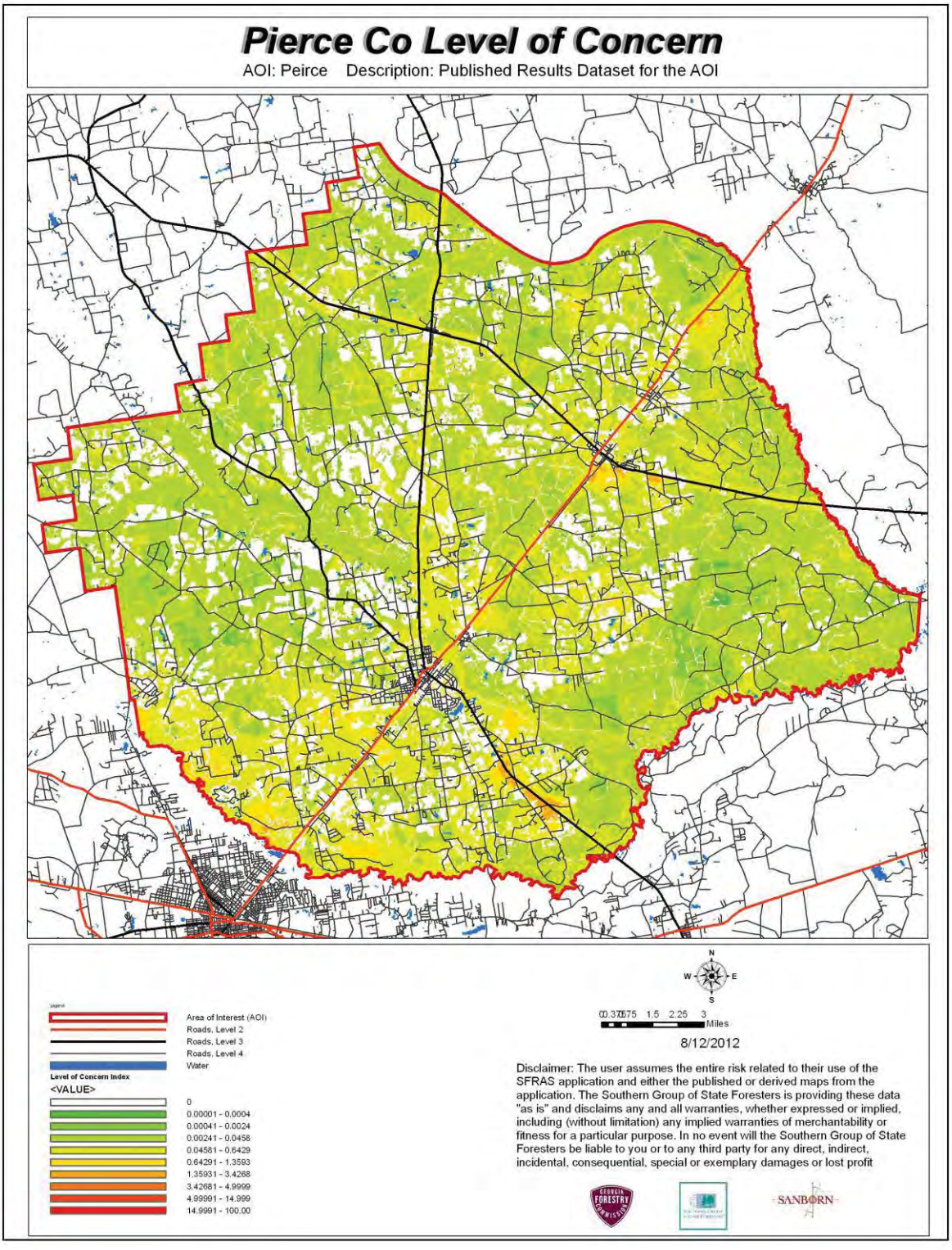
Pierce Co Level of Concern
AOI: Peirce Description: Published Results Dataset for the AOI
Legend
Area of Interest (AOI)
Roads, Level 2
Roads, Level 3
Roads, Level 4
Water
Level of Concern Index
<VALUE>
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0.00041 - 0.0024
0.00241 - 0.0458
0.04581 - 0.6429
0.64291 - 1.3593
1.35931 - 3.4268
3.42681 - 4.9999
4.99991 - 14.999
14.9991 - 100.00
N
W
E
S
0 0.375 0.75 1.5 2.25 3
Miles
8/12/2012
Disclaimer: The user assumes the entire risk related to their use of the SFRAS application and either the published or derived maps from the application. The Southern Group of State Foresters is providing these data "as is" and disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the Southern Group of State Foresters be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit
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VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As Southeastern Georgia continues to see increased growth from other areas seeking less crowded and warmer climes, new development will occur more frequently on forest and wildland areas. Pierce County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

Over the past 20 years, much has been learned about how and why homes burn during wildland fire emergencies. Perhaps most importantly, case histories and research have shown that even in the most severe circumstances, wildland fire disasters can be avoided. Homes can be designed, built and maintained to withstand a wildfire even in the absence of fire services on the scene. The national Firewise Communities program is a national awareness initiative to help people understand that they don't have to be victims in a wildfire emergency. The National Fire Protection Association has produced two standards for reference: NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

The following recommendations were developed by the Pierce County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county and city officials. A priority order was determined based on which mitigation projects would best reduce the hazard of wildfire in the assessment area.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Primary Protection for Community and Its Essential Infrastructure		
Treatment Area	Treatment Types	Treatment Method(s)
1. All Structures	Create minimum of 30-feet of defensible space**	Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.
2. Applicable Structures	Reduce structural ignitability**	Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.
3. Community Hazards	Utility services	Work with GA Power and EMC's to encourage new underground service to rural homes. Adopt standards for safety zone around propane distribution tanks.
4. Driveway Access	Right of Way Clearance	Maintain vertical and horizontal clearance for emergency equipment. See that adequate lengths of culverts are installed to allow emergency vehicle access.
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds.
6. Codes and Ordinances	Examine existing codes and ordinances.	Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns Review the need for subdivision and development ordinances for public safety concerns. Adopt and enforce uniform addressing ordinance.
7. Law Enforcement	Traffic control	Work with local law enforcement to better control non essential traffic during fire emergencies.

Proposed Community Wildland Fuel Reduction Priorities		
Treatment Area	Treatment Types	Treatment Method(s)
1. Adjacent WUI Lands	Reduce hazardous fuels	Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas. Seek grant for mowing or prescribed burning in WUI areas.
2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Helicopter Dip Spots and Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. GFC to locate and pre-clear additional helicopter dip locations.
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear.
3. Road Names	Road Signage	Improved Road Signage at Crossroads. “Dead End” or “No Outlet” Tags on Road Signs
4. Personnel	Training	Obtain Wildland Fire Suppression training for Fire Personnel.
**Actions to be taken by homeowners and community stakeholders		

Proposed Education and Outreach Priorities

1. Conduct "How to Have a Firewise Home" Workshop for Pierce County Residents
Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Target local schools, community groups and local senior centers. Distribute materials promoting firewise practices and planning through local community and governmental meetings.
2. Conduct "Firewise" Workshop for Community Leaders
Arrange for GFC Firewise program to work with local community leaders and governmental officials on the importance of "Firewise Planning" in developing ordinances and codes as the county as the need arises. Identify "Communities at Risk" within the county for possible firewise community recognition.
3. Spring Clean-up Event
Conduct clean-up event every spring involving the Georgia Forestry Commission, Pierce County Fire Departments and community residents. Set up information table with educational materials and refreshments. Initiate the event with a morning briefing by GFC Firewise coordinator and local fire officials detailing plans for the day and safety precautions. Activities to include the following: • Clean flammable vegetative material from roofs and gutters • Trim shrubs and vines to 30 feet away from structures • Trim overhanging limbs • Clean hazardous or flammable debris from adjacent properties Celebrate the work with a community cookout, with Community officials, GFC and Pierce County Fire Departments discussing and commending the work accomplished.
4. Informational Packets
Develop and distribute informational packets to be distributed by realtors and insurance agents. Included in the packets are the following: • Be Firewise Around Your Home • Firewise Guide to Landscape and Construction • Firewise Communities USA Bookmarks

5. Wildfire Protection Display
Create and exhibit a display for the general public at local events such as the Pecan Festival. Display can be independent or combined with the Georgia Forestry Commission display. Hold Open House at individual Fire Stations to promote Community Firewise Safety and develop community support and understanding of local fire departments and current issues.
6. Press
Invite the local news media to community "Firewise" functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Pierce County.

VIII. ACTION PLAN

Roles and Responsibilities

The following roles and responsibilities have been developed to implement the action plan:

Role	Responsibility
Hazardous Fuels and Structural Ignitability Reduction	
Pierce County WUI Fire Council	Create this informal team or council comprised of residents, GFC officials, Pierce County Fire Department officials, a representative from the city and county governments along with EMA Director for Pierce County. Meet periodically to review progress towards mitigation goals, appoint and delegate special activities, work with federal, state, and local officials to assess progress and develop future goals and action plans. Work with residents to implement projects and firewise activities.
Key Messages to focus on	1 Defensible Space and Firewise Landscaping 2 Debris Burning Safety 3 Firewise information for homeowners 4 Prescribed burning benefits
Communications objectives	1 Create public awareness for fire danger and defensible space issues 2 Identify most significant human cause fire issues 3 Enlist public support to help prevent these causes 4 Encourage people to employ fire prevention and defensible spaces in their communities.
Target Audiences	1 Homeowners 2 Forest Landowners and users 3 Civic Groups 4 School Groups
Methods	1 News Releases 2 Radio and TV PSA's for area stations and cable access channels 3 Personal Contacts 4 Key messages and prevention tips 5 Visuals such as signs, brochures and posters

Spring Clean-up Day	
Event Coordinator	Coordinate day's events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.
Publicity Coordinator	Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.
Work Supervisor	Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, Pierce County Fire Departments and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local city and county officials, develop safety protocol. Supervise work and monitor activities for safety the day of the event.

Funding Needs

The following funding is needed to implement the action plan:

Project	Estimated Cost	Potential Funding Source(s)
1. Create a minimum of 30 feet of defensible space around structures	Varies	Residents will supply labor and fund required work on their own properties.
2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material.	Varies	Residents will supply labor and fund required work on their own properties.
3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.	No Cost	To be adopted by city and county governments.
4. Spring Cleanup Day	Varies	Community Business Donations.
5. Fuel Reduction Activities	$35/acre	FEMA & USFS Grants

POTENTIAL FUNDING SOURCES:

As funding is questionable in these times of tight government budgets and economic uncertainty, unconventional means should be identified whereby the need for funding can be reduced or eliminated.

Publications / Brochures –

- FIREWISE materials are available for cost of shipping only at www.firewise.org.
- Another source of mitigation information can be found at www.nfpa.org.
- Access to reduced cost or free of charge copy services should be sought whereby publications can be reproduced.
- Free of charge public meeting areas should be identified where communities could gather to be educated regarding prevention and firewise principles.

Mitigation –

- Community Protection Grant:
    - USFS sponsored prescribed burn program. Communities with at risk properties that lie within 3 miles of the USFS border may apply with the GFC to have their forest land prescribed burned free of charge.
- FEMA Mitigation Policy MRR-2-08-01: through GEMA - Hazard Mitigation Grant Program (HMGP) and Pre Disaster Mitigation (PDM)
    - To provide technical and financial assistance to local governments to assist in the implementation of long term cost effective hazard mitigation measures.
    - This policy addresses wildfire mitigation for the purpose of reducing the threat to all-risk structures through creating defensible space, structural protection through the application of ignition resistant construction, and limited hazardous fuels reduction to protect life and property.
    - With a complete and registered plan (addendum to the State plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP if the county is declared under a wildfire disaster.
- GFC - Plowing and burning assistance can be provided through the Georgia Forestry Commission as a low cost option for mitigation efforts.
- Individual Homeowners –
    - In most cases of structural protection ultimately falls on the responsibility of the community and the homeowner. They will bear the cost; yet they will reap the benefit from properly implemented mitigation efforts.
    - GEMA Grant - PDM (See above)

Ultimately it is our goal to help the communities by identifying the communities threatened with a high risk to wildfire and educate those communities on methods to implement on reducing those risks.

Assessment Strategy

To accurately assess progress and effectiveness for the action plan, the Pierce County WUI Fire Council will implement the following:

- Annual wildfire risk assessment will be conducted to re-assess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning, and clearing of defensible space) will be incorporated into an annual renewal of the original action plan.
- Mitigation efforts that could not be funded in the requested year will be incorporated into the annual renewal of the original action plan.
- Continuing educational and outreach programs will be conducted and assessed for effectiveness. Workshops will be evaluated based on attendance and post surveys that are distributed by mail 1 month and 6 months following workshop date.
- The Pierce County WUI Council will publish an annual report detailing mitigation projects initiated and completed, progress for ongoing actions, funds received, funds spent, and in-kind services utilized. The report will include a "state of the community" section that critically evaluates mitigation progress and identifies areas for improvement. Recommendations will be incorporated into the annual renewal of the action plan.
- An annual survey will be distributed to residents soliciting information on individual mitigation efforts on their own property (e.g., defensible space). Responses will be tallied and reviewed at the next Pierce County WUI Council meeting. Needed actions will be discussed and delegated.

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. An agreed-upon schedule for meeting to review accomplishments, solve problems, and plan for the future should extend beyond the scope of this plan. Without this follow up this plan will have limited value

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Appendix D

PIERCE COUNTY
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Thunderstorm / Wind	88	66	21	48	87	0.75	133.33	2.1	2.4	1.74
Tornado	13	66	3	7	13	5.08	19.70	0.3	0.35	0.26
Hail	33	66	11	29	33	2.00	50.00	1.1	1.45	0.66
Flood	7	66	4	7	7	9.43	10.61	0.4	0.35	0.14
Drought	480	16	290	480	480	0.03	3000.00	29	24	9.6
Severe Winter Storm	6	66	6	6	6	11.00	9.09	0.6	0.3	0.12
Wildfire	3256	50	475	1082	3256	0.02	6512.00	47.5	54.1	65.12
Hurricane / Tropical Storm	3	66	1	3	3	22.00	4.55	0.1	0.15	0.06

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval. For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuarcy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.

GEMA Worksheet #1 Identify the Hazard Step 1

Date: What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. *Research newspapers and other historical records*
2. *Review existing plans and reports.*
3. *Talk to the experts in your community, state, or region.*
4. *Gather information on Internet Websites.*
5. *Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.*

Task B. Focus on the most prevalent hazard in your community or state.

1. *Go to hazard Websites.*
2. *Locate your community or state on the Website map.*
3. *Determine whether you are in a high-risk area. Get more localized information if necessary.*
4. *Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that post a significant threat.*

	Task A	**Task B**
Avalanche	___	___
Coastal Erosion	**___**	**___**
Coastal Storm	___	___
Dam Failure	**___**	**___**
Drought	_X	_X_
Earthquake	**___**	**___**
Expansive Soils	___	___
Extreme Heat	___	___
Flood	**_X_**	**_X_**
Hailstorm	_X_	_X_
Hurricane	**_X_**	**_X_**
Land Slide	___	___
Severe Winter Storm	_X_	_X_
Tornado	**_X_**	**_X_**
Tsunami	**___**	**___**
Volcano	___	___
Wildfire	**_X_**	**_X_**
Windstorm	___	___
Hazard Material	___	___
Radiological	___	___
Other: Thunderstorm/Wind	X	X
Other_____	___	___
Other_____	___	___

*Note: **Bolded** hazards are addressed in this How-to Guide.*

Use this space to record information you find for each of the hazards you will be researching. Attach additional pages as necessary.

Hazard or Event Description (Type of hazard, date of event, number of injuries, cost and types of damage, etc.)	**Source of Information**	**Map Available for this Hazard?**	**Scale of Map**

GEMA Worksheet #2 Profile Hazard Events Step 2

County: Date:

How Bad Can It Get?

Task A. Obtain or create a base map.

GEMA will be providing you with a base map, USGS topos and DOQQ as part of our deliverables to local government for the planning process. Additionally, we will be providing you with detailed hazard layer coverages. These data layers originate from state or nationwide coverage or datasets. Therefore, it is important for local government to assess what you already have at the local level. It is important for you at the local level to have an idea of what existing maps you have available for the planning process. Some important things to think about:

1) What maps do we already have in the county that would be relevant to the planning process?
2) Have other local plans used maps or mapping technology where there is specific data that is also needed in my local plan?
3) What digital maps do we have?
4) Do we have any Geographic Information System (GIS) data, map themes or layers or databases here at the local level (or regional) that we can use?
5) If we do have any GIS data, where is it located at, and who is our local expert?
6) Are there any ongoing GIS or mapping initiatives at the local level in other planning or mapping efforts? If so, what are they, and what are the timetables for completion?
7) Are there mapping needs that have been identified at the local level in the past? If so, what are they and when were they identified?
8) Of the existing maps, GIS data and other digital mapping information, what confidence do we have at the local level that it is accurate data?

Please answer the above questions on a separate sheet of paper and attach to this worksheet.
It is important to realize that those counties that already have GIS and digital mapping, (ie: parcel level data, GPS fire hydrants, etc) higher levels of spatial accuracy and detail will exist for some data layers at the local level. However, for this planning process, that level of detail will not be needed on all layers in the overall mapping and analysis.

You can use existing maps from:

- Road Maps
- USGS topographic maps or Digital Orthophoto Quarter Quads (DOQQ)
- Topographic and/or planimetric maps from other agencies
- Aerial topographic and/or planimetric maps
- Field Surveys
- GIS software
- CADD software
- Digitized paper map

Title of Map	Scale	Date

Task B. Obtain a hazard event profile.	Task C. Record your hazard event profile information.
Avalanche	
Coastal Storm / Coastal Erosion 1. Get a copy of your FIRM. _____ 2. Verify that the FIRM is up-to-date and complete. _____ 3. Determine the annual rate of coastal erosion. _____ 4. Find your design wind speed. _____	1. Transfer the boundaries of your coastal storm hazard areas onto your base map. 2. Transfer the BFEs onto your base map. 3. Record the erosion rates on your base map: _____ 4. Record the design wind speed here and on your base map: _____
Dam Failure	
Drought	
Earthquake 1. Go to the http://geohazards.cr.usgs.gov Website. 2. Locate your planning area on the map. 3. Determine your PGA.	1. Record your PGA: _____ 2. If you have more than one PGA print, download or order your PGA map.
Expansive Soils	
Extreme Heat	
Flood 1. Get a copy of your FIRM. _____ 2. Verify the FIRM is up-to-date and complete. _____	1. Transfer the boundaries from your firm onto your base map (floodway, 100-yr flood, 500-yr flood). 2. Transfer the BFEs onto your base map.
Hailstorm	
Hurricane	
Land Subsidence	
Landslide 1. Map location of previous landslides. _____ 2. Map the topography. _____ 3. Map the geology. _____ 4. Identify thee high-hazard areas on your map. _____	1. Mark the areas susceptible to landslides onto your base map.
Severe Winter Storm	
Tornado 1. Find your design wind speed. _____	1. Record your design wind speed: _____ 2. If you have more than one design wind speed, print, download or copy your design wind speed zones, copy the boundary of your design wind speed zones on your base map, then record the design wind speed zones on your base map.
Tsunami	
Wildfire 1. Map the fuel models located within the urban-wildland interface areas. _____ 2. Map the topography. _____ 3. Determine your critical fire weather frequency. _____ 4. Determine your fire hazard severity. _____	1. Draw the boundaries of your wildfire hazard areas onto your base map.
Other 1. Map the hazard. _____	1. Record hazard event info on your base map.

Worksheet #4 Evaluate Alternative Mitigation Actions

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2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. ***Scoring:*** *For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.*

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Goal #1: *Prevent or reduce damage caused by Thunderstorms and Winds in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*

Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Thunderstorms and Winds.*

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Increase public awareness of weather radios, shelters, emergency procedures, and the use of WKUB as the emergency broadcast system station in Pierce County and in the Cities of Blackshear, Offerman, and Patterson through public safety announcements, publications, and other means.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Survey unknown right-of-way areas owned by the Pierce County Commission and the Cities of Blackshear, Offerman, and Patterson in order to establish tree maintenance schedules.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Determine wind ratings and plan to wind retrofit Critical Facilities in Pierce County and in the Cities of Blackshear, Offerman, and Patterson as funds become available to do so.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Disseminate information to the public concerning wind ratings, champion new construction being built to those minimum wind standards, and champion the wind retrofitting of existing buildings in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Maintain, improve, and upgrade critical infrastructure to avoid/mitigate loss of power.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Purchase portable and stationary generators sufficient to maintain power at critical facilities and accessories as needed.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Worksheet #4 Evaluate Alternative Mitigation Actions

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Goal #1: *Prevent or reduce damage caused by Tornadoes in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*

Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Tornadoes.*

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Use building inspection program to inspect for adequate tie-downs on new and existing manufactured housing in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Identify areas in Pierce County and the Cities of Blackshear, Offerman, and Patterson where tornadoes occur frequently.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Plan for pre-disaster mitigation in Tornado & other hazard seasons by preparing public service announcements and brochures. Solicit business participation in distributing information.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Promote safe shelter rooms in new and existing buildings in areas of Pierce County and the Cities of Blackshear, Offerman, and Patterson where Tornadoes and other disasters frequently occur.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Secure funding for a hazardous weather alert system such as: sirens, weather radios, Code Red, reverse call systems, etc., in the Cities of Blackshear, Offerman, and Patterson and in populated areas of Pierce County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

*3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.*

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Goal #1: *Prevent or reduce damage caused by Hail in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*
Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Hail.*

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Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Install storm windows and/or ballistic film on new and existing critical facilities and promote their installation on new and existing private buildings in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Encourage the public to include hail damage under insurance coverage and to store equipment and vehicles under shelters in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal #1: *Prevent or reduce damage caused by Flood in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*
Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Flooding.*

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Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #1: Maintain and clean drainage canals in Pierce County and in the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #2: Plan flood and drainage projects in Blackshear near Carter's Fried Chicken (U.S. 84/121) and in areas lacking curb & gutter.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #3: Plan flood and drainage projects in Offerman at Railroad Lane, Gardenia Drive (more work needed), Mayberry Road, Shellie Trail, Armor Road, Carter Drive, and in areas lacking adequate drainage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #4: Plan flood and drainage projects in Patterson on Peach Ave., Pear Ave., Dallas St., Dempsey Trailer Park area, and in areas lacking curb & gutter.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #5: Plan flood and drainage projects in Pierce County on Taylor Farm Road, Bennett Road, Bailey Road (off Dean Still), parts of North Bowen Road, Cross Swamp Road, Hackelbarney Road (at Whitney Lake and other areas), Turkey Ridge, SR 203 at Raulerson's Pond (near Milepost #1), Clifford Loop, Sandy Bottom, Mill Creek, Winky Trail, Twin Oaks Drive (at Cason Road), Sinclair Road, Golf Course Rd., Floyd Dr., Satilla Acres Subdivision retention area, and other flood-prone areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #6: Replace drainage pipes in Pierce County, Blackshear, Offerman, and Patterson with 18" minimum size pipes, as needed.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #7: Attempt to take precautions at water facilities in unincorporated Pierce County and in the Cities of Blackshear, Offerman and Patterson to ensure flood protection, as funds become available to do so.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #8 (formerly #9): Enact subdivision ordinance in Pierce County and the Cities of Blackshear, Offerman, and Patterson requiring subdivision impact studies and 2 separate exits from subdivision areas if a subdivision exceeds a certain number of home sites.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #9 (formerly #10): Work to alleviate present evacuation & emergency access problems in Satilla Acres, behind Farr's, around Golf Course area, Blue Lake, Hacklebarney Village, Oakridge, and others in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #10 (formerly #11): Purchase UTV/ATV vehicle, flat bottomed boat, motor, and trailer for evacuation purposes.	`	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #11 (formerly #12): Conduct routine storm-water drainage repair & cleaning, constant yard debris collection, and obtain signage and posts for 25 "Street Closed" and 25 "Water Over Road" signs in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #12 (formerly #13): After flood events or other hazard events in Pierce County and the Cities of Blackshear, Offerman, and Patterson, attempt to perform analysis on properties affected to determine if events have occurred in the past and attempt to mitigate or purchase, if necessary.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #13 (formerly #14): Continue participation in NFIP and enforce floodplain and building ordinances and regulations. Work towards database to record depth of flooding to determine extent of potential damage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #14 (formerly #15): Build up roadway and improve drainage affected by 2009 floods in Okefenokee Golf Course Area (250+ homes affected) and work with FEMA to update FIRMs covering later phases possibly in floodplains.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #15 (formerly #16): Make improvements to roadway and drainage on roads affected by 2009 floods in Pierce County including Yellow Bluff Road, Voight Bridge Road, Turkey Ridge Road, Bell Road, Moneyhole Road, Hammock Drive, and in River Woods Subdivision.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Goal #1: *Prevent or reduce damage caused by Drought in Pierce County and in the Cities of Blackshear, Offerman and Patterson.*
Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Drought.*

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Action Step #1: Seek input from State and Federal agencies to enact procedures during Drought to limit water usage in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #2: Replace antiquated water & sewer lines and equipment prone to failure in unincorporated Pierce County and in the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #3: Work with County Extension Agent to distribute literature related to best management practices in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Action Step #4: Promote increased usage of surface water and surface artesian flow for agriculture and industry instead of well systems in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #5: Promote the installation of private water systems instead of individual wells in Pierce County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Action Step #6: Promote the paid extension of city water lines into areas of individual wells and/or new subdivisions in the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Goal #1: *Prevent or reduce damage caused by Severe Winter Storms in Pierce County and the Cities of Blackshear, Offerman, and Patterson.*

Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Severe Winter Storms.*

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Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #1: Continue the policy of wrapping exposed piping with insulation and installing new insulation layers at Critical Facilities in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Maintain temperatures above 32 degrees to prevent freezing in government-owned occupied and unoccupied structures in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3: Identify solutions for heating unmanned fire stations and preventing the freezing of water tanks in the fire vehicles in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #4: Disseminate information to the public concerning Severe Winter Storms and champion new construction being built to appropriate low temperature ratings and existing structures being retrofitted in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. ***Scoring:*** *For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.*

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the "expert" or source to consult to help you evaluate the criterion.

Goal #1: *Prevent or reduce damage caused by Wildfire in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*
Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, and woodlands due to Wildfire.*

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #1 (formerly #2): Provide additional first responder training, air units, air unit chargers, Class A Pumper & Fire Knocker trucks, and other equipment to all Pierce County Volunteer Fire Departments for Wildfire use.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2 (formerly #3): Provide additional first responder training, air units, air unit chargers, Class A Pumper & Fire Knocker trucks, and other equipment to City of Blackshear Volunteer Fire Departments for Wildfire use.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3 (formerly #4): Provide additional first responder training, air units, air unit chargers, Class A Pumper & Fire Knocker trucks, and other equipment to City of Patterson Volunteer Fire Departments for Wildfire use.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #4 (formerly #5): Trim tree lines and create fire buffers around critical facilities and infrastructure in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #5 (formerly #6): Encourage agencies and private property owners to trim tree lines and create fire buffers around new and existing homes, businesses, and utilities in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #6 (formerly #7): Support and enforce GA Forestry Commission burn ordinances and bans and promote hazardous fuel reduction by prescribed burning, mechanical treatment, or chemical treatment carried out and promoted by the GA Forestry in Pierce County and the Cities of Blackshear, Offerman, and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #7 (formerly #8): Pierce County and the Cities of Blackshear, Offerman and Patterson should become “Firewise” Communities and conduct “How to Have a Firewise Home” workshops for residents and community leaders.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #8 (formerly #9): Identify fire coverage areas in Pierce County and the Cities of Blackshear, Offerman and Patterson, reevaluate and possibly relocate stations to more strategic locations for full benefit of fire coverage and fire rating.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #9 (formerly #10): Plan to acquire property for the new addition of Pierce County Volunteer Fire Stations including Otter Creek District, 911/Central Fire Station, Cason/Hackelbarney Area and others.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #10 (formerly #11): Plan to make modifications to existing Pierce County and the Cities of Blackshear, Offerman and Patterson Volunteer Fire Stations as needed.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #11 (formerly #12): Identify funding sources and plan for a full time paid fire department in Pierce County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #12 (formerly #13): Purchase shower equipment, containment area, suits and rigs for exposure to chemicals and other hazardous materials while fighting fires in agricultural areas in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #13 (formerly #14): Pass a subdivision ordinance in Pierce County and the Cities of Blackshear, Offerman and Patterson requiring that any subdivision over X number of lots requires 500 GPM capacity water pressure and fire hydrants.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #14 (formerly #15): Conduct a tree survey on Pierce County and the Cities of Blackshear, Offerman and Patterson right-of-ways to locate diseased and damaged trees in order to reduce available fuel.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #15 (formerly #16): Continue to update the Volunteer Fire Department Master Plans as needed.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

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Goal #1: *Prevent or reduce damage caused by Wildfire in Pierce County and in the Cities of Blackshear, Offerman, and Patterson.*
Objective #2: *Implement priorities, projects and recommendations contained in GA Forestry Commission's "Community Wildfire Protection Plan".*

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Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #1: Create a minimum of 30 feet of defensible space around all governmental structures and recommend to homeowners & community stakeholders that they create same space through the trimming of shrubs and vines, overhanging limbs, replacement of flammable plants with less flammable varieties and remove vegetation around chimneys.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Reduce structural ignitability by cleaning flammable vegetative materials from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for easy access and replace pine straw and mulch around plantings with less flammable landscaping materials around all governmental structures and recommend same to homeowners and community stakeholders.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #3: Work with GA Power and EMCs to encourage new underground service to rural homes; Adopt standards for safety zone around propane distribution tanks.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #4: Ensure Driveway Access/Right-Of-Way Clearance by maintaining vertical and horizontal clearance for emergency equipment; See that adequate lengths of culverts are installed to allow emergency vehicle access.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #5: As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul-de-sacs or turn arounds.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #6: Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), property address marking standards and other relevant concerns; Review the need for subdivision and development ordinances for public safety concerns; Adopt and enforce uniform addressing ordinance.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #7: Work with local law enforcement to better control non-essential traffic during fire emergencies.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #8: Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas; Seek grants for mowing or prescribed burning in WUI areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #9: Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing; Maintain firebreaks along ROW adjacent to residential areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #10: Clean and re-harrowing of existing fire lines.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #11 (formerly #13): Improve road signage at crossroads; Add “Dead End” and “No Outlet” signs to road posts.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #12 (formerly #14): Ensure that all personnel are trained in Wildfire Suppression.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #13 (formerly #17): Conduct a Spring Clean-up Event every Spring.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #14 (formerly #18): Develop and distribute Firewise informational packets to be distributed by realtors & insurance agents.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #15 (formerly #19): Create and Exhibit a Wildfire Protection Display for the general public at the local events such as the Pecan Festival (Display can be independent or combined with the GA Forestry Commission display); Hold open houses at individual fire stations to promote community Firewise safety and develop community support and understanding of local fire departments and current issues.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #16 (formerly #20): Invite local news media to community "Firewise" functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Pierce County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #17 (formerly #21): Create a Pierce County Wildland-Urban Interface (WUI) Fire Council to review progress towards mitigation goals, appoint & delegate special activities, work with Federal, State and Local officials to assess progress and develop future goals & action plans and work with residents to implement projects and Firewise activities.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal #1: *Prevent or reduce damage caused by Hurricanes/Tropical Storms in Pierce County and in the Cities of Blackshear, Offerman and Patterson.*

Objective #1: *Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, and the public, due to Hurricanes/Tropical Storms.*

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Action Step #1: Design new educational facilities to the level that they could be used as public shelters for emergency purposes and test current shelters and educational facilities for safety and effectiveness in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Purchase a storage trailer and construct a storage building for storage of emergency supplies needed for shelters and buy additional materials and/or relocate materials from Brunswick for shelters in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #3: Review building codes, local ordinances and policies & procedures regarding pre-disaster mitigation issues and streamline those items for easier enforcement in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #4: Work with GDOT to improve unsafe roads in Pierce County and the Cities of Blackshear, Offerman and Patterson that already are, or could be, evacuation routes.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #5: Cut made to fit plywood window covers and install construction materials necessary for use during Hurricanes/Tropical Storms at Critical Facilities in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal #1: *Prevent or reduce damage caused by Hurricanes/Tropical Storms in Pierce County and in the Cities of Blackshear, Offerman and Patterson.*

***Objective #2:** Advise the public of health & safety precautions and procedures necessary during Hurricanes/Tropical Storms and other events and on pre-disaster mitigation, in general.*

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Action Step #1: Acquire and distribute literature from state agencies regarding disaster health & safety issues in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Distribute information concerning pre-disaster mitigation to area news markets and by speaking at schools and civic clubs in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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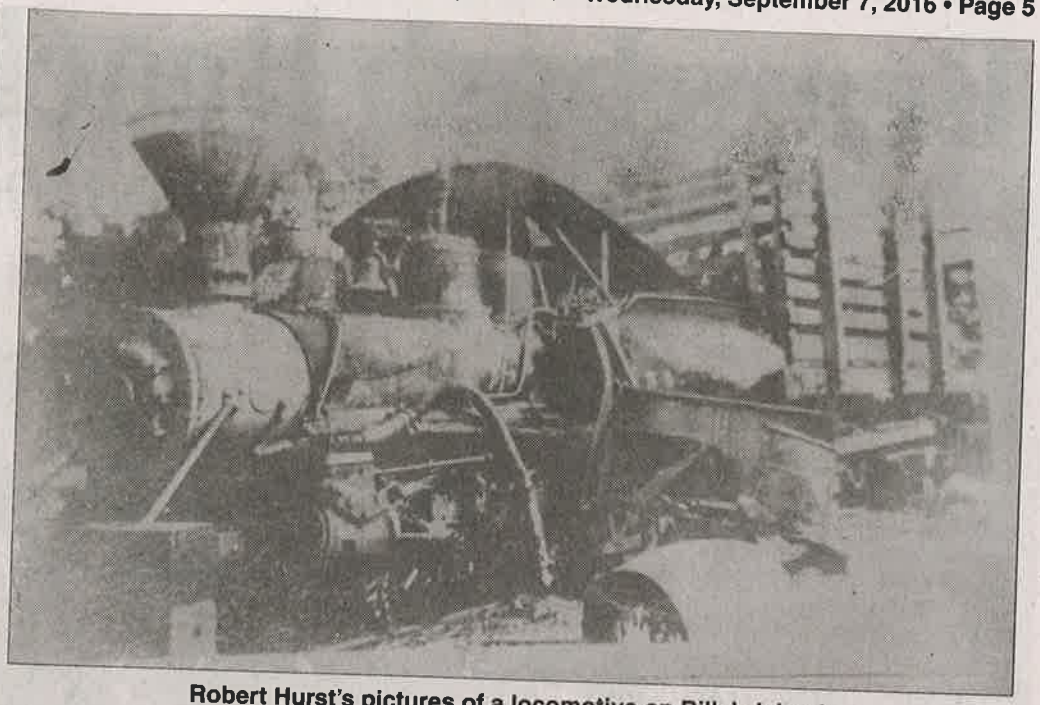
Goal #1: *Prevent or reduce damage caused by Hurricanes/Tropical Storms in Pierce County and in the Cities of Blackshear, Offerman and Patterson.*

Objective #3**:** *Ensure reliable electrical power and communications efficiency at facilities and among agencies during Hurricanes/Tropical Storms and other events..*

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Action Step #1: Purchase generators and trailers for use at critical facilities and pre-wire facilities & gas pumps for generator use in Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2 (formerly #3): Purchase communications equipment (radios, pagers, batteries, chargers, etc.) that comply with new FCC narrow banded requirements for Pierce County and the Cities of Blackshear, Offerman and Patterson.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Appendix E



Robert Hurst's pictures of a locomotive on Billy's Island.

y's Island has a rich history

Okefenokee fell prey to numerous moonshining operations; because of this illegal business, many timber workers operating heavy machinery became drunken or hung-over victims.

John Hopkins, who became manager of the 219,500 acres of land purchased by Charles C. and Daniel Hebard from the Suwannee Canal Company, saw the danger involved in this action. He, setting an example, destroyed several of these stills around Billy's Island; his continued devotion to the Swamp gained him a reputation as a "true friend of the Okefenokee." It was at this time, in the late 1920s, a resurgence of campaigns to preserve the Swamp appeared, tells Lois B. Mays in her Settlers of the Okefenokee.

Sherry

PUBLIC NOTICE

The Pierce County Emergency Management Agency (EMA) invites the public to attend the kick-off meeting for planning and updating our local Hazard Mitigation Plan. This plan is renewed every five (5) years. We would welcome any input from our citizens and local business owners. Some of those who will be part of the planning group will be: Planning specialist from GEMHSA (Georgia Emergency Management and Homeland Security Agency), Board of County Commissioners, Cities of Blackshear, Offerman, and Patterson, Fire/EMS, Sheriff's Department, Police Departments, Health Department, Code Enforcement, Public Works, Forestry, School Board, Coastal Pines, and hopefully... you. The meeting will be for an hour on Tuesday, September 20th at 10:00 a.m. at **312 Nichols St. in the Commissioner's office Conference Room.**

28b090716ppn

Blackshear Community

Pierce County EMA/FIRE

309 Pierce Industrial Blvd., P.O. Box 421, Blackshear, GA 31516
Phone: (912)449-2040 Fax: (912)807-0573
Leonard Roberts, EMA/FIRE Director
leonard.roberts@piercecountyga.gov

Sign in Sheet For Hazard Mitigation meeting Sept.20 2016

Brenda Denison	City of Offerman	offerman@accessatc.net,
Fred Daniels	City of Offerman	offerman@AccessATC.Net
Stuart Sweat	City of Patterson	sswea t@atc.cc
Lanier Walker	County Commissioner	alwalker 8U@hotmail.com
Wallace Tomlinson	City of Blackshear	Wtomlinson2012@gmail.com
James Spivey	Pierce County EMS	james.spivey@piercecountyga.gov
Amy Hitt	Pierce County	amy.hitt@piercecountyga.gov
Stephanie Bell	Pierce County	piercefc@gmail.com
Dell Brown	Pierce County Joint Planning Comm.	dell.brown@piercecountyga.gov
Tommy Banks	GFC	tbanks@gfc.state.ga.us
Jim Durrance	Georgia Forestry Commission	JDurrance@gfc.state.ga.us
Ariel Godwin	SGRC	agodwin@sgrc.us
Curtis WRIGHT	BLACKSHEAR PD	cwright@blackshearpolice.org
Bucky Goble	Blackshear Fire	buckygoble@gmail.com

Southern Georgia Regional Commission
Pierce County Hazard Mitigation Plan Update
Workshop 1 – Nov. 9, 2016

Name	Organization	Title	Email
Janet Daniels	City of Offerman	City Clerk	offerman@accessatc.net
Brenda Denison	offerman	Mayor	offerman@accessatc.net.
Buddy Gobble	BFD	Chief	buddygobble@gmail.com
James Spivey	PCEMS	Director	james.spivey@piercecountyga.gov
DELL BROWN	PC JPC	DIRECTOR	dell.brown@piercecountyga.gov
Leonard Roberts	Pierce EMA	Director	leonard.roberts@piercecountyga.gov
Steve Layson	P.C. BOC		
Stephanie Bell	PC Family Conn	Director	piercefc@gmail.com
Arled Godwin	SGRC	Planner	agodwin@sgrc.us

Southern Georgia Regional Commission
Pierce County Hazard Mitigation Plan Update
Workshop 2 – Jan. 11, 2017

Name	Organization	Title	Email
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Dell Brown	PC JPC	Planning Director	dell.brown@piercecountyga.gov
A.J. Griffis	Road Dept	Road Dept	
Leonard Roberts	Pierce EMA	EMA Director	leonard.roberts@piercecountyga.gov
Stevie Sweat	Patterson - Fire & Public Works	Supt.	ssweat@atc.cc
Janet Daniels	City of Offerman	City Clerk	offerman@accessatc.net
[illegible]	City of Offerman	Mayor	offerman@accessatc.net
Stephanie Bell	Pierce County Family Conn.	Director	piercefc@gmail.com
James Spivey	Pierce EMS	Director	James.spivey@piercecountyga.gov
Bucky Goble	Blackshear Fire	Fire Chief	buckygoble@gmail.com

Southern Georgia Regional Commission
Pierce County Hazard Mitigation Plan Update
Workshop 3 – Feb. 8, 2017

Name	Organization	Title	Email
Brenda Dean	Offerman	Mayor	offerman@accessatc.net
Janet Daniels	City of Offerman	City Clerk	offerman@ACCESSATC.Net
Steve Sweat	City of Patterson	Public Works & Fire	ssweat@atc.cc
A.J. Griffis	Road Dept.	Road superintendent	
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Stephanie Bell	PC Family Connection	Director	piercefc@gmail.com
DELL BROWN	Pierce County Joint Planning	DIRECTOR	dell.brown@piercecountyga.gov
Steve Layson	PCBOC	Co. Mgr.	steve.layson@piercecountyga.gov
CHRIS WRIGHT	CITY OF BLACKSHEAR (PD)	POLICE CHIEF	cwright@blackshearpolice.org
Leonard Roberts	Pierce EMA	EMA Director	leonard.roberts@piercecountyga.gov

Southern Georgia Regional Commission
Pierce County Hazard Mitigation Plan Update
Workshop 4 – May 16, 2017

Name	Organization	Title	Email
Leonard Roberts	Pierce Co EMA/Fire	Director	leonard.roberts@pierce-countyga.gov
Loretta Hylton	SGRC	Planner	lhylton@sgrc.us
Bucky Gobble	Blackshear Fire	Chief	buckygobble@gmail.com
Janet Daniels	City of Offerman	City Clerk	offerman@accessatc.net
Brenda Denison	City of Offerman	Mayor	offerman@accessatc.net
Stephanie Bell	Pierce County Family Conn	Director	piercefc@gmail.com
Stevie Sweat	City of Patterson	Supt. - Fire	ssweat@atc.cc
Dell Brown	Pierce County Joint Planning Comm.	Director	dell.brown@piercecountyga.gov

Southern Georgia Regional Commission
Pierce County Hazard Mitigation Plan Update
Workshop 5 – June 21, 2017

Name	Organization	Title	Email
Leonard Roberts	Pierce EMA	Director	leonard.roberts@piercecountyga.gov
Bucky Gobble	Blackshear Fire	Chief	buckygobble@gmail.com
Janet Daniels	City of Offerman	City Clerk	offerman@accessatc.net
Brenda Denison	City of Offerman	Mayor	offerman@accessatc.net.
Stecie Sweat	City of Patterson	Public Work-Fire	ssweat@atc.cc
DELMAN (DELL) BROWN	PIERCE CO. JOINT PLANNING	DIRECTOR	dell.brown@piercecountyga.gov
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us

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J. Turner at
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p. Weeping
a night, but
e morning.

Please don't forget, we still have many sick ad shut-ins. Give them a call, visit or send a cheery note. They'll feel better, so will you. Pray for Sis. Hortense Brewton. She's at home recuperating. Lend a helping hand if you can.

****

Visit a church of your choice every Sunday. Lend a helping hand to those in need and do pray for and love one another as He has loved you.

****

Thought – We're in this together.

observes Easter

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early ser-
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God gave His only
begotten Son,
Absolutely at peace and joy
within His love.

Easter is love in harmony.
Whoever believeth in Him
Shall have eternal life
Right now being washed
from all my sin.

Easter is love in harmony.
No deeper love will be!
"For God so loved the world"
As He died to revive us
and set us free.

Then, Bob Edwards led the congregation in singing "Christ Has Risen Today." As the offertory special music, Chris Smith sang, "You Saved the Day." Afterwards, the choir presented the Easter musical, "Victory."

The message for the day was preached by the Reverend R.C. James. The title of the message was "What a Difference a Few Days Makes" with the scripture taken from Mark: 16:1-8. The points of the message were (1) "A Ministry of Love," (2) "A Message of Life," and (3) "A Mission of Liberation."

The Reverend R.C. James gave the invitation, and the congregation sang, "Let Jesus Come Into Your Heart," followed by the benediction.

either Joe Gant or Misty Strickland.

Historical Society to meet in Nahunta

The Brantley County Historical Society will meet Friday, Apr. 20, at 10:30 a.m. at Shanes Kitchen in Nahunta.

All members are urged to attend. Visitors are welcome.

WOW work day to replace annual fish fry

The Woodmen of the World annual fish fry scheduled for Saturday, Apr. 21 at 5 p.m. has been cancelled. Instead a work day has been scheduled for Saturday, April 21 at 8 a.m. to clean the building and the yards.

Everyone bring yard tools. Also bring snacks and desserts to go with hotdogs and hamburgers which will be provided by the Chapter Hall.

For additional information call Alex Bennett, President 283-8885.

PUBLIC NOTICE

The Pierce County Emergency Management Agency (EMA), in co-operation with the Southern Georgia Regional Commission (SGRC), invites the public to attend a Joint Public Hearing to review the Pierce County and Cities of Blackshear, Offerman, and Patterson Hazard Mitigation Plan Update and provide an opportunity for public comment. The plan update has been developed in accordance with the Disaster Mitigation Act of 2000, which requires local governments to have an approved Hazard Mitigation Plan addressing natural hazards as a condition of receiving future federal disaster assistance. The SGRC staff will host a Public Hearing/Open House on May 1, 2018 at 5:30 PM at 705 College Ave., Board Meeting Room, Blackshear, GA 31516. Comments are being accepted by email at agodwin@sgrc.us, by fax at 229-333-5312, or by mailing them to Pierce HMP, 327 W. Savannah Ave., Valdosta, GA 31601. The draft of the Plan is available on the SGRC website, www.sgrc.us. For more information please call Ariel Godwin, Senior Planner at 229-333-5277.

25b041818pp.jc

Sherry Ariel

Pierce County and Cities of Blackshear, Offerman, and Patterson
Hazard Mitigation Plan Update – Final Public Hearing
Date: May 1, 2018

Name	Organization	Title	Email
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
NEAL Bennett	PC BOC	Chairman	
Jason Rubenbauer	PCBOC	Manager	
[illegible]	EMA / Fire	Director	
[illegible]	Pierce Ext.		
[illegible]			
[illegible]			
Amy Hitt	PCBOC	Clerk	amy.hitt@piercecountyga.gov
Franklin Rozier Jr	PCBOC	Attorney	fdrozier@bellsouth.net
[illegible]	PCBOC	Commissioner	
[illegible]	P.C.B.O.Comm.	Comm.	County E.
Harold N. Rozier, III	P.C.B.O.C.	1st Dist. Commissioner	haroldrozier@accessatc.net.

Resolution no. 2018-0501

RESOLUTION FOR ADOPTION OF
PIERCE COUNTY MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN UPDATE

WHEREAS, to be eligible for federal disaster assistance in the event of a presidentially declared disaster and mitigation assistance under the Hazard Mitigation Grant programs, local governments must have adopted or be actively developing a Hazard Mitigation Plan prepared in accordance with federal regulations promulgated pursuant to the Disaster Mitigation Act of 2000 ("the Act"); and

WHEREAS, Pierce County and the Cities of Blackshear, Offerman, and Patterson, adopted the previous Pierce County Hazard Mitigation Plan Update in 2013; and

WHEREAS, in accordance with the requirements of the Act, an updated plan is required to be submitted to FEMA through GEMA every five years; and

WHEREAS, the 2013 Plan Update will expire on December 11, 2018 and the new Hazard Mitigation Plan Update will become effective on December 12, 2018; and

WHEREAS, the Pierce County Emergency Management Agency, with the assistance of representatives from various other departments within Pierce County and the Cities of Blackshear, Offerman, and Patterson, as well as volunteer and other non-governmental agencies, has developed an updated plan to meet these requirements; and

WHEREAS, the updated plan is titled the "Pierce County and Cities of Blackshear, Offerman, and Patterson 2018-2023 Hazard Mitigation Plan Update" (referred to hereafter as "the Plan"); and

WHEREAS, the Plan applies to unincorporated Pierce County and the Cities of Blackshear, Offerman, and Patterson; and

WHEREAS, GEMA has notified the Pierce County Emergency Management Agency that the Plan satisfies the requirements of the Act;

BE IT THEREFORE RESOLVED that Pierce County, meeting in regular session, hereby adopts the Plan.

SO RESOLVED this __1st__ day of _May_, 2018.

By _____
Neal Bennett
County Commission Chair

COUNTY COMMISSIONERS ★ SEAL ★ PIERCE COUNTY, GA

Attest _____
Amy Hitt
County Clerk

RESOLUTION 2018-07

A RESOLUTION OF THE BLACKSHEAR CITY COUNCIL OF THE CITY OF BLACKSHEAR, GEORGIA PURSUANT TO THE DISASTER MITIGATION ACT 0F 2000 AUTHORIZING ADOPTION OF THE PIERCE COUNTY AND THE CITIES OF BLACKSHEAR, OFFERMAN, AND PATTERSON HAZARD MITIGATION PLANAND PROVIDE FOR AN EFFECTIVE DATE.

WHEREAS, Pierce County and its municipal governments are required to complete a Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Pierce County and its municipal governments have completed a Hazard Mitigation Plan that fulfills the Federal requirements of the Disaster Mitigation Act of 2000.

NOW, THEREFORE, BE IT RESOLVED BY THE BLACKSHEAR CITY COUNCIL OF THE CITY OF BLACKSHEAR, GEORGIA, THAT:

SECTION ONE. The Blackshear City Council hereby adopts this Hazard Mitigation Plan.

SECTION TWO. This Resolution shall take effect immediately upon passage.

ADOPTED this **13th** day of **March, 2018**.

ATTEST:

SUSAN FOWLER
City Clerk

CITY OF BLACKSHEAR

RICHARD LARSON
Mayor

A RESOLUTION OF THE CITY OF OFFERMAN CITY COUNCIL PURSUANT TO THE DISASTER MITIGATION ACT OF 2000 AUTHORIZING ADOPTION OF THE PIERCE COUNTY PRE-DISASTER HAZARD MITIGATION PLAN

WHEREAS, Pierce County and its municipal governments are required to complete a Pre-Disaster Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Pierce County and its municipal governments have completed a Pre-Disaster Hazard Mitigation Plan that fulfills the Federal requirements of the Disaster Mitigation Act of 2000.

NOW THEREFORE LET IT BE RESOLVED THAT THE CITY OF OFFERMAN COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 22nd DAY OF May 2018

Signed: Brenda Denison, Mayor

(City Seal)

Attest: Janet Daniels / County Clerk

A RESOLUTION OF THE CITY OF PATTERSON CITY COUNCIL PURSUANT TO THE DISASTER MITIGATION ACT OF 2000 AUTHORIZING ADOPTION OF THE PIERCE COUNTY PRE-DISASTER HAZARD MITIGATION PLAN

WHEREAS, Pierce County and its municipal governments are required to complete a Pre-Disaster Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Pierce County and its municipal governments have completed a Pre-Disaster Hazard Mitigation Plan that fulfills the Federal requirements of the Disaster Mitigation Act of 2000.

NOW THEREFORE LET IT BE RESOLVED THAT THE CITY OF PATTERSON COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 10 DAY OF May, 2018

Signed: R. D. Thomas, Jr., Mayor

(City Seal)

Attest: Ray Cunningham /City Clerk

Appendix F

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Thunderstorm Wind

88 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	73
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	27
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Wind Magnitude Definitions:
Measured Gust:'MG', Estimated Gust:'EG', Measured Sustained:'MS', Estimated Sustained:'ES'

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Wind Speeds ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	3	284.30K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/26/1956	14:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/08/1974	12:05	CST	Thunderstorm Wind	56 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	05/01/1976	02:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	08/12/1976	12:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/17/1983	13:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/05/1983	17:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/22/1983	14:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/06/1985	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/06/1985	16:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/19/1985	18:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/13/1986	15:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/18/1986	17:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/21/1986	16:20	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/25/1987	15:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	11/05/1988	04:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/03/1991	05:25	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	05/05/1991	18:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/04/1991	19:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/15/1991	18:00	CST	Thunderstorm Wind	0 kts.	0	3	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	07/16/1991	15:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Blackshear	PIERCE CO.	GA	10/30/1993	06:30	EST	Thunderstorm Wind	0 kts.	0	0	50.00K	0.00K
Blackshear	PIERCE CO.	GA	06/09/1994	16:45	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Blackshear	PIERCE CO.	GA	06/25/1994	12:15	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Bristol	PIERCE CO.	GA	07/25/1995	18:30	EST	Thunderstorm Wind	0 kts.	0	0	2.00K	0.00K
PATTERSON	PIERCE CO.	GA	02/15/1996	18:55	EST	Thunderstorm Wind	60 kts.	0	0	1.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/08/1996	15:00	EST	Thunderstorm Wind	60 kts.	0	0	0.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/23/1997	15:10	EST	Thunderstorm Wind		0	0	0.80K	0.00K

BLACKSHEAR	PIERCE CO.	GA	05/04/1998	12:30	EST	Thunderstorm Wind		0	0	1.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/08/1998	13:55	EST	Thunderstorm Wind		0	0	1.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/05/1998	21:10	EST	Thunderstorm Wind		0	0	3.00K	0.00K
HOMESTEAD	PIERCE CO.	GA	06/19/1998	17:45	EST	Thunderstorm Wind		0	0	1.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/27/1998	13:30	EST	Thunderstorm Wind		0	0	0.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/03/1998	19:05	EST	Thunderstorm Wind		0	0	2.50K	0.00K
BRISTOL	PIERCE CO.	GA	07/31/1998	18:15	EST	Thunderstorm Wind		0	0	2.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	01/02/1999	16:00	EST	Thunderstorm Wind		0	0	4.50K	0.00K
BRISTOL	PIERCE CO.	GA	06/30/1999	18:00	EST	Thunderstorm Wind		0	0	0.50K	0.00K
BONNYMAN	PIERCE CO.	GA	03/16/2000	16:25	EST	Thunderstorm Wind		0	0	0.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/04/2000	16:21	EST	Thunderstorm Wind		0	0	0.50K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/30/2001	16:33	EST	Thunderstorm Wind		0	0	0.50K	0.00K
PATTERSON	PIERCE CO.	GA	05/10/2002	18:30	EST	Thunderstorm Wind		0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	05/10/2002	18:52	EST	Thunderstorm Wind		0	0	1.00K	0.00K
OFFERMAN	PIERCE CO.	GA	10/21/2002	15:50	EST	Thunderstorm Wind		0	0	60.00K	0.00K
OFFERMAN	PIERCE CO.	GA	10/21/2002	16:00	EST	Thunderstorm Wind		0	0	100.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	10/21/2002	16:30	EST	Thunderstorm Wind		0	0	10.00K	0.00K
BRISTOL	PIERCE CO.	GA	12/24/2002	12:10	EST	Thunderstorm Wind		0	0	10.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	02/22/2003	12:00	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	05/02/2003	23:30	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	07/15/2004	14:40	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/15/2004	17:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	03/22/2005	16:30	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	06/23/2005	18:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/10/2006	20:10	EST	Thunderstorm Wind	58 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	PIERCE CO.	GA	05/10/2006	20:15	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/28/2006	15:39	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/27/2006	18:28	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/27/2006	18:30	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	08/04/2006	14:15	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	09/07/2006	15:50	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	12/25/2006	09:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
BRISTOL	PIERCE CO.	GA	07/20/2007	17:51	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OWEN	PIERCE CO.	GA	07/21/2007	19:35	EST-5	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	07/28/2007	16:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	08/11/2007	17:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	05/11/2008	08:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON STRIP ARPT	PIERCE CO.	GA	05/11/2008	15:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MERSHON	PIERCE CO.	GA	06/02/2008	17:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BYNUM	PIERCE CO.	GA	06/11/2008	16:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HOMESTEAD	PIERCE CO.	GA	12/11/2008	09:50	EST-5	Thunderstorm Wind	45 kts. EG	0	0	5.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	04/05/2009	14:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	04/05/2009	14:49	EST-5	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	05/21/2010	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MERSHON	PIERCE CO.	GA	05/21/2010	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OFFERMAN	PIERCE CO.	GA	05/21/2010	16:46	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HOMESTEAD	PIERCE CO.	GA	06/13/2010	15:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/20/2010	16:50	EST-5	Thunderstorm Wind	45 kts. EG	0	0	2.00K	0.00K
OWEN	PIERCE CO.	GA	04/21/2012	15:18	EST-5	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	04/21/2012	15:32	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MERSHON	PIERCE CO.	GA	06/04/2012	13:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	06/04/2012	13:33	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	06/04/2012	13:42	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	04/14/2013	19:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OFFERMAN	PIERCE CO.	GA	06/10/2014	19:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/24/2014	16:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/17/2015	15:54	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HOMESTEAD	PIERCE CO.	GA	06/17/2015	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

BONNYMAN	PIERCE CO.	GA	02/24/2016	06:20	EST-5	Thunderstorm Wind	40 kts. EG	0	0	0.50K	0.00K
MERSHON	PIERCE CO.	GA	04/01/2016	17:06	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/17/2016	19:59	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:								0	3	284.30K	0.00K

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Tornado

13 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	12
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	4
Number of Days with Event and Property Damage:	7
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Tornadoes ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	32	3.376M	0.00K
PIERCE CO.	PIERCE CO.	GA	06/19/1972	12:55	CST	Tornado	F1	0	1	25.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/16/1976	10:30	CST	Tornado	F2	0	0	250.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	02/10/1986	22:15	EST	Tornado	F1	0	0	2.500M	0.00K
PIERCE CO.	PIERCE CO.	GA	02/10/1986	22:30	EST	Tornado	F1	0	7	250.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	03/03/1991	05:30	EST	Tornado	F1	0	20	0.00K	0.00K
Bristol	PIERCE CO.	GA	11/07/1995	17:34	EST	Tornado	F1	0	4	300.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	01/02/1999	16:10	EST	Tornado	F0	0	0	35.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/04/2000	16:21	EST	Tornado	F0	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/07/2000	16:25	EST	Tornado	F0	0	0	5.50K	0.00K
BRISTOL	PIERCE CO.	GA	12/24/2002	11:45	EST	Tornado	F0	0	0	10.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	12/11/2008	09:55	EST-5	Tornado	EF0	0	0	0.00K	0.00K
BYNUM	PIERCE CO.	GA	12/02/2009	15:15	EST-5	Tornado	EF2	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	12/24/2014	12:50	EST-5	Tornado	EF1	0	0	0.00K	0.00K
Totals:								0	32	3.376M	0.00K

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Hail

33 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	24
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Select: All Hail ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
PIERCE CO.	PIERCE CO.	GA	06/19/1981	18:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
Blackshear	PIERCE CO.	GA	01/28/1995	17:45	EST	Hail	0.75 in.	0	0	0.00K	0.00K
Alma	PIERCE CO.	GA	07/25/1995	18:13	EST	Hail	0.75 in.	0	0	0.00K	0.00K
Bristol	PIERCE CO.	GA	07/25/1995	18:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/27/1997	13:55	EST	Hail	1.00 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/27/1997	14:20	EST	Hail	1.00 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	10/26/1997	17:40	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/04/1998	13:35	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/04/1998	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	05/04/1998	16:45	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	08/22/1999	15:45	EST	Hail	1.00 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	07/16/2000	21:25	EST	Hail	0.88 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/10/2002	18:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	10/21/2002	15:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
OFFERMAN	PIERCE CO.	GA	10/21/2002	16:00	EST	Hail	1.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	10/21/2002	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BRISTOL	PIERCE CO.	GA	10/21/2002	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	07/15/2004	14:40	EST	Hail	1.75 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	06/23/2005	18:00	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	05/24/2006	16:55	EST	Hail	0.88 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/25/2006	15:53	EST	Hail	1.75 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	05/28/2006	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	06/11/2007	15:00	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
PATTERSON STRIP ARPT	PIERCE CO.	GA	07/21/2007	19:24	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
OWEN	PIERCE CO.	GA	07/21/2007	19:35	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	04/05/2009	14:44	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
PATTERSON	PIERCE CO.	GA	05/16/2009	16:55	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
OWEN	PIERCE CO.	GA	05/16/2009	17:04	EST-5	Hail	1.25 in.	0	0	0.00K	0.00K
MERSHON	PIERCE CO.	GA	05/21/2010	16:30	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	06/13/2010	15:08	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K

PATTERSON	PIERCE CO.	GA	03/27/2011	13:33	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
OWEN	PIERCE CO.	GA	04/21/2012	19:18	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
MERSHON	PIERCE CO.	GA	06/04/2012	13:30	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Flash Flood, Flood

Pierce county contains the following zones:
'Pierce'

5 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	2
Number of Days with Event:	4
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	2
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	2

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	35.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	03/01/1998	00:01	EST	Flood		0	0	25.00K	0.00K
COUNTYWIDE	PIERCE CO.	GA	09/29/1998	23:00	EST	Flash Flood		0	0	10.00K	0.00K
COUNTYWIDE	PIERCE CO.	GA	06/12/2001	02:05	EST	Flash Flood		0	0	0.00K	0.00K
OWEN	PIERCE CO.	GA	04/02/2009	10:45	EST-5	Flood		0	0	0.00K	0.00K
BLACKSHEAR	PIERCE CO.	GA	04/02/2009	13:56	EST-5	Flood		0	0	0.00K	0.00K
Totals:								0	0	35.00K	0.00K

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Drought

Pierce county contains the following zones:
'Pierce'

0 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	0
Number of Days with Event:	0
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	0

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K

Tabular Data Archive

Important Alert: Due to a processing and dissemination error, an incorrect U.S. Drought Monitor map was posted this morning. A new map has posted and data and statistics are being updated all data will be posted by 10:30 CST. This new map posting at 9:30 CST supersedes the map posted this morning. We apologize for any inconvenience.

County | Pierce County (GA) | Statistics type: Traditional Percent Area | Legend

Percent Area in U.S. Drought Monitor Categories

Show All entries Search:

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2000-01-04	0.00	100.00	100.00	100.00	0.00	0.00
2000-01-11	0.00	100.00	100.00	100.00	0.00	0.00
2000-01-18	0.00	100.00	100.00	100.00	0.00	0.00
2000-01-25	0.00	100.00	100.00	100.00	0.00	0.00
2000-02-01	0.00	100.00	100.00	100.00	0.00	0.00
2000-02-08	0.00	100.00	100.00	100.00	0.00	0.00
2000-02-15	0.00	100.00	100.00	100.00	0.00	0.00
2000-02-22	0.00	100.00	100.00	100.00	0.00	0.00
2000-02-29	0.00	100.00	100.00	100.00	0.00	0.00
2000-03-07	0.00	100.00	100.00	100.00	0.00	0.00
2000-03-14	0.00	100.00	100.00	100.00	0.00	0.00
2000-03-21	0.00	100.00	100.00	100.00	0.00	0.00
2000-03-28	0.00	100.00	100.00	100.00	0.00	0.00
2000-04-04	0.00	100.00	100.00	100.00	0.00	0.00
2000-04-11	0.00	100.00	100.00	100.00	0.00	0.00
2000-04-18	0.00	100.00	100.00	100.00	0.00	0.00
2000-04-25	0.00	100.00	100.00	0.00	0.00	0.00
2000-05-02	0.00	100.00	100.00	0.00	0.00	0.00
2000-05-09	0.00	100.00	100.00	0.00	0.00	0.00
2000-05-16	0.00	100.00	100.00	96.71	0.00	0.00
2000-05-23	0.00	100.00	100.00	96.71	0.00	0.00
2000-05-30	0.00	100.00	100.00	100.00	0.00	0.00
2000-06-06	0.00	100.00	100.00	100.00	0.00	0.00
2000-06-13	0.00	100.00	100.00	100.00	100.00	0.00
2000-06-20	0.00	100.00	100.00	100.00	100.00	0.00
2000-06-27	0.00	100.00	100.00	100.00	99.64	0.00
2000-07-04	0.00	100.00	100.00	100.00	0.00	0.00
2000-07-11	0.00	100.00	100.00	100.00	30.06	0.00
2000-07-18	0.00	100.00	100.00	100.00	0.00	0.00
2000-07-25	0.00	100.00	100.00	100.00	0.00	0.00
2000-08-01	0.00	100.00	100.00	84.40	0.00	0.00
2000-08-08	0.00	100.00	100.00	0.00	0.00	0.00
2000-08-15	0.00	100.00	22.37	0.00	0.00	0.00
2000-08-22	0.00	100.00	0.00	0.00	0.00	0.00
2000-08-29	0.00	100.00	0.00	0.00	0.00	0.00
2000-09-05	0.00	100.00	0.00	0.00	0.00	0.00
2000-09-12	3.88	96.12	0.00	0.00	0.00	0.00
2000-09-19	100.00	0.00	0.00	0.00	0.00	0.00
2000-09-26	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2000-10-03	100.00	0.00	0.00	0.00	0.00	0.00
2000-10-10	100.00	0.00	0.00	0.00	0.00	0.00
2000-10-17	100.00	0.00	0.00	0.00	0.00	0.00
2000-10-24	0.00	100.00	0.00	0.00	0.00	0.00
2000-10-31	0.00	100.00	0.00	0.00	0.00	0.00
2000-11-07	0.00	100.00	1.06	0.00	0.00	0.00
2000-11-14	0.00	100.00	1.06	0.00	0.00	0.00
2000-11-21	0.00	100.00	54.88	0.00	0.00	0.00
2000-11-28	0.00	100.00	1.13	0.00	0.00	0.00
2000-12-05	0.00	100.00	1.13	0.00	0.00	0.00
2000-12-12	0.00	100.00	1.12	0.00	0.00	0.00
2000-12-19	0.00	100.00	22.81	0.00	0.00	0.00
2000-12-26	0.00	100.00	100.00	0.00	0.00	0.00
2001-01-02	0.00	100.00	0.00	0.00	0.00	0.00
2001-01-09	0.00	100.00	0.00	0.00	0.00	0.00
2001-01-16	0.00	100.00	0.00	0.00	0.00	0.00
2001-01-23	0.00	100.00	0.00	0.00	0.00	0.00
2001-01-30	0.00	100.00	0.00	0.00	0.00	0.00
2001-02-06	0.00	100.00	0.00	0.00	0.00	0.00
2001-02-13	0.00	100.00	100.00	0.00	0.00	0.00
2001-02-20	0.00	100.00	100.00	0.00	0.00	0.00
2001-02-27	0.00	100.00	100.00	0.00	0.00	0.00
2001-03-06	0.00	100.00	100.00	0.00	0.00	0.00
2001-03-13	0.00	100.00	100.00	0.00	0.00	0.00
2001-03-20	0.00	100.00	100.00	0.00	0.00	0.00
2001-03-27	0.00	100.00	100.00	0.00	0.00	0.00
2001-04-03	0.00	100.00	100.00	0.00	0.00	0.00
2001-04-10	0.00	100.00	100.00	0.00	0.00	0.00
2001-04-17	0.00	100.00	100.00	0.00	0.00	0.00
2001-04-24	0.00	100.00	100.00	0.00	0.00	0.00
2001-05-01	0.00	100.00	100.00	0.00	0.00	0.00
2001-05-08	0.00	100.00	100.00	0.00	0.00	0.00
2001-05-15	0.00	100.00	100.00	100.00	0.00	0.00
2001-05-22	0.00	100.00	100.00	100.00	0.00	0.00
2001-05-29	0.00	100.00	100.00	100.00	0.00	0.00
2001-06-05	0.00	100.00	100.00	100.00	0.00	0.00
2001-06-12	0.00	100.00	100.00	0.00	0.00	0.00
2001-06-19	0.00	100.00	100.00	0.00	0.00	0.00
2001-06-26	0.00	100.00	100.00	0.00	0.00	0.00
2001-07-03	0.00	100.00	44.96	0.00	0.00	0.00
2001-07-10	7.69	92.31	0.00	0.00	0.00	0.00
2001-07-17	7.69	92.31	0.00	0.00	0.00	0.00
2001-07-24	7.70	92.30	0.00	0.00	0.00	0.00
2001-07-31	4.26	95.74	0.00	0.00	0.00	0.00
2001-08-07	100.00	0.00	0.00	0.00	0.00	0.00
2001-08-14	100.00	0.00	0.00	0.00	0.00	0.00
2001-08-21	100.00	0.00	0.00	0.00	0.00	0.00
2001-08-28	100.00	0.00	0.00	0.00	0.00	0.00
2001-09-04	100.00	0.00	0.00	0.00	0.00	0.00
2001-09-11	100.00	0.00	0.00	0.00	0.00	0.00
2001-09-18	100.00	0.00	0.00	0.00	0.00	0.00
2001-09-25	100.00	0.00	0.00	0.00	0.00	0.00
2001-10-02	100.00	0.00	0.00	0.00	0.00	0.00
2001-10-09	100.00	0.00	0.00	0.00	0.00	0.00
2001-10-16	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2001-10-23	100.00	0.00	0.00	0.00	0.00	0.00
2001-10-30	0.00	100.00	29.76	0.00	0.00	0.00
2001-11-06	0.00	100.00	93.46	0.00	0.00	0.00
2001-11-13	0.00	100.00	100.00	0.00	0.00	0.00
2001-11-20	0.00	100.00	100.00	0.00	0.00	0.00
2001-11-27	0.00	100.00	100.00	0.00	0.00	0.00
2001-12-04	0.00	100.00	100.00	0.00	0.00	0.00
2001-12-11	0.00	100.00	100.00	0.00	0.00	0.00
2001-12-18	0.00	100.00	100.00	0.00	0.00	0.00
2001-12-25	0.00	100.00	100.00	0.00	0.00	0.00
2002-01-01	0.00	100.00	100.00	100.00	0.00	0.00
2002-01-08	0.00	100.00	100.00	98.83	0.00	0.00
2002-01-15	0.00	100.00	100.00	48.35	0.00	0.00
2002-01-22	0.00	100.00	100.00	38.67	0.00	0.00
2002-01-29	0.00	100.00	100.00	48.49	0.00	0.00
2002-02-05	0.00	100.00	100.00	43.84	0.00	0.00
2002-02-12	0.00	100.00	100.00	100.00	0.00	0.00
2002-02-19	0.00	100.00	100.00	100.00	0.00	0.00
2002-02-26	0.00	100.00	100.00	100.00	0.00	0.00
2002-03-05	0.00	100.00	100.00	0.00	0.00	0.00
2002-03-12	0.00	100.00	100.00	0.00	0.00	0.00
2002-03-19	0.00	100.00	100.00	0.00	0.00	0.00
2002-03-26	0.00	100.00	100.00	11.29	0.00	0.00
2002-04-02	0.00	100.00	100.00	11.66	0.00	0.00
2002-04-09	0.00	100.00	100.00	14.89	0.00	0.00
2002-04-16	0.00	100.00	100.00	85.82	0.00	0.00
2002-04-23	0.00	100.00	100.00	79.06	0.00	0.00
2002-04-30	0.00	100.00	100.00	100.00	0.00	0.00
2002-05-07	0.00	100.00	100.00	100.00	0.00	0.00
2002-05-14	0.00	100.00	100.00	100.00	63.16	0.00
2002-05-21	0.00	100.00	100.00	100.00	100.00	0.00
2002-05-28	0.00	100.00	100.00	100.00	80.61	0.00
2002-06-04	0.00	100.00	100.00	100.00	100.00	0.00
2002-06-11	0.00	100.00	100.00	100.00	97.01	0.00
2002-06-18	0.00	100.00	100.00	100.00	92.30	0.00
2002-06-25	0.00	100.00	100.00	100.00	0.00	0.00
2002-07-02	0.00	100.00	100.00	100.00	0.00	0.00
2002-07-09	0.00	100.00	100.00	100.00	0.00	0.00
2002-07-16	0.00	100.00	100.00	100.00	0.00	0.00
2002-07-23	0.00	100.00	100.00	39.24	0.00	0.00
2002-07-30	0.00	100.00	9.59	0.00	0.00	0.00
2002-08-06	0.00	100.00	9.28	0.00	0.00	0.00
2002-08-13	0.00	100.00	78.99	0.00	0.00	0.00
2002-08-20	0.00	100.00	79.27	0.00	0.00	0.00
2002-08-27	0.00	100.00	83.33	0.00	0.00	0.00
2002-09-03	0.00	100.00	100.00	0.00	0.00	0.00
2002-09-10	0.00	100.00	100.00	0.00	0.00	0.00
2002-09-17	6.93	93.07	0.00	0.00	0.00	0.00
2002-09-24	42.26	57.74	0.00	0.00	0.00	0.00
2002-10-01	0.00	100.00	0.00	0.00	0.00	0.00
2002-10-08	0.00	100.00	100.00	0.00	0.00	0.00
2002-10-15	0.00	100.00	89.24	0.00	0.00	0.00
2002-10-22	0.00	100.00	92.92	0.00	0.00	0.00
2002-10-29	0.00	100.00	30.48	0.00	0.00	0.00
2002-11-05	0.00	100.00	39.16	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2002-11-12	0.00	100.00	26.30	0.00	0.00	0.00
2002-11-19	0.00	100.00	40.30	0.00	0.00	0.00
2002-11-26	0.00	100.00	28.36	0.00	0.00	0.00
2002-12-03	0.00	100.00	32.87	0.00	0.00	0.00
2002-12-10	0.00	100.00	31.14	0.00	0.00	0.00
2002-12-17	0.00	100.00	0.00	0.00	0.00	0.00
2002-12-24	0.00	100.00	0.00	0.00	0.00	0.00
2002-12-31	0.00	100.00	0.00	0.00	0.00	0.00
2003-01-07	0.00	100.00	0.00	0.00	0.00	0.00
2003-01-14	0.00	100.00	0.00	0.00	0.00	0.00
2003-01-21	0.00	100.00	0.00	0.00	0.00	0.00
2003-01-28	0.00	100.00	0.00	0.00	0.00	0.00
2003-02-04	0.00	100.00	0.00	0.00	0.00	0.00
2003-02-11	0.00	100.00	0.00	0.00	0.00	0.00
2003-02-18	0.00	100.00	0.00	0.00	0.00	0.00
2003-02-25	0.00	100.00	0.00	0.00	0.00	0.00
2003-03-04	0.00	100.00	0.00	0.00	0.00	0.00
2003-03-11	100.00	0.00	0.00	0.00	0.00	0.00
2003-03-18	100.00	0.00	0.00	0.00	0.00	0.00
2003-03-25	100.00	0.00	0.00	0.00	0.00	0.00
2003-04-01	100.00	0.00	0.00	0.00	0.00	0.00
2003-04-08	100.00	0.00	0.00	0.00	0.00	0.00
2003-04-15	100.00	0.00	0.00	0.00	0.00	0.00
2003-04-22	100.00	0.00	0.00	0.00	0.00	0.00
2003-04-29	100.00	0.00	0.00	0.00	0.00	0.00
2003-05-06	100.00	0.00	0.00	0.00	0.00	0.00
2003-05-13	100.00	0.00	0.00	0.00	0.00	0.00
2003-05-20	100.00	0.00	0.00	0.00	0.00	0.00
2003-05-27	100.00	0.00	0.00	0.00	0.00	0.00
2003-06-03	100.00	0.00	0.00	0.00	0.00	0.00
2003-06-10	100.00	0.00	0.00	0.00	0.00	0.00
2003-06-17	100.00	0.00	0.00	0.00	0.00	0.00
2003-06-24	100.00	0.00	0.00	0.00	0.00	0.00
2003-07-01	100.00	0.00	0.00	0.00	0.00	0.00
2003-07-08	100.00	0.00	0.00	0.00	0.00	0.00
2003-07-15	100.00	0.00	0.00	0.00	0.00	0.00
2003-07-22	100.00	0.00	0.00	0.00	0.00	0.00
2003-07-29	100.00	0.00	0.00	0.00	0.00	0.00
2003-08-05	100.00	0.00	0.00	0.00	0.00	0.00
2003-08-12	100.00	0.00	0.00	0.00	0.00	0.00
2003-08-19	100.00	0.00	0.00	0.00	0.00	0.00
2003-08-26	100.00	0.00	0.00	0.00	0.00	0.00
2003-09-02	100.00	0.00	0.00	0.00	0.00	0.00
2003-09-09	100.00	0.00	0.00	0.00	0.00	0.00
2003-09-16	100.00	0.00	0.00	0.00	0.00	0.00
2003-09-23	100.00	0.00	0.00	0.00	0.00	0.00
2003-09-30	100.00	0.00	0.00	0.00	0.00	0.00
2003-10-07	100.00	0.00	0.00	0.00	0.00	0.00
2003-10-14	100.00	0.00	0.00	0.00	0.00	0.00
2003-10-21	100.00	0.00	0.00	0.00	0.00	0.00
2003-10-28	100.00	0.00	0.00	0.00	0.00	0.00
2003-11-04	100.00	0.00	0.00	0.00	0.00	0.00
2003-11-11	100.00	0.00	0.00	0.00	0.00	0.00
2003-11-18	100.00	0.00	0.00	0.00	0.00	0.00
2003-11-25	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2003-12-02	100.00	0.00	0.00	0.00	0.00	0.00
2003-12-09	100.00	0.00	0.00	0.00	0.00	0.00
2003-12-16	100.00	0.00	0.00	0.00	0.00	0.00
2003-12-23	100.00	0.00	0.00	0.00	0.00	0.00
2003-12-30	100.00	0.00	0.00	0.00	0.00	0.00
2004-01-06	100.00	0.00	0.00	0.00	0.00	0.00
2004-01-13	100.00	0.00	0.00	0.00	0.00	0.00
2004-01-20	100.00	0.00	0.00	0.00	0.00	0.00
2004-01-27	100.00	0.00	0.00	0.00	0.00	0.00
2004-02-03	100.00	0.00	0.00	0.00	0.00	0.00
2004-02-10	100.00	0.00	0.00	0.00	0.00	0.00
2004-02-17	100.00	0.00	0.00	0.00	0.00	0.00
2004-02-24	100.00	0.00	0.00	0.00	0.00	0.00
2004-03-02	100.00	0.00	0.00	0.00	0.00	0.00
2004-03-09	100.00	0.00	0.00	0.00	0.00	0.00
2004-03-16	100.00	0.00	0.00	0.00	0.00	0.00
2004-03-23	0.00	100.00	0.00	0.00	0.00	0.00
2004-03-30	0.00	100.00	0.00	0.00	0.00	0.00
2004-04-06	0.00	100.00	0.00	0.00	0.00	0.00
2004-04-13	0.00	100.00	0.00	0.00	0.00	0.00
2004-04-20	0.00	100.00	0.00	0.00	0.00	0.00
2004-04-27	0.00	100.00	0.00	0.00	0.00	0.00
2004-05-04	0.00	100.00	0.00	0.00	0.00	0.00
2004-05-11	0.00	100.00	0.00	0.00	0.00	0.00
2004-05-18	0.00	100.00	0.00	0.00	0.00	0.00
2004-05-25	0.00	100.00	100.00	0.00	0.00	0.00
2004-06-01	0.00	100.00	100.00	0.00	0.00	0.00
2004-06-08	0.00	100.00	100.00	56.12	0.00	0.00
2004-06-15	0.00	100.00	87.88	0.00	0.00	0.00
2004-06-22	0.00	100.00	77.23	0.00	0.00	0.00
2004-06-29	20.47	79.53	0.00	0.00	0.00	0.00
2004-07-06	100.00	0.00	0.00	0.00	0.00	0.00
2004-07-13	100.00	0.00	0.00	0.00	0.00	0.00
2004-07-20	100.00	0.00	0.00	0.00	0.00	0.00
2004-07-27	100.00	0.00	0.00	0.00	0.00	0.00
2004-08-03	100.00	0.00	0.00	0.00	0.00	0.00
2004-08-10	40.20	59.80	0.00	0.00	0.00	0.00
2004-08-17	100.00	0.00	0.00	0.00	0.00	0.00
2004-08-24	100.00	0.00	0.00	0.00	0.00	0.00
2004-08-31	100.00	0.00	0.00	0.00	0.00	0.00
2004-09-07	100.00	0.00	0.00	0.00	0.00	0.00
2004-09-14	100.00	0.00	0.00	0.00	0.00	0.00
2004-09-21	100.00	0.00	0.00	0.00	0.00	0.00
2004-09-28	100.00	0.00	0.00	0.00	0.00	0.00
2004-10-05	100.00	0.00	0.00	0.00	0.00	0.00
2004-10-12	100.00	0.00	0.00	0.00	0.00	0.00
2004-10-19	100.00	0.00	0.00	0.00	0.00	0.00
2004-10-26	100.00	0.00	0.00	0.00	0.00	0.00
2004-11-02	100.00	0.00	0.00	0.00	0.00	0.00
2004-11-09	100.00	0.00	0.00	0.00	0.00	0.00
2004-11-16	100.00	0.00	0.00	0.00	0.00	0.00
2004-11-23	100.00	0.00	0.00	0.00	0.00	0.00
2004-11-30	100.00	0.00	0.00	0.00	0.00	0.00
2004-12-07	100.00	0.00	0.00	0.00	0.00	0.00
2004-12-14	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2004-12-21	100.00	0.00	0.00	0.00	0.00	0.00
2004-12-28	100.00	0.00	0.00	0.00	0.00	0.00
2005-01-04	100.00	0.00	0.00	0.00	0.00	0.00
2005-01-11	100.00	0.00	0.00	0.00	0.00	0.00
2005-01-18	100.00	0.00	0.00	0.00	0.00	0.00
2005-01-25	100.00	0.00	0.00	0.00	0.00	0.00
2005-02-01	100.00	0.00	0.00	0.00	0.00	0.00
2005-02-08	100.00	0.00	0.00	0.00	0.00	0.00
2005-02-15	100.00	0.00	0.00	0.00	0.00	0.00
2005-02-22	100.00	0.00	0.00	0.00	0.00	0.00
2005-03-01	100.00	0.00	0.00	0.00	0.00	0.00
2005-03-08	100.00	0.00	0.00	0.00	0.00	0.00
2005-03-15	100.00	0.00	0.00	0.00	0.00	0.00
2005-03-22	100.00	0.00	0.00	0.00	0.00	0.00
2005-03-29	100.00	0.00	0.00	0.00	0.00	0.00
2005-04-05	100.00	0.00	0.00	0.00	0.00	0.00
2005-04-12	100.00	0.00	0.00	0.00	0.00	0.00
2005-04-19	100.00	0.00	0.00	0.00	0.00	0.00
2005-04-26	100.00	0.00	0.00	0.00	0.00	0.00
2005-05-03	100.00	0.00	0.00	0.00	0.00	0.00
2005-05-10	100.00	0.00	0.00	0.00	0.00	0.00
2005-05-17	100.00	0.00	0.00	0.00	0.00	0.00
2005-05-24	100.00	0.00	0.00	0.00	0.00	0.00
2005-05-31	100.00	0.00	0.00	0.00	0.00	0.00
2005-06-07	100.00	0.00	0.00	0.00	0.00	0.00
2005-06-14	100.00	0.00	0.00	0.00	0.00	0.00
2005-06-21	100.00	0.00	0.00	0.00	0.00	0.00
2005-06-28	100.00	0.00	0.00	0.00	0.00	0.00
2005-07-05	100.00	0.00	0.00	0.00	0.00	0.00
2005-07-12	100.00	0.00	0.00	0.00	0.00	0.00
2005-07-19	100.00	0.00	0.00	0.00	0.00	0.00
2005-07-26	100.00	0.00	0.00	0.00	0.00	0.00
2005-08-02	100.00	0.00	0.00	0.00	0.00	0.00
2005-08-09	100.00	0.00	0.00	0.00	0.00	0.00
2005-08-16	100.00	0.00	0.00	0.00	0.00	0.00
2005-08-23	100.00	0.00	0.00	0.00	0.00	0.00
2005-08-30	100.00	0.00	0.00	0.00	0.00	0.00
2005-09-06	100.00	0.00	0.00	0.00	0.00	0.00
2005-09-13	100.00	0.00	0.00	0.00	0.00	0.00
2005-09-20	100.00	0.00	0.00	0.00	0.00	0.00
2005-09-27	100.00	0.00	0.00	0.00	0.00	0.00
2005-10-04	100.00	0.00	0.00	0.00	0.00	0.00
2005-10-11	100.00	0.00	0.00	0.00	0.00	0.00
2005-10-18	100.00	0.00	0.00	0.00	0.00	0.00
2005-10-25	100.00	0.00	0.00	0.00	0.00	0.00
2005-11-01	100.00	0.00	0.00	0.00	0.00	0.00
2005-11-08	100.00	0.00	0.00	0.00	0.00	0.00
2005-11-15	100.00	0.00	0.00	0.00	0.00	0.00
2005-11-22	100.00	0.00	0.00	0.00	0.00	0.00
2005-11-29	100.00	0.00	0.00	0.00	0.00	0.00
2005-12-06	100.00	0.00	0.00	0.00	0.00	0.00
2005-12-13	100.00	0.00	0.00	0.00	0.00	0.00
2005-12-20	100.00	0.00	0.00	0.00	0.00	0.00
2005-12-27	100.00	0.00	0.00	0.00	0.00	0.00
2006-01-03	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2006-01-10	100.00	0.00	0.00	0.00	0.00	0.00
2006-01-17	100.00	0.00	0.00	0.00	0.00	0.00
2006-01-24	100.00	0.00	0.00	0.00	0.00	0.00
2006-01-31	100.00	0.00	0.00	0.00	0.00	0.00
2006-02-07	100.00	0.00	0.00	0.00	0.00	0.00
2006-02-14	100.00	0.00	0.00	0.00	0.00	0.00
2006-02-21	100.00	0.00	0.00	0.00	0.00	0.00
2006-02-28	100.00	0.00	0.00	0.00	0.00	0.00
2006-03-07	100.00	0.00	0.00	0.00	0.00	0.00
2006-03-14	100.00	0.00	0.00	0.00	0.00	0.00
2006-03-21	100.00	0.00	0.00	0.00	0.00	0.00
2006-03-28	100.00	0.00	0.00	0.00	0.00	0.00
2006-04-04	100.00	0.00	0.00	0.00	0.00	0.00
2006-04-11	100.00	0.00	0.00	0.00	0.00	0.00
2006-04-18	100.00	0.00	0.00	0.00	0.00	0.00
2006-04-25	100.00	0.00	0.00	0.00	0.00	0.00
2006-05-02	100.00	0.00	0.00	0.00	0.00	0.00
2006-05-09	100.00	0.00	0.00	0.00	0.00	0.00
2006-05-16	100.00	0.00	0.00	0.00	0.00	0.00
2006-05-23	100.00	0.00	0.00	0.00	0.00	0.00
2006-05-30	100.00	0.00	0.00	0.00	0.00	0.00
2006-06-06	100.00	0.00	0.00	0.00	0.00	0.00
2006-06-13	100.00	0.00	0.00	0.00	0.00	0.00
2006-06-20	100.00	0.00	0.00	0.00	0.00	0.00
2006-06-27	100.00	0.00	0.00	0.00	0.00	0.00
2006-07-04	100.00	0.00	0.00	0.00	0.00	0.00
2006-07-11	32.34	67.66	0.00	0.00	0.00	0.00
2006-07-18	0.00	100.00	0.00	0.00	0.00	0.00
2006-07-25	0.00	100.00	0.00	0.00	0.00	0.00
2006-08-01	0.00	100.00	0.00	0.00	0.00	0.00
2006-08-08	0.00	100.00	0.00	0.00	0.00	0.00
2006-08-15	0.00	100.00	0.00	0.00	0.00	0.00
2006-08-22	0.00	100.00	100.00	0.00	0.00	0.00
2006-08-29	0.00	100.00	1.24	0.00	0.00	0.00
2006-09-05	0.00	100.00	1.24	0.00	0.00	0.00
2006-09-12	0.00	100.00	0.00	0.00	0.00	0.00
2006-09-19	0.00	100.00	0.00	0.00	0.00	0.00
2006-09-26	0.00	100.00	0.00	0.00	0.00	0.00
2006-10-03	0.00	100.00	11.23	0.00	0.00	0.00
2006-10-10	0.00	100.00	100.00	0.00	0.00	0.00
2006-10-17	0.00	100.00	100.00	0.00	0.00	0.00
2006-10-24	0.00	100.00	100.00	0.00	0.00	0.00
2006-10-31	0.00	100.00	100.00	0.00	0.00	0.00
2006-11-07	0.00	100.00	100.00	0.00	0.00	0.00
2006-11-14	0.00	100.00	100.00	0.00	0.00	0.00
2006-11-21	0.00	100.00	100.00	0.00	0.00	0.00
2006-11-28	0.00	100.00	0.00	0.00	0.00	0.00
2006-12-05	0.00	100.00	0.00	0.00	0.00	0.00
2006-12-12	0.00	100.00	94.05	0.00	0.00	0.00
2006-12-19	0.00	100.00	94.05	0.00	0.00	0.00
2006-12-26	0.00	100.00	94.05	0.00	0.00	0.00
2007-01-02	0.00	100.00	0.00	0.00	0.00	0.00
2007-01-09	0.00	100.00	0.00	0.00	0.00	0.00
2007-01-16	0.00	100.00	0.00	0.00	0.00	0.00
2007-01-23	0.00	100.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2007-01-30	0.00	100.00	0.00	0.00	0.00	0.00
2007-02-06	0.00	100.00	0.00	0.00	0.00	0.00
2007-02-13	0.00	100.00	0.00	0.00	0.00	0.00
2007-02-20	0.00	100.00	0.00	0.00	0.00	0.00
2007-02-27	0.00	100.00	0.00	0.00	0.00	0.00
2007-03-06	2.61	97.39	0.00	0.00	0.00	0.00
2007-03-13	2.61	97.39	0.00	0.00	0.00	0.00
2007-03-20	0.00	100.00	0.00	0.00	0.00	0.00
2007-03-27	0.00	100.00	0.00	0.00	0.00	0.00
2007-04-03	0.00	100.00	100.00	0.00	0.00	0.00
2007-04-10	0.00	100.00	100.00	0.00	0.00	0.00
2007-04-17	0.00	100.00	100.00	100.00	0.00	0.00
2007-04-24	0.00	100.00	100.00	100.00	100.00	0.00
2007-05-01	0.00	100.00	100.00	100.00	100.00	0.00
2007-05-08	0.00	100.00	100.00	100.00	100.00	0.00
2007-05-15	0.00	100.00	100.00	100.00	100.00	0.00
2007-05-22	0.00	100.00	100.00	100.00	100.00	0.00
2007-05-29	0.00	100.00	100.00	100.00	100.00	0.00
2007-06-05	0.00	100.00	100.00	100.00	0.00	0.00
2007-06-12	0.00	100.00	100.00	100.00	0.00	0.00
2007-06-19	0.00	100.00	100.00	100.00	0.00	0.00
2007-06-26	0.00	100.00	100.00	100.00	0.00	0.00
2007-07-03	0.00	100.00	100.00	100.00	0.00	0.00
2007-07-10	0.00	100.00	100.00	100.00	0.00	0.00
2007-07-17	0.00	100.00	100.00	100.00	0.00	0.00
2007-07-24	0.00	100.00	100.00	100.00	0.00	0.00
2007-07-31	0.00	100.00	100.00	100.00	0.00	0.00
2007-08-07	0.00	100.00	52.69	0.00	0.00	0.00
2007-08-14	0.00	100.00	11.03	0.00	0.00	0.00
2007-08-21	0.00	100.00	13.25	0.00	0.00	0.00
2007-08-28	0.00	100.00	68.35	0.00	0.00	0.00
2007-09-04	30.74	69.26	0.00	0.00	0.00	0.00
2007-09-11	30.74	69.26	0.00	0.00	0.00	0.00
2007-09-18	71.06	28.94	0.00	0.00	0.00	0.00
2007-09-25	100.00	0.00	0.00	0.00	0.00	0.00
2007-10-02	100.00	0.00	0.00	0.00	0.00	0.00
2007-10-09	100.00	0.00	0.00	0.00	0.00	0.00
2007-10-16	100.00	0.00	0.00	0.00	0.00	0.00
2007-10-23	100.00	0.00	0.00	0.00	0.00	0.00
2007-10-30	100.00	0.00	0.00	0.00	0.00	0.00
2007-11-06	100.00	0.00	0.00	0.00	0.00	0.00
2007-11-13	80.46	19.54	0.00	0.00	0.00	0.00
2007-11-20	80.46	19.54	0.00	0.00	0.00	0.00
2007-11-27	80.46	19.54	0.00	0.00	0.00	0.00
2007-12-04	20.70	79.30	0.00	0.00	0.00	0.00
2007-12-11	0.00	100.00	0.00	0.00	0.00	0.00
2007-12-18	0.00	100.00	0.00	0.00	0.00	0.00
2007-12-25	0.00	100.00	0.00	0.00	0.00	0.00
2008-01-01	0.00	100.00	0.00	0.00	0.00	0.00
2008-01-08	0.00	100.00	0.00	0.00	0.00	0.00
2008-01-15	0.00	100.00	0.00	0.00	0.00	0.00
2008-01-22	0.00	100.00	0.00	0.00	0.00	0.00
2008-01-29	0.00	100.00	0.00	0.00	0.00	0.00
2008-02-05	0.00	100.00	0.00	0.00	0.00	0.00
2008-02-12	0.00	100.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2008-02-19	0.00	100.00	0.00	0.00	0.00	0.00
2008-02-26	100.00	0.00	0.00	0.00	0.00	0.00
2008-03-04	100.00	0.00	0.00	0.00	0.00	0.00
2008-03-11	100.00	0.00	0.00	0.00	0.00	0.00
2008-03-18	100.00	0.00	0.00	0.00	0.00	0.00
2008-03-25	100.00	0.00	0.00	0.00	0.00	0.00
2008-04-01	100.00	0.00	0.00	0.00	0.00	0.00
2008-04-08	100.00	0.00	0.00	0.00	0.00	0.00
2008-04-15	100.00	0.00	0.00	0.00	0.00	0.00
2008-04-22	100.00	0.00	0.00	0.00	0.00	0.00
2008-04-29	100.00	0.00	0.00	0.00	0.00	0.00
2008-05-06	100.00	0.00	0.00	0.00	0.00	0.00
2008-05-13	100.00	0.00	0.00	0.00	0.00	0.00
2008-05-20	100.00	0.00	0.00	0.00	0.00	0.00
2008-05-27	100.00	0.00	0.00	0.00	0.00	0.00
2008-06-03	100.00	0.00	0.00	0.00	0.00	0.00
2008-06-10	100.00	0.00	0.00	0.00	0.00	0.00
2008-06-17	100.00	0.00	0.00	0.00	0.00	0.00
2008-06-24	100.00	0.00	0.00	0.00	0.00	0.00
2008-07-01	100.00	0.00	0.00	0.00	0.00	0.00
2008-07-08	100.00	0.00	0.00	0.00	0.00	0.00
2008-07-15	0.00	100.00	0.00	0.00	0.00	0.00
2008-07-22	0.00	100.00	0.00	0.00	0.00	0.00
2008-07-29	0.00	100.00	0.00	0.00	0.00	0.00
2008-08-05	0.00	100.00	0.00	0.00	0.00	0.00
2008-08-12	0.00	100.00	92.69	0.00	0.00	0.00
2008-08-19	0.00	100.00	92.69	0.00	0.00	0.00
2008-08-26	7.52	92.48	0.00	0.00	0.00	0.00
2008-09-02	7.52	92.48	0.00	0.00	0.00	0.00
2008-09-09	7.52	92.48	0.00	0.00	0.00	0.00
2008-09-16	7.52	92.48	0.00	0.00	0.00	0.00
2008-09-23	7.52	92.48	0.00	0.00	0.00	0.00
2008-09-30	0.00	100.00	92.01	0.00	0.00	0.00
2008-10-07	0.00	100.00	92.01	0.00	0.00	0.00
2008-10-14	0.00	100.00	92.56	0.00	0.00	0.00
2008-10-21	0.00	100.00	93.85	0.00	0.00	0.00
2008-10-28	7.13	92.87	0.00	0.00	0.00	0.00
2008-11-04	7.13	92.87	0.00	0.00	0.00	0.00
2008-11-11	7.13	92.87	0.00	0.00	0.00	0.00
2008-11-18	7.13	92.87	0.00	0.00	0.00	0.00
2008-11-25	7.13	92.87	0.00	0.00	0.00	0.00
2008-12-02	100.00	0.00	0.00	0.00	0.00	0.00
2008-12-09	100.00	0.00	0.00	0.00	0.00	0.00
2008-12-16	100.00	0.00	0.00	0.00	0.00	0.00
2008-12-23	100.00	0.00	0.00	0.00	0.00	0.00
2008-12-30	100.00	0.00	0.00	0.00	0.00	0.00
2009-01-06	100.00	0.00	0.00	0.00	0.00	0.00
2009-01-13	100.00	0.00	0.00	0.00	0.00	0.00
2009-01-20	100.00	0.00	0.00	0.00	0.00	0.00
2009-01-27	100.00	0.00	0.00	0.00	0.00	0.00
2009-02-03	100.00	0.00	0.00	0.00	0.00	0.00
2009-02-10	0.00	100.00	0.00	0.00	0.00	0.00
2009-02-17	0.00	100.00	100.00	0.00	0.00	0.00
2009-02-24	0.00	100.00	100.00	0.00	0.00	0.00
2009-03-03	0.00	100.00	100.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2009-03-10	0.00	100.00	100.00	0.00	0.00	0.00
2009-03-17	0.00	100.00	100.00	0.00	0.00	0.00
2009-03-24	0.00	100.00	100.00	0.00	0.00	0.00
2009-03-31	0.00	100.00	69.98	0.00	0.00	0.00
2009-04-07	100.00	0.00	0.00	0.00	0.00	0.00
2009-04-14	100.00	0.00	0.00	0.00	0.00	0.00
2009-04-21	100.00	0.00	0.00	0.00	0.00	0.00
2009-04-28	100.00	0.00	0.00	0.00	0.00	0.00
2009-05-05	100.00	0.00	0.00	0.00	0.00	0.00
2009-05-12	100.00	0.00	0.00	0.00	0.00	0.00
2009-05-19	100.00	0.00	0.00	0.00	0.00	0.00
2009-05-26	100.00	0.00	0.00	0.00	0.00	0.00
2009-06-02	100.00	0.00	0.00	0.00	0.00	0.00
2009-06-09	100.00	0.00	0.00	0.00	0.00	0.00
2009-06-16	100.00	0.00	0.00	0.00	0.00	0.00
2009-06-23	100.00	0.00	0.00	0.00	0.00	0.00
2009-06-30	100.00	0.00	0.00	0.00	0.00	0.00
2009-07-07	100.00	0.00	0.00	0.00	0.00	0.00
2009-07-14	100.00	0.00	0.00	0.00	0.00	0.00
2009-07-21	100.00	0.00	0.00	0.00	0.00	0.00
2009-07-28	100.00	0.00	0.00	0.00	0.00	0.00
2009-08-04	100.00	0.00	0.00	0.00	0.00	0.00
2009-08-11	100.00	0.00	0.00	0.00	0.00	0.00
2009-08-18	100.00	0.00	0.00	0.00	0.00	0.00
2009-08-25	100.00	0.00	0.00	0.00	0.00	0.00
2009-09-01	100.00	0.00	0.00	0.00	0.00	0.00
2009-09-08	100.00	0.00	0.00	0.00	0.00	0.00
2009-09-15	100.00	0.00	0.00	0.00	0.00	0.00
2009-09-22	100.00	0.00	0.00	0.00	0.00	0.00
2009-09-29	100.00	0.00	0.00	0.00	0.00	0.00
2009-10-06	100.00	0.00	0.00	0.00	0.00	0.00
2009-10-13	61.46	38.54	0.00	0.00	0.00	0.00
2009-10-20	100.00	0.00	0.00	0.00	0.00	0.00
2009-10-27	100.00	0.00	0.00	0.00	0.00	0.00
2009-11-03	100.00	0.00	0.00	0.00	0.00	0.00
2009-11-10	100.00	0.00	0.00	0.00	0.00	0.00
2009-11-17	100.00	0.00	0.00	0.00	0.00	0.00
2009-11-24	100.00	0.00	0.00	0.00	0.00	0.00
2009-12-01	100.00	0.00	0.00	0.00	0.00	0.00
2009-12-08	100.00	0.00	0.00	0.00	0.00	0.00
2009-12-15	100.00	0.00	0.00	0.00	0.00	0.00
2009-12-22	100.00	0.00	0.00	0.00	0.00	0.00
2009-12-29	100.00	0.00	0.00	0.00	0.00	0.00
2010-01-05	100.00	0.00	0.00	0.00	0.00	0.00
2010-01-12	100.00	0.00	0.00	0.00	0.00	0.00
2010-01-19	100.00	0.00	0.00	0.00	0.00	0.00
2010-01-26	100.00	0.00	0.00	0.00	0.00	0.00
2010-02-02	100.00	0.00	0.00	0.00	0.00	0.00
2010-02-09	100.00	0.00	0.00	0.00	0.00	0.00
2010-02-16	100.00	0.00	0.00	0.00	0.00	0.00
2010-02-23	100.00	0.00	0.00	0.00	0.00	0.00
2010-03-02	100.00	0.00	0.00	0.00	0.00	0.00
2010-03-09	100.00	0.00	0.00	0.00	0.00	0.00
2010-03-16	100.00	0.00	0.00	0.00	0.00	0.00
2010-03-23	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2010-03-30	100.00	0.00	0.00	0.00	0.00	0.00
2010-04-06	100.00	0.00	0.00	0.00	0.00	0.00
2010-04-13	100.00	0.00	0.00	0.00	0.00	0.00
2010-04-20	100.00	0.00	0.00	0.00	0.00	0.00
2010-04-27	100.00	0.00	0.00	0.00	0.00	0.00
2010-05-04	100.00	0.00	0.00	0.00	0.00	0.00
2010-05-11	100.00	0.00	0.00	0.00	0.00	0.00
2010-05-18	100.00	0.00	0.00	0.00	0.00	0.00
2010-05-25	100.00	0.00	0.00	0.00	0.00	0.00
2010-06-01	100.00	0.00	0.00	0.00	0.00	0.00
2010-06-08	100.00	0.00	0.00	0.00	0.00	0.00
2010-06-15	100.00	0.00	0.00	0.00	0.00	0.00
2010-06-22	100.00	0.00	0.00	0.00	0.00	0.00
2010-06-29	100.00	0.00	0.00	0.00	0.00	0.00
2010-07-06	100.00	0.00	0.00	0.00	0.00	0.00
2010-07-13	100.00	0.00	0.00	0.00	0.00	0.00
2010-07-20	88.30	11.70	0.00	0.00	0.00	0.00
2010-07-27	35.01	64.99	0.00	0.00	0.00	0.00
2010-08-03	35.01	64.99	0.00	0.00	0.00	0.00
2010-08-10	27.33	72.67	0.00	0.00	0.00	0.00
2010-08-17	0.00	100.00	0.00	0.00	0.00	0.00
2010-08-24	7.74	92.26	0.00	0.00	0.00	0.00
2010-08-31	7.74	92.26	0.00	0.00	0.00	0.00
2010-09-07	7.74	92.26	0.00	0.00	0.00	0.00
2010-09-14	0.00	100.00	100.00	0.00	0.00	0.00
2010-09-21	0.00	100.00	100.00	0.00	0.00	0.00
2010-09-28	0.00	100.00	100.00	95.98	0.00	0.00
2010-10-05	0.00	100.00	100.00	95.98	0.00	0.00
2010-10-12	0.00	100.00	100.00	95.98	0.00	0.00
2010-10-19	0.00	100.00	100.00	95.98	0.00	0.00
2010-10-26	0.00	100.00	100.00	99.72	0.00	0.00
2010-11-02	0.00	100.00	100.00	99.72	0.00	0.00
2010-11-09	0.00	100.00	100.00	99.72	0.00	0.00
2010-11-16	0.00	100.00	100.00	86.94	0.00	0.00
2010-11-23	0.00	100.00	100.00	100.00	0.00	0.00
2010-11-30	0.00	100.00	100.00	100.00	0.00	0.00
2010-12-07	0.00	100.00	100.00	100.00	0.00	0.00
2010-12-14	0.00	100.00	100.00	100.00	5.15	0.00
2010-12-21	0.00	100.00	100.00	100.00	2.24	0.00
2010-12-28	0.00	100.00	100.00	100.00	0.00	0.00
2011-01-04	0.00	100.00	100.00	100.00	0.00	0.00
2011-01-11	0.00	100.00	100.00	100.00	0.00	0.00
2011-01-18	0.00	100.00	100.00	100.00	0.00	0.00
2011-01-25	0.00	100.00	100.00	100.00	0.00	0.00
2011-02-01	0.00	100.00	100.00	100.00	0.00	0.00
2011-02-08	0.00	100.00	100.00	100.00	0.00	0.00
2011-02-15	0.00	100.00	100.00	100.00	0.00	0.00
2011-02-22	0.00	100.00	100.00	100.00	0.00	0.00
2011-03-01	0.00	100.00	100.00	100.00	0.00	0.00
2011-03-08	0.00	100.00	100.00	100.00	0.00	0.00
2011-03-15	0.00	100.00	100.00	100.00	0.00	0.00
2011-03-22	0.00	100.00	100.00	100.00	0.00	0.00
2011-03-29	0.00	100.00	100.00	100.00	90.79	0.00
2011-04-05	0.00	100.00	100.00	100.00	63.89	0.00
2011-04-12	0.00	100.00	100.00	100.00	63.89	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2011-04-19	0.00	100.00	100.00	100.00	0.00	0.00
2011-04-26	0.00	100.00	100.00	100.00	0.00	0.00
2011-05-03	0.00	100.00	100.00	100.00	0.00	0.00
2011-05-10	0.00	100.00	100.00	100.00	98.92	0.00
2011-05-17	0.00	100.00	100.00	100.00	98.92	0.00
2011-05-24	0.00	100.00	100.00	100.00	98.92	0.00
2011-05-31	0.00	100.00	100.00	100.00	100.00	0.00
2011-06-07	0.00	100.00	100.00	100.00	100.00	0.00
2011-06-14	0.00	100.00	100.00	100.00	100.00	0.00
2011-06-21	0.00	100.00	100.00	100.00	100.00	0.00
2011-06-28	0.00	100.00	100.00	100.00	100.00	0.00
2011-07-05	0.00	100.00	100.00	100.00	100.00	0.00
2011-07-12	0.00	100.00	100.00	100.00	100.00	0.00
2011-07-19	0.00	100.00	100.00	100.00	100.00	0.00
2011-07-26	0.00	100.00	100.00	100.00	100.00	0.00
2011-08-02	0.00	100.00	100.00	100.00	100.00	0.00
2011-08-09	0.00	100.00	100.00	100.00	100.00	0.00
2011-08-16	0.00	100.00	100.00	100.00	100.00	0.00
2011-08-23	0.00	100.00	100.00	100.00	100.00	0.00
2011-08-30	0.00	100.00	100.00	100.00	100.00	0.00
2011-09-06	0.00	100.00	100.00	100.00	100.00	0.00
2011-09-13	0.00	100.00	100.00	100.00	100.00	0.00
2011-09-20	0.00	100.00	100.00	100.00	100.00	0.00
2011-09-27	0.00	100.00	100.00	100.00	100.00	0.00
2011-10-04	0.00	100.00	100.00	100.00	64.47	0.00
2011-10-11	0.00	100.00	100.00	100.00	64.95	0.00
2011-10-18	0.00	100.00	100.00	79.68	7.70	0.00
2011-10-25	0.00	100.00	100.00	79.68	7.70	0.00
2011-11-01	0.00	100.00	100.00	79.68	7.70	0.00
2011-11-08	0.00	100.00	100.00	79.68	7.70	0.00
2011-11-15	0.00	100.00	100.00	79.68	10.63	0.00
2011-11-22	0.00	100.00	100.00	79.68	10.63	0.00
2011-11-29	0.00	100.00	100.00	79.68	4.42	0.00
2011-12-06	0.00	100.00	100.00	79.68	4.42	0.00
2011-12-13	0.00	100.00	100.00	79.68	4.42	0.00
2011-12-20	0.00	100.00	100.00	100.00	79.68	0.00
2011-12-27	0.00	100.00	100.00	100.00	79.68	0.00
2012-01-03	0.00	100.00	100.00	100.00	79.68	0.00
2012-01-10	0.00	100.00	100.00	100.00	79.68	0.00
2012-01-17	0.00	100.00	100.00	100.00	100.00	0.00
2012-01-24	0.00	100.00	100.00	100.00	100.00	0.00
2012-01-31	0.00	100.00	100.00	100.00	100.00	32.03
2012-02-07	0.00	100.00	100.00	100.00	100.00	42.26
2012-02-14	0.00	100.00	100.00	100.00	100.00	42.26
2012-02-21	0.00	100.00	100.00	100.00	100.00	42.26
2012-02-28	0.00	100.00	100.00	100.00	100.00	42.26
2012-03-06	0.00	100.00	100.00	100.00	43.67	0.00
2012-03-13	0.00	100.00	100.00	100.00	43.67	0.00
2012-03-20	0.00	100.00	100.00	100.00	43.67	0.00
2012-03-27	0.00	100.00	100.00	100.00	43.67	0.00
2012-04-03	0.00	100.00	100.00	100.00	43.67	0.00
2012-04-10	0.00	100.00	100.00	100.00	43.67	0.00
2012-04-17	0.00	100.00	100.00	100.00	43.67	0.00
2012-04-24	0.00	100.00	100.00	100.00	43.67	0.00
2012-05-01	0.00	100.00	100.00	100.00	39.92	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2012-05-08	0.00	100.00	100.00	100.00	39.92	0.00
2012-05-15	0.00	100.00	100.00	100.00	39.92	0.00
2012-05-22	0.00	100.00	100.00	100.00	39.92	0.00
2012-05-29	0.00	100.00	94.92	42.70	0.00	0.00
2012-06-05	0.00	100.00	94.92	0.00	0.00	0.00
2012-06-12	0.00	100.00	1.77	0.00	0.00	0.00
2012-06-19	92.22	7.78	0.00	0.00	0.00	0.00
2012-06-26	100.00	0.00	0.00	0.00	0.00	0.00
2012-07-03	100.00	0.00	0.00	0.00	0.00	0.00
2012-07-10	100.00	0.00	0.00	0.00	0.00	0.00
2012-07-17	100.00	0.00	0.00	0.00	0.00	0.00
2012-07-24	100.00	0.00	0.00	0.00	0.00	0.00
2012-07-31	100.00	0.00	0.00	0.00	0.00	0.00
2012-08-07	100.00	0.00	0.00	0.00	0.00	0.00
2012-08-14	100.00	0.00	0.00	0.00	0.00	0.00
2012-08-21	100.00	0.00	0.00	0.00	0.00	0.00
2012-08-28	100.00	0.00	0.00	0.00	0.00	0.00
2012-09-04	100.00	0.00	0.00	0.00	0.00	0.00
2012-09-11	100.00	0.00	0.00	0.00	0.00	0.00
2012-09-18	100.00	0.00	0.00	0.00	0.00	0.00
2012-09-25	100.00	0.00	0.00	0.00	0.00	0.00
2012-10-02	100.00	0.00	0.00	0.00	0.00	0.00
2012-10-09	100.00	0.00	0.00	0.00	0.00	0.00
2012-10-16	100.00	0.00	0.00	0.00	0.00	0.00
2012-10-23	100.00	0.00	0.00	0.00	0.00	0.00
2012-10-30	35.39	64.61	0.00	0.00	0.00	0.00
2012-11-06	16.90	83.10	0.00	0.00	0.00	0.00
2012-11-13	0.00	100.00	0.00	0.00	0.00	0.00
2012-11-20	0.00	100.00	0.00	0.00	0.00	0.00
2012-11-27	0.00	100.00	98.88	0.00	0.00	0.00
2012-12-04	0.00	100.00	98.52	0.00	0.00	0.00
2012-12-11	0.00	100.00	98.52	0.00	0.00	0.00
2012-12-18	0.00	100.00	98.52	0.00	0.00	0.00
2012-12-25	0.00	100.00	100.00	0.00	0.00	0.00
2013-01-01	0.00	100.00	100.00	0.00	0.00	0.00
2013-01-08	0.00	100.00	100.00	0.00	0.00	0.00
2013-01-15	0.00	100.00	100.00	0.00	0.00	0.00
2013-01-22	0.00	100.00	100.00	0.00	0.00	0.00
2013-01-29	0.00	100.00	100.00	100.00	0.00	0.00
2013-02-05	0.00	100.00	100.00	100.00	0.00	0.00
2013-02-12	0.00	100.00	100.00	100.00	0.00	0.00
2013-02-19	0.00	100.00	100.00	100.00	0.00	0.00
2013-02-26	0.00	100.00	88.68	0.00	0.00	0.00
2013-03-05	0.00	100.00	13.47	0.00	0.00	0.00
2013-03-12	0.00	100.00	13.47	0.00	0.00	0.00
2013-03-19	0.00	100.00	13.47	0.00	0.00	0.00
2013-03-26	91.45	8.55	0.00	0.00	0.00	0.00
2013-04-02	91.45	8.55	0.00	0.00	0.00	0.00
2013-04-09	100.00	0.00	0.00	0.00	0.00	0.00
2013-04-16	100.00	0.00	0.00	0.00	0.00	0.00
2013-04-23	100.00	0.00	0.00	0.00	0.00	0.00
2013-04-30	100.00	0.00	0.00	0.00	0.00	0.00
2013-05-07	100.00	0.00	0.00	0.00	0.00	0.00
2013-05-14	100.00	0.00	0.00	0.00	0.00	0.00
2013-05-21	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2013-05-28	100.00	0.00	0.00	0.00	0.00	0.00
2013-06-04	100.00	0.00	0.00	0.00	0.00	0.00
2013-06-11	100.00	0.00	0.00	0.00	0.00	0.00
2013-06-18	100.00	0.00	0.00	0.00	0.00	0.00
2013-06-25	100.00	0.00	0.00	0.00	0.00	0.00
2013-07-02	100.00	0.00	0.00	0.00	0.00	0.00
2013-07-09	100.00	0.00	0.00	0.00	0.00	0.00
2013-07-16	100.00	0.00	0.00	0.00	0.00	0.00
2013-07-23	100.00	0.00	0.00	0.00	0.00	0.00
2013-07-30	100.00	0.00	0.00	0.00	0.00	0.00
2013-08-06	100.00	0.00	0.00	0.00	0.00	0.00
2013-08-13	100.00	0.00	0.00	0.00	0.00	0.00
2013-08-20	100.00	0.00	0.00	0.00	0.00	0.00
2013-08-27	100.00	0.00	0.00	0.00	0.00	0.00
2013-09-03	100.00	0.00	0.00	0.00	0.00	0.00
2013-09-10	100.00	0.00	0.00	0.00	0.00	0.00
2013-09-17	100.00	0.00	0.00	0.00	0.00	0.00
2013-09-24	100.00	0.00	0.00	0.00	0.00	0.00
2013-10-01	100.00	0.00	0.00	0.00	0.00	0.00
2013-10-08	100.00	0.00	0.00	0.00	0.00	0.00
2013-10-15	100.00	0.00	0.00	0.00	0.00	0.00
2013-10-22	94.22	5.78	0.00	0.00	0.00	0.00
2013-10-29	94.22	5.78	0.00	0.00	0.00	0.00
2013-11-05	94.22	5.78	0.00	0.00	0.00	0.00
2013-11-12	94.22	5.78	0.00	0.00	0.00	0.00
2013-11-19	94.22	5.78	0.00	0.00	0.00	0.00
2013-11-26	94.22	5.78	0.00	0.00	0.00	0.00
2013-12-03	94.22	5.78	0.00	0.00	0.00	0.00
2013-12-10	94.22	5.78	0.00	0.00	0.00	0.00
2013-12-17	94.22	5.78	0.00	0.00	0.00	0.00
2013-12-24	94.22	5.78	0.00	0.00	0.00	0.00
2013-12-31	97.26	2.74	0.00	0.00	0.00	0.00
2014-01-07	97.26	2.74	0.00	0.00	0.00	0.00
2014-01-14	100.00	0.00	0.00	0.00	0.00	0.00
2014-01-21	100.00	0.00	0.00	0.00	0.00	0.00
2014-01-28	100.00	0.00	0.00	0.00	0.00	0.00
2014-02-04	100.00	0.00	0.00	0.00	0.00	0.00
2014-02-11	100.00	0.00	0.00	0.00	0.00	0.00
2014-02-18	100.00	0.00	0.00	0.00	0.00	0.00
2014-02-25	100.00	0.00	0.00	0.00	0.00	0.00
2014-03-04	100.00	0.00	0.00	0.00	0.00	0.00
2014-03-11	100.00	0.00	0.00	0.00	0.00	0.00
2014-03-18	100.00	0.00	0.00	0.00	0.00	0.00
2014-03-25	100.00	0.00	0.00	0.00	0.00	0.00
2014-04-01	100.00	0.00	0.00	0.00	0.00	0.00
2014-04-08	100.00	0.00	0.00	0.00	0.00	0.00
2014-04-15	100.00	0.00	0.00	0.00	0.00	0.00
2014-04-22	100.00	0.00	0.00	0.00	0.00	0.00
2014-04-29	100.00	0.00	0.00	0.00	0.00	0.00
2014-05-06	100.00	0.00	0.00	0.00	0.00	0.00
2014-05-13	100.00	0.00	0.00	0.00	0.00	0.00
2014-05-20	100.00	0.00	0.00	0.00	0.00	0.00
2014-05-27	100.00	0.00	0.00	0.00	0.00	0.00
2014-06-03	100.00	0.00	0.00	0.00	0.00	0.00
2014-06-10	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2014-06-17	100.00	0.00	0.00	0.00	0.00	0.00
2014-06-24	100.00	0.00	0.00	0.00	0.00	0.00
2014-07-01	100.00	0.00	0.00	0.00	0.00	0.00
2014-07-08	100.00	0.00	0.00	0.00	0.00	0.00
2014-07-15	100.00	0.00	0.00	0.00	0.00	0.00
2014-07-22	60.59	39.41	0.00	0.00	0.00	0.00
2014-07-29	1.88	98.12	0.00	0.00	0.00	0.00
2014-08-05	1.88	98.12	0.00	0.00	0.00	0.00
2014-08-12	1.88	98.12	0.00	0.00	0.00	0.00
2014-08-19	1.58	98.42	0.00	0.00	0.00	0.00
2014-08-26	1.14	98.86	19.95	0.00	0.00	0.00
2014-09-02	0.00	100.00	24.91	0.00	0.00	0.00
2014-09-09	0.00	100.00	0.00	0.00	0.00	0.00
2014-09-16	0.00	100.00	0.00	0.00	0.00	0.00
2014-09-23	3.60	96.40	0.00	0.00	0.00	0.00
2014-09-30	100.00	0.00	0.00	0.00	0.00	0.00
2014-10-07	100.00	0.00	0.00	0.00	0.00	0.00
2014-10-14	100.00	0.00	0.00	0.00	0.00	0.00
2014-10-21	100.00	0.00	0.00	0.00	0.00	0.00
2014-10-28	100.00	0.00	0.00	0.00	0.00	0.00
2014-11-04	100.00	0.00	0.00	0.00	0.00	0.00
2014-11-11	100.00	0.00	0.00	0.00	0.00	0.00
2014-11-18	1.43	98.57	0.00	0.00	0.00	0.00
2014-11-25	100.00	0.00	0.00	0.00	0.00	0.00
2014-12-02	100.00	0.00	0.00	0.00	0.00	0.00
2014-12-09	100.00	0.00	0.00	0.00	0.00	0.00
2014-12-16	100.00	0.00	0.00	0.00	0.00	0.00
2014-12-23	100.00	0.00	0.00	0.00	0.00	0.00
2014-12-30	100.00	0.00	0.00	0.00	0.00	0.00
2015-01-06	100.00	0.00	0.00	0.00	0.00	0.00
2015-01-13	100.00	0.00	0.00	0.00	0.00	0.00
2015-01-20	100.00	0.00	0.00	0.00	0.00	0.00
2015-01-27	100.00	0.00	0.00	0.00	0.00	0.00
2015-02-03	100.00	0.00	0.00	0.00	0.00	0.00
2015-02-10	100.00	0.00	0.00	0.00	0.00	0.00
2015-02-17	100.00	0.00	0.00	0.00	0.00	0.00
2015-02-24	100.00	0.00	0.00	0.00	0.00	0.00
2015-03-03	100.00	0.00	0.00	0.00	0.00	0.00
2015-03-10	100.00	0.00	0.00	0.00	0.00	0.00
2015-03-17	100.00	0.00	0.00	0.00	0.00	0.00
2015-03-24	100.00	0.00	0.00	0.00	0.00	0.00
2015-03-31	100.00	0.00	0.00	0.00	0.00	0.00
2015-04-07	100.00	0.00	0.00	0.00	0.00	0.00
2015-04-14	100.00	0.00	0.00	0.00	0.00	0.00
2015-04-21	100.00	0.00	0.00	0.00	0.00	0.00
2015-04-28	33.93	66.07	0.00	0.00	0.00	0.00
2015-05-05	33.93	66.07	0.00	0.00	0.00	0.00
2015-05-12	0.10	99.90	0.00	0.00	0.00	0.00
2015-05-19	0.10	99.90	0.00	0.00	0.00	0.00
2015-05-26	0.02	99.98	0.00	0.00	0.00	0.00
2015-06-02	0.03	99.97	73.54	0.00	0.00	0.00
2015-06-09	11.43	88.57	49.07	0.00	0.00	0.00
2015-06-16	11.43	88.57	53.09	0.00	0.00	0.00
2015-06-23	11.43	88.57	53.09	0.00	0.00	0.00
2015-06-30	11.43	88.57	36.70	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2015-07-07	11.43	88.57	36.70	0.00	0.00	0.00
2015-07-14	11.43	88.57	36.70	0.00	0.00	0.00
2015-07-21	11.43	88.57	36.70	0.00	0.00	0.00
2015-07-28	11.80	88.20	2.21	0.00	0.00	0.00
2015-08-04	23.24	76.76	0.00	0.00	0.00	0.00
2015-08-11	23.24	76.76	0.00	0.00	0.00	0.00
2015-08-18	8.31	91.69	0.00	0.00	0.00	0.00
2015-08-25	2.39	97.61	0.00	0.00	0.00	0.00
2015-09-01	15.01	84.99	0.00	0.00	0.00	0.00
2015-09-08	100.00	0.00	0.00	0.00	0.00	0.00
2015-09-15	99.94	0.06	0.00	0.00	0.00	0.00
2015-09-22	99.94	0.06	0.00	0.00	0.00	0.00
2015-09-29	99.93	0.07	0.00	0.00	0.00	0.00
2015-10-06	99.93	0.07	0.00	0.00	0.00	0.00
2015-10-13	84.05	15.95	0.00	0.00	0.00	0.00
2015-10-20	84.05	15.95	0.00	0.00	0.00	0.00
2015-10-27	84.04	15.96	0.00	0.00	0.00	0.00
2015-11-03	84.04	15.96	0.00	0.00	0.00	0.00
2015-11-10	100.00	0.00	0.00	0.00	0.00	0.00
2015-11-17	100.00	0.00	0.00	0.00	0.00	0.00
2015-11-24	98.06	1.94	0.00	0.00	0.00	0.00
2015-12-01	98.06	1.94	0.00	0.00	0.00	0.00
2015-12-08	0.00	100.00	0.00	0.00	0.00	0.00
2015-12-15	0.00	100.00	0.00	0.00	0.00	0.00
2015-12-22	0.00	100.00	0.00	0.00	0.00	0.00
2015-12-29	0.00	100.00	0.00	0.00	0.00	0.00
2016-01-05	0.00	100.00	0.00	0.00	0.00	0.00
2016-01-12	0.00	100.00	0.00	0.00	0.00	0.00
2016-01-19	0.00	100.00	0.00	0.00	0.00	0.00
2016-01-26	0.00	100.00	0.00	0.00	0.00	0.00
2016-02-02	0.00	100.00	0.00	0.00	0.00	0.00
2016-02-09	100.00	0.00	0.00	0.00	0.00	0.00
2016-02-16	100.00	0.00	0.00	0.00	0.00	0.00
2016-02-23	100.00	0.00	0.00	0.00	0.00	0.00
2016-03-01	86.50	13.50	0.00	0.00	0.00	0.00
2016-03-08	20.85	79.15	0.00	0.00	0.00	0.00
2016-03-15	20.85	79.15	0.00	0.00	0.00	0.00
2016-03-22	20.85	79.15	0.00	0.00	0.00	0.00
2016-03-29	76.97	23.03	0.00	0.00	0.00	0.00
2016-04-05	100.00	0.00	0.00	0.00	0.00	0.00
2016-04-12	100.00	0.00	0.00	0.00	0.00	0.00
2016-04-19	100.00	0.00	0.00	0.00	0.00	0.00
2016-04-26	100.00	0.00	0.00	0.00	0.00	0.00
2016-05-03	100.00	0.00	0.00	0.00	0.00	0.00
2016-05-10	100.00	0.00	0.00	0.00	0.00	0.00
2016-05-17	100.00	0.00	0.00	0.00	0.00	0.00
2016-05-24	100.00	0.00	0.00	0.00	0.00	0.00
2016-05-31	100.00	0.00	0.00	0.00	0.00	0.00
2016-06-07	100.00	0.00	0.00	0.00	0.00	0.00
2016-06-14	100.00	0.00	0.00	0.00	0.00	0.00
2016-06-21	100.00	0.00	0.00	0.00	0.00	0.00
2016-06-28	100.00	0.00	0.00	0.00	0.00	0.00
2016-07-05	100.00	0.00	0.00	0.00	0.00	0.00
2016-07-12	100.00	0.00	0.00	0.00	0.00	0.00
2016-07-19	100.00	0.00	0.00	0.00	0.00	0.00

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2016-07-26	100.00	0.00	0.00	0.00	0.00	0.00
2016-08-02	97.40	2.60	0.00	0.00	0.00	0.00
2016-08-09	97.40	2.60	0.00	0.00	0.00	0.00
2016-08-16	97.40	2.60	0.00	0.00	0.00	0.00
2016-08-23	100.00	0.00	0.00	0.00	0.00	0.00
2016-08-30	96.54	3.46	0.00	0.00	0.00	0.00
2016-09-06	100.00	0.00	0.00	0.00	0.00	0.00
2016-09-13	100.00	0.00	0.00	0.00	0.00	0.00
2016-09-20	100.00	0.00	0.00	0.00	0.00	0.00
2016-09-27	100.00	0.00	0.00	0.00	0.00	0.00
2016-10-04	100.00	0.00	0.00	0.00	0.00	0.00
2016-10-11	100.00	0.00	0.00	0.00	0.00	0.00
2016-10-18	100.00	0.00	0.00	0.00	0.00	0.00
2016-10-25	100.00	0.00	0.00	0.00	0.00	0.00
2016-11-01	100.00	0.00	0.00	0.00	0.00	0.00
2016-11-08	99.06	0.94	0.00	0.00	0.00	0.00
2016-11-15	99.06	0.94	0.00	0.00	0.00	0.00
2016-11-22	0.00	100.00	0.00	0.00	0.00	0.00
2016-11-29	0.00	100.00	85.18	0.00	0.00	0.00
2016-12-06	0.00	100.00	91.58	0.00	0.00	0.00
2016-12-13	5.04	94.96	16.97	0.00	0.00	0.00
2016-12-20	4.53	95.47	16.97	0.00	0.00	0.00
2016-12-27	4.53	95.47	16.97	0.00	0.00	0.00
2017-01-03	4.53	95.47	16.97	0.00	0.00	0.00
2017-01-10	4.53	95.47	16.97	0.00	0.00	0.00
2017-01-17	4.53	95.47	16.97	0.00	0.00	0.00
2017-01-24	100.00	0.00	0.00	0.00	0.00	0.00
2017-01-31	100.00	0.00	0.00	0.00	0.00	0.00
2017-02-07	100.00	0.00	0.00	0.00	0.00	0.00
2017-02-14	100.00	0.00	0.00	0.00	0.00	0.00
2017-02-21	100.00	0.00	0.00	0.00	0.00	0.00
2017-02-28	100.00	0.00	0.00	0.00	0.00	0.00
2017-03-07	100.00	0.00	0.00	0.00	0.00	0.00
2017-03-14	100.00	0.00	0.00	0.00	0.00	0.00
2017-03-21	88.48	11.52	0.00	0.00	0.00	0.00
2017-03-28	0.00	100.00	0.00	0.00	0.00	0.00
2017-04-04	0.00	100.00	0.00	0.00	0.00	0.00

Showing 1 to 901 of 901 entries

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The National Drought Mitigation Center | University of Nebraska-Lincoln
3310 Holdrege Street | P.O. Box 830988 | Lincoln, NE 68583–0988
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NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: **Cold/Wind Chill, Freezing Fog, Frost/Freeze, Heavy Snow, Ice Storm, Sleet, Winter Storm, Winter Weather**

Pierce county contains the following zones:
'Pierce'

2 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	2
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	2

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	02/12/2010	19:03	EST-5	Winter Storm		0	0	0.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	01/29/2014	10:30	EST-5	Sleet		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
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Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Wildfire

Pierce county contains the following zones:
'Pierce'

0 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	0
Number of Days with Event:	0
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	0

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K

NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Storm Events Database

Search Results for Pierce County, Georgia

Event Types: Hurricane (Typhoon), Tropical Storm

Pierce county contains the following zones:
'Pierce'

3 events were reported between 01/01/1950 and 12/31/2016 (24472 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	3
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Column Definitions:
'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

*Click on **Location** below to display details.*
Available Event Types have changed over time. Please refer to the Database Details for more information.

Sort By: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	1	0.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	09/05/2004	00:01	EST	Tropical Storm		0	0	0.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	09/25/2004	12:00	EST	Tropical Storm		0	0	0.00K	0.00K
PIERCE (ZONE)	PIERCE (ZONE)	GA	09/01/2016	07:00	EST-5	Tropical Storm		0	1	0.00K	0.00K
Totals:								0	1	0.00K	0.00K

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
11702	Altamaha Homecare, Inc.	Blackshear city	717 Cameron Drive	Blackshear	GA	31516	Medical, Clinics	Essential, Vulnerable Population	Nursing Homes	1031700.00	
3583	Bearville Volunteer Fire Department	Blackshear city	Rt 1,box 714	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	300000.00	6000.00
28006	Blackshear Church of God	Blackshear city	411 W Carter Ave	Blackshear	GA	31516	NGO, Private		> 50 units	91647.00	
3643	Blackshear City Hall/Jail	Blackshear city	318 E Taylor St	Blackshear	GA	31516	Government, City Hall	Essential	Government - Emergency Response	994200.00	227500.00
11922	Blackshear FD	Blackshear city	Carter Avenue	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	367200.00	50000.00
11923	Blackshear FD	Blackshear city	219 Nichols Street	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	683100.00	50000.00
11927	Blackshear Housing Auth-234 Housing	Blackshear city	Ware, Pomery, Napier Street	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	5 to 9 units	3756000.00	
11930	Blackshear Housing Auth-Fannie Gray	Blackshear city	Hendry, McDuffie Streets	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	20 to 49 units	7462500.00	
11929	Blackshear Housing Auth-Lee Darling	Blackshear city	Sycamore and Oden Streets	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	5 to 9 units	1470000.00	
11933	Blackshear Housing Auth-Ware Street	Blackshear city	Yeomans and Ware Street	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	10 to 19 units	3402000.00	
11936	Blackshear Marion Anderson Library	Blackshear city	424 Lee Street	Blackshear	GA	31516	NGO, Library	Historic Consideration, Important	Government - General Services	692700.00	
11955	Blackshear Pierce County Recreation	Blackshear city	Youmans Street	Blackshear	GA	31516	Government, Government Offices		Government - General Services	375000.00	10000.00

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
11940	Blackshear Police Department	Blackshear city	219 Nichols Street	Blackshear	GA	31516	Law Enforcement, Police	Essential	Government - Emergency Response	804600.00	64800.00
11957	Blackshear Presbyterian Child Care	Blackshear city	432 Main Street	Blackshear	GA	31516	Education, Pre K	Important, Vulnerable Population	Churches and Non-Profit Organizations	2084100.00	
13318	Blackshear Public Works	Blackshear city	211 Nichols Street	Blackshear	GA	31516	Government, Government Offices	Transportation	Government - General Services	780000.00	64800.00
13319	Blackshear Sewer Line System	Blackshear city	Fox Trail Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	40000000.00	
21181	Blackshear Wastewater Lift Station	Blackshear city	County Farm Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21184	Blackshear Wastewater Lift Station	Blackshear city	Bob Bowen Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	110000.00
13324	Blackshear Wastewater Lift Station	Blackshear city	Industrial Blvd.	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21178	Blackshear Wastewater Lift Station	Blackshear city	County Farm Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21179	Blackshear Wastewater Lift Station	Blackshear city	Sunny Meadows Drive	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21180	Blackshear Wastewater Lift Station	Blackshear city	U.S. Highway #84	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21182	Blackshear Wastewater Lift Station	Blackshear city	Marion Street	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
11966	Blackshear Wastewater Treatment	Blackshear city	Fox Trail Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	2029500.00	170960.00
13327	Blackshear Wastewater Treatment	Blackshear city	Grovehill Avenue	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	2029500.00	170960.00

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
11967	Blackshear Water Line System	Blackshear city	Carter Avenue	Blackshear	GA	31516	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	40000000.00	
3695	Blackshear Water Well Pump Treatment Plant	Blackshear city	Carter Ave	Blackshear	GA	31516	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	1000000.00	
13329	Blackshear Water Well Pump Treatment	Blackshear city	505 Memory Street	Blackshear	GA	31516	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	1524600.00	274990.00
21161	Blackshear Water Well Pump Treatment	Blackshear city	Bowen Road at Sundance Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - Emergency Response	1043100.00	
3696	City of Blackshear Water Tank	Blackshear city	Mimosa	Blackshear	GA	31516	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	1000000.00	
13330	Country Manor	Blackshear city	310 Pomeroy Street	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	> 50 units	9370200.00	
12046	Head Start Concerted Services	Blackshear city	619 Grady Street	Blackshear	GA	31516	Education, K - 12	Essential, Vulnerable Population	Government - Emergency Response	12750000.00	69500.00
11979	Kimbrell Veterinary Clinic	Blackshear city	3141 West Highway #84	Blackshear	GA	31516	Medical, Private	Essential, Vulnerable Population	Medical Office and Clinic	574200.00	
21202	New Pierce County Library	Blackshear city	705 College Avenue	Blackshear	GA	31516	Government, Library	Important	Government - General Services	3000000.00	
21201	Pierce County BOE Bus Barn	Blackshear city	4746 County Farm Rd	Blackshear	GA	31516	Government, Transportation	Important	Grade Schools and Admin. Offices	1800000.00	62800.00
12043	Pierce County BOE High School	Blackshear city	4850 County Farm Road	Blackshear	GA	31516	Education, K - 12	Essential, Vulnerable Population	Government - Emergency Response	51038700.00	3335900.00

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
21200	Pierce County BOE Maintenance Facility	Blackshear city	834B E. Main Street	Blackshear	GA	31516	Government, Transportation	Important	Grade Schools and Admin. Offices	1881000.00	108000.00
1178	Pierce County BOE Middle School	Blackshear city	5216 Country Farm Rd.	Blackshear	GA		Education, K - 12	Essential, Vulnerable Population	Government - Emergency Response	34561500.00	1769700.00
12040	Pierce County BOE Offices	Blackshear city	834 E Main Street	Blackshear	GA	31516	Government, Government Offices	Important, Vulnerable Population	Grade Schools and Admin. Offices	3109800.00	161100.00
12097	Pierce County Centralized Resource Center	Blackshear city	711 Hendry Street	Blackshear	GA	31516	Government, Government Offices	Essential, Vulnerable Population	Government - Emergency Response	7242600.00	10000.00
12096	Pierce County Health Department	Blackshear city	715 Ware Street	Blackshear	GA	31516	Government, Government Offices	Essential	Government - Emergency Response	1927800.00	
12098	Pierce County Nursing Home	Blackshear city	221 Carter Avenue	Blackshear	GA	31516	Government, Private	Essential, Vulnerable Population	Nursing Homes	12476400.00	600000.00
12100	Pierce County Road Department	Blackshear city	4746 County Farm Rd	Blackshear	GA	31516	Government, Government Offices	Transportation	Government - General Services	1987200.00	54971.00
12110	USDA Farmer's Home Admin/Farm Svc.	Blackshear city	705 College Avenue	Blackshear	GA	31516	Government, Government Offices	Essential	Government - Emergency Response	1440000.00	
12111	USPO- Blackshear #1	Blackshear city	327 East Main Street	Blackshear	GA	31516	Government, Government Offices	Important	Government - General Services	1087200.00	
12112	USPO Blackshear #2	Blackshear city	US #84	Blackshear	GA	31516	Government, Government Offices	Important	Government - General Services	2570400.00	
13331	Village Apartments of Blackshear	Blackshear city	940 Ware Street	Blackshear	GA	31516	Government, Private	Special Consideration, Vulnerable Population	> 50 units	12367500.00	
28007	Offerman Baptist Church	Offerman	8056 Georgia 38	Patterson	GA	31557	NGO, Private		> 50 units	54432.00	

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
11987	Offerman City Hall	Offerman	6113 Carter Drive	Offerman	GA	31556	Government, Government Offices	Essential	Government - Emergency Response	720000.00	40517.00
21197	Offerman Water Well & Pump	Offerman	Carter Drive	Offerman	GA	31556	Government, Water/Sewer	Essential	Government - Emergency Response	5000.00	
12115	USPO-Offerman	Offerman	7203 U.S. #84	Offerman	GA	31556	Government, Government Offices	Important	Government - General Services	163800.00	
21196	City Hall/Police Dept/Adult Education	Patterson city	3531 Williams Street	Patterson	GA	31557	Government, Government Offices	Essential	Government - General Services	5400000.00	
12027	County EMS Station #2	Patterson city	5535 Gardner Street	Patterson	GA	31557	Government, EMS	Essential	Government - Emergency Response	2160300.00	243200.00
11975	GA DOT Maintenance HQ	Patterson city	660 Highway #84	Patterson	GA	31557	Government, Government Offices	Important, Transportation	Government - General Services	600000.00	
11977	GA Forestry Commission	Patterson city	6047 East Main Street	Patterson	GA	31557	Government, Government Offices	Essential	Government - Emergency Response	1750500.00	
3666	Patterson (Water Reclamation Center)	Patterson city	3471 James Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	1000000.00	107925.00
28008	Patterson Baptist Church	Patterson city	5770 Main St.	Patterson	GA	31557	NGO, Private		> 50 units	271625.00	
12035	Patterson Recreation	Patterson city	6190 Industrial Blvd.	Patterson	GA	31537	Government, Government Offices		Government - General Services	744000.00	33400.00
12029	Patterson Recreation/Gym	Patterson city	3515 Williams Street	Patterson	GA	31557	Government, Government Offices		Government - General Services	2100000.00	65700.00
14439	Patterson Sewer Line System	Patterson city	3471 James Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	25000000.00	
12036	Patterson Shop	Patterson city	6335 Highway #84	Patterson	GA	31557	Government, Government Offices	Important	Government - General Services	702000.00	98900.00

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
21188	Patterson Wastewater Lift Station	Patterson city	U.S. Highway #84	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21189	Patterson Wastewater Lift Station	Patterson city	Dallas Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21191	Patterson Wastewater Lift Station	Patterson city	Dereck Lane	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21187	Patterson Wastewater Lift Station	Patterson city	Lucas Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21192	Patterson Wastewater Lift Station	Patterson city	James Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21193	Patterson Wastewater Lift Station	Patterson city	Walker Road	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21194	Patterson Wastewater Lift Station	Patterson city	Hyers Street	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	1000000.00
13334	Patterson Water Line System	Patterson city	Tyre Bridge Road	Patterson	GA	31557	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	25000000.00	
21186	Patterson Water Storage Tank	Patterson city	6542 U.S. Highway #84	Patterson	GA	31557	Government, Water/Sewer	Lifeline	Government - General Services	750000.00	
12037	Patterson Water Well Pump Treatment	Patterson city	Tyre Bridge Road	Patterson	GA	31557	Government, Water/Sewer	Essential, Lifeline	Government - Emergency Response	1000000.00	
12045	Pierce County BOE Patterson Elementary	Patterson city	3414 Drawdy Street	Patterson	GA	31557	Education, K - 12	Essential, Vulnerable Population	Government - Emergency Response	17078100.00	907900.00
28005	Son Shine Kids Daycare	Patterson city	3224 Drawdy Rd	Patterson	GA	31557	Education, Education, Day Care, Day Care		> 50 units	165523.00	
12109	The Playhouse	Patterson city	5519 East Railroad Avenue	Patterson	GA	31557	Education, Education, Day Care, Day Care	Important, Vulnerable Population	Professional/Technical Services	338400.00	

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
12116	USPO Patterson	Patterson city	6489 Highway #84	Patterson	GA	31557	Government, Government Offices	Important	Government - General Services	489300.00	
13309	Blackshear Landfill Building	Pierce County	5358 Brown Lane	Blackshear	GA	31516	Government, Landfill	Important	Government - General Services	96000.00	
21183	Blackshear Wastewater Lift Station	Pierce County	Hendry Street	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
13323	Blackshear Wastewater Lift Station	Pierce County	Highway 121 South	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
13326	Blackshear Wastewater Lift Station	Pierce County	Session Hill	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
21185	Blackshear Wastewater Lift Station	Pierce County	Youman's Road	Blackshear	GA	31516	Government, Water/Sewer	Lifeline	Government - General Services	30000.00	100000.00
11973	Garden View Retirement Assisted Living	Pierce County	6134 College Avenue	Blackshear	GA	31516	NGO, Private	Essential, Vulnerable Population	Nursing Homes	1059300.00	
3585	Hacklebarney Volunteer Fire Department	Pierce County	7055 Hackelbarney Road	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	724800.00	
11980	Lollipop Kids	Pierce County	5218 Highway 121	Blackshear	GA	31516	Education, Education, Day Care, Day Care	Important, Vulnerable Population	Professional/Technical Services	2745600.00	
11984	Nasworthy Care Home	Pierce County	4896 Stanfield Road	Patterson	GA	31557	NGO, NGO, Private, Private	Essential, Vulnerable Population	Nursing Homes	632100.00	
3587	Northside-Mershon Volunteer Fire Department	Pierce County	Johnson Bypass	Blackshear	GA	31551	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	934800.00	
3590	Otter Creek Volunteer Fire Department	Pierce County	5942 Owens Road	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	398700.00	
12039	Pierce County Ag Building	Pierce County	705 College Avenue	Blackshear	GA	31516	Government, Government Offices	Essential	Government - Emergency Response	2771700.00	59900.00

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
1180	Pierce County BOE Blackshear Elementary School	Pierce County	5217 North Highway 121	Blackshear	GA	31516	Education, K - 12	Essential, Vulnerable Population	Government - Emergency Response	44700000.00	1612400.00
21160	Pierce County BOE Midway Elementary	Pierce County	3244 Midway Church Road	Blackshear	GA	31516	Education, K - 12	Vulnerable Population	Grade Schools and Admin. Offices	20455200.00	900000.00
12049	Pierce County Courthouse Commission Annex	Pierce County	312 Nichols Street	Blackshear	GA	31516	Government, Court House	Essential	Government - Emergency Response	6750000.00	220300.00
3635	Pierce County Courthouse	Pierce County	3550 W Hwy 84	Blackshear	GA	31516	Law Enforcement, Court House	Essential, Historic Consideration	Government - Emergency Response	5181600.00	525000.00
12067	Pierce County EMS 911	Pierce County	309 Pierce Industrial Blvd.	Blackshear	GA	31516	Emergency Services, Emergency Services, Communications, Communications	Essential	Government - Emergency Response	1448700.00	123500.00
3589	Pierce County FD Patterson Fire Department	Pierce County	5535 Gardner Street	Patterson	GA	31557	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	122552.00	
12092	Pierce County FD-Offerman/Big Creek	Pierce County	6119 Carter Drive	Offerman	GA	31556	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	600000.00	50000.00
3547	Pierce County Jail	Pierce County	300 Pierce Industrial Boulevard	Blackshear	GA	31516	Law Enforcement, Jails	Essential, Special Consideration, Vulnerable Population	Government - Emergency Response	413115.00	

Critical Facilities List
Final as of April 10, 2017

Id	Name	Jurisdiction	Address	City	State	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
3626	Pierce County Sheriff's Office	Pierce County	300 Pierce Industrial Boulevard	Blackshear	GA	31516	Law Enforcement, Sheriff	Essential, Vulnerable Population, Special Consideration	Government - Emergency Response	6141900.00	500000.00
12107	Sessions Hill Community Center	Pierce County	Allen Avenue	Blackshear	GA	31516	NGO, Private	Important	Government - General Services	1500000.00	
3584	Southside Volunteer Fire Department	Pierce County	4621 St. John's Church Road	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	388800.00	
3586	Sunset Volunteer Fire Department	Pierce County	1436 Sunset Road	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	405900.00	50000.00
12114	USPO Mershon	Pierce County	2547 Highway #32	Blackshear	GA	31551	Government, Government Offices	Important	Government - General Services	297600.00	
12113	USPO-Bristol	Pierce County	1983 Highway #121	Blackshear	GA	31518	Government, Government Offices	Important	Government - General Services	463800.00	
12117	Walker's Home Care	Pierce County	5991 Trudie Road	Patterson	GA	31557	NGO, Water/Sewer	Essential, Vulnerable Population	Nursing Homes	713400.00	
21199	Walkerville Volunteer Fire Department	Pierce County	3028 Walkerville Road	Blackshear	GA	31516	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	900000.00	

Appendix G

Hazard Risk Analyses
Supplement to the Pierce County Joint Hazard Mitigation Plan

Southern Georgia Regional Commission

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Introduction

The Federal Disaster Mitigation Act of 2000 (DMA2K) requires state, local, and tribal governments to develop and maintain a mitigation plan to be eligible for certain federal disaster assistance and hazard mitigation funding programs.

Mitigation seeks to reduce a hazard's impacts, which may include loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation must be based on a sound risk assessment that quantifies the potential losses of a disaster by assessing the vulnerability of buildings, infrastructure, and people.

In recognition of the importance of planning in mitigation activities, FEMA Hazus-MH, a powerful disaster risk assessment tool based on geographic information systems (GIS). This tool enables communities of all sizes to predict estimated losses from floods, hurricanes, earthquakes, and other related phenomena and to measure the impact of various mitigation practices that might help reduce those losses.

In 2017, the Georgia Department of Emergency Management partnered with The SOUTHERN GEORGIA REGIONAL COMMISSION (SGRC) to develop a detailed risk assessment focused on defining hurricane, riverine flood and tornado impacts for Georgia. This assessment identifies the characteristics and potential consequences of the disaster, how much of the community could be affected by the disaster, and the impact on community assets. In the following years, the Georgia Association of Regional Commissions (GARC) are utilizing this workflow to define impacts in other counties in Georgia. This document provides the results for Pierce County.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Pierce County. The Hazus-MH application includes default data for every county in the US. This Hazus-MH data was derived from a variety of national sources and in some cases the data are also several years old. Whenever possible, using local provided data is preferred. Pierce County provided building inventory information from the county's property tax assessment system. This section describes the changes made to the default Hazus-MH inventory and the modeling parameters used for each scenario.

County Inventory Changes

The default Hazus-MH site-specific point inventory was updated using data compiled from the Georgia Emergency Management Agency (GEMA). The default Hazus-MH aggregate inventory (General Building Stock) was also updated prior to running the scenarios. Reported losses reflect the updated data sets.

General Building Stock Updates

General Building Stock (GBS) is an inventory category that consists of aggregated data (grouped by census geography — tract or block). Hazus-MH generates a combination of site-specific and aggregated loss estimates based on the given analysis and user input.

The GBS records for Pierce County were replaced with data derived from parcel and property assessment data obtained from Pierce County. The county provided property assessment data was current as of Decembe 2016 and the parcel data current as of January 2017. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary; then, each parcel point was linked to an assessor record based upon matching parcel numbers. The parcel assessor match-rate for Pierce County is 99.7%. The generated building inventory represents the approximate locations (within a parcel) of structures. The building inventory was aggregated by census block. Both the tract and block tables were updated. Table 1 shows the results of the changes to the GBS tables by occupancy class.

Table 1: GBS Building Exposure Updates by Occupancy Class*

Occupancy Classification	Default Count	Updated Count	Default Exposure	Updated Exposure
Agricultural	57	5	$ 11,623,000	$ 7,101,000
Commercial	383	408	$ 179,920,000	$ 237,011,000
Education	18	9	$ 17,722,000	$ 25,675,000
Government	11	34	$ 3,464,000	$ 20,523,000
Industrial	97	183	$ 50,131,000	$ 175,473,000
Religious	69	89	$ 35,321,000	$ 55,646,000
Residential	7691	8464	$ 1,075,760,000	$ 1,010,940,000
Total	**8326**	**9192**	**$ 1,373,941,000**	**$ 1,532,369,000**

*The exposure values represent the total number and replacement cost for all Pierce County Buildings

For Pierce County, the updated GBS was used to calculate hurricane wind losses. The flood losses and tornado losses were calculated from building inventory modeled in Hazus-MH as User-Defined Facility (UDF)[1], or site-specific points. Figure 1 shows the distribution of buildings as points based on the county provided data.

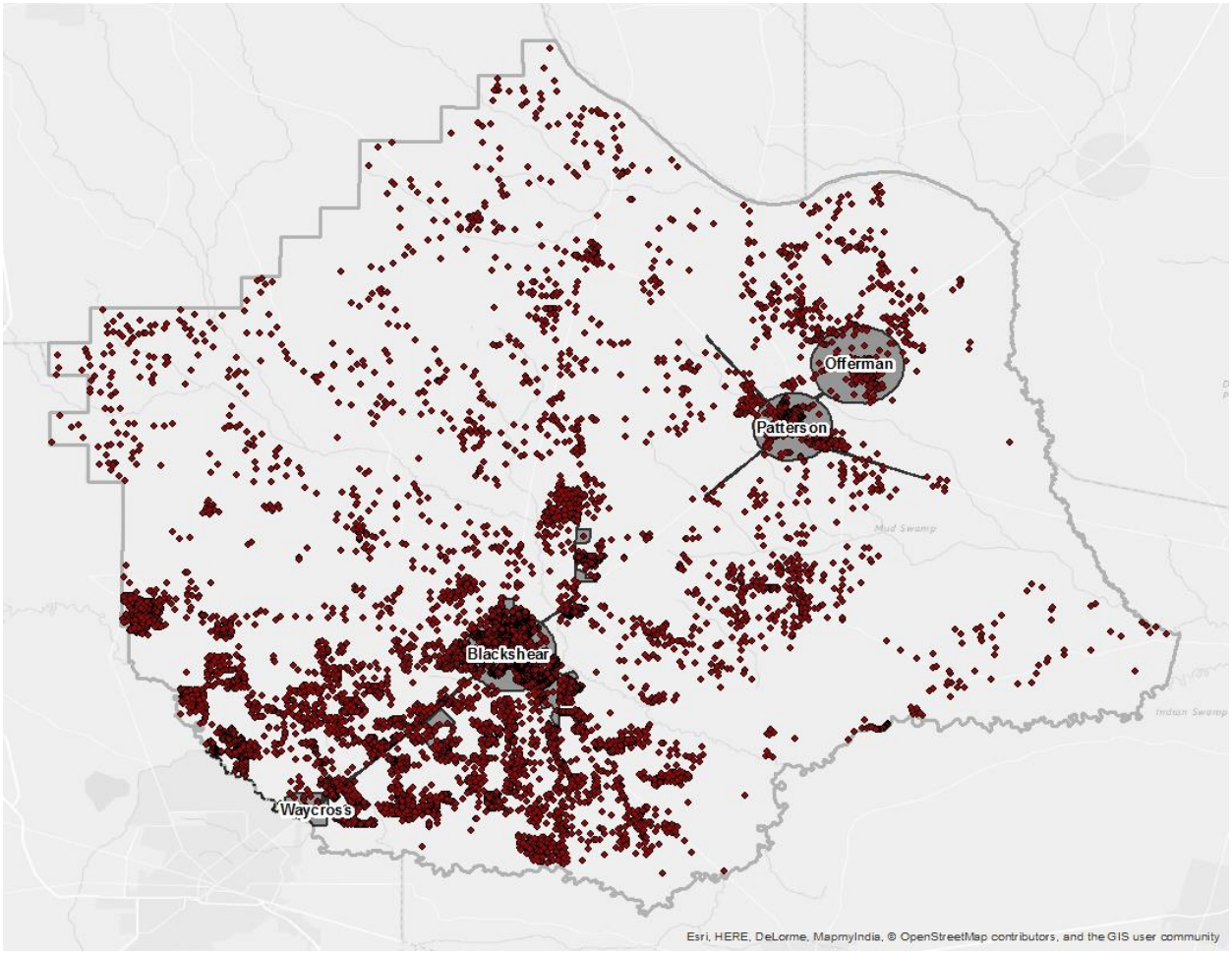

Figure 1: Pierce County Overview

[1] The UDF inventory category in Hazus-MH allows the user to enter site-specific data in place of GBS data.

Essential Facility Updates

The default Hazus-MH essential facility data was updated to reflect improved information available in the Georgia Mitigation Information System (GMIS). For these risk analyses, only GMIS data for buildings that Hazus-MH classified as Essential Facilities was integrated into Hazus-MH because the application provides specialized reports for these five types of facilities. Essential Facility inventory was updated for the analysis conducted for this report. The following table summarizes the counts and exposures, where available, by Essential Facility classification of the updated data for the county.

Essential facilities include:

- Care facilities
- EOCs
- Fire stations
- Police stations
- Schools

Table 2: Updated Essential Facilities

Classification	Updated Count	Updated Exposure
Pierce County		
EOC	1	$ 880,000
Care	5	$ 15,911,000
Fire	12	$ 10,010,000
Police	7	$ 28,588,000
School	7	$ 25,455,000
Total	**32**	**$ 80,844,000**

Classification	Updated Count	Updated Exposure
Offerman		
EOC	0	$ -
Care	0	$ -
Fire	1	$ 600,000
Police	0	$ -
School	0	$ -
Total	**1**	**$ 600,000**

Classification	Updated Count	Updated Exposure
Blackshear		
EOC	1	$ 880,000
Care	2	$ 13,507,000
Fire	2	$ 1,050,000
Police	6	$ 26,027,000
School	5	$ 4,990,000
Total	**16**	**$ 46,454,000**

Classification	Updated Count	Updated Exposure
Patterson		
EOC	0	$ -
Care	0	$ -
Fire	2	$ 4,311,000
Police	1	$ 2,561,000
School	1	$ -
Total	**4**	**$ 6,872,000**

Assumptions and Exceptions

Hazus-MH loss estimates may be impacted by certain assumptions and process variances made in this risk assessment.

- The Pierce County analysis used Hazus-MH Version 2.2 SP1, which was released by FEMA in May 2015.
- County provided parcel and property assessment data may not fully reflect all buildings in the county. For example, some counties do not report not-for-profit buildings such as government buildings, schools and churches in their property assessment data. This data was used to update the General Building Stock as well as the User Defined Facilities applied in this risk assessment.
- GBS updates from assessor data will skew loss calculations. The following attributes were defaulted or calculated:
    - Foundation Type was set from Occupancy Class
    - First Floor Height was set from Foundation Type
    - Content Cost was calculated from Replacement Cost
- It is assumed that the buildings are located at the centroid of the parcel unless building footprints are used. For this analysis of Pierce County, parcel centroids were used.
- The essential facilities extracted from the GMIS were only used in the portion of the analysis designated as essential facility damage. They were not used in the update of the General Building Stock or the User Defined Facility inventory.

The hazard models included in this risk assessment included:

- Hurricane assessment which was comprised of a wind only damage assessment
- Flood assessment based on the 1% annual chance event that includes riverine assessments
- Tornado assessment based on GIS modeling

Hurricane Risk Assessment

Hazard Definition

The National Hurricane Center describes a hurricane as a tropical cyclone in which the maximum sustained wind is, at minimum, 74 miles per hour (mph)[2]. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline. Hurricanes in the Atlantic Ocean, Gulf of Mexico, and Caribbean form between June and November with the peak of hurricane season occurring in the middle of September. Figure 2 shows that many hurricanes have impacted the Atlantic and Gulf coasts of the United States.

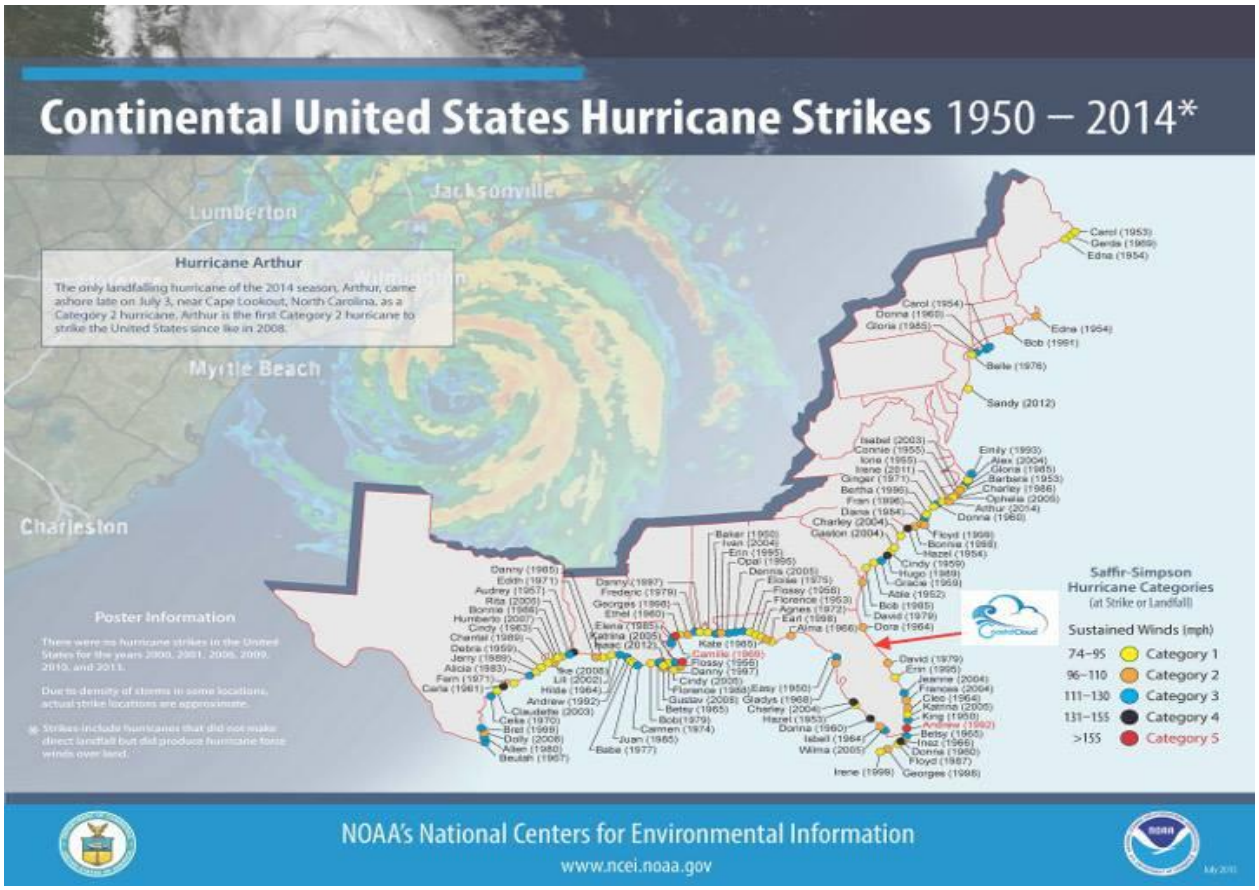

Figure 2: Continental United States Hurricane Strikes: 1950 to 2014[3]

Hurricane intensities are measured using the Saffir-Simpson Hurricane Wind Scale (Table 3). This scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time.

[2] National Hurricane Center (2011). "Glossary of NHC Terms." National Oceanic and Atmospheric Administration. http://www.nhc.noaa.gov/aboutgloss.shtml#h. Retrieved 2-23-2012.

[3] Source: NOAA National Climatic Data Center

Table 3: Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed (mph)	Damage
1	74 – 95	Very dangerous winds will produce some damage
2	96 – 110	Extremely dangerous winds will cause extensive damage
3	111 - 130	Devastating damage will occur
4	131 -155	Catastrophic damage will occur
5	> 155	Catastrophic damage will occur

Hurricanes bring a complex set of impacts. The winds from a hurricane produce a rise in the water level at landfall called storm surge. Storm surges produce coastal flooding effects that can be as damaging as the hurricane's winds. Hurricanes bring very intense inland riverine flooding. Hurricanes can also produce tornadoes that can add to the wind damages inland. In this risk assessment, only hurricane winds, and coastal storm surge are considered.

The National Oceanic and Atmospheric Administration's National Hurricane Center created the HURDAT database, which contains all of the tracks of tropical systems since the mid-1800s. This database was used to document the number of tropical systems that have affected Pierce County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Pierce County but impacted the county. Since 1851, Pierce County has had 65 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Pierce County

Year	Month	Day	Name	Wind (Knots)	Category
1868	October	4	NOTNAMED	50	TS
1868	October	5	NOTNAMED	40	TS
1871	August	23	NOTNAMED	60	TS
1871	August	23	NOTNAMED	50	TS
1871	October	6	NOTNAMED	40	TS
1871	October	6	NOTNAMED	40	TS
1873	June	2	NOTNAMED	40	TS
1873	September	19	NOTNAMED	60	TS
1877	September	20	NOTNAMED	40	TS
1877	September	20	NOTNAMED	40	TS
1878	October	11	NOTNAMED	40	TS
1885	August	31	NOTNAMED	40	TS
1885	October	12	NOTNAMED	50	TS
1885	October	12	NOTNAMED	50	TS
1888	September	9	NOTNAMED	45	TS
1888	September	9	NOTNAMED	40	TS
1893	June	16	NOTNAMED	50	TS
1896	June	29	NOTNAMED	100	H3
1898	October	2	NOTNAMED	115	H4
1898	October	2	NOTNAMED	90	H2
1907	June	29	NOTNAMED	45	TS
1907	September	29	NOTNAMED	40	TS
1911	August	5	NOTNAMED	20	TD
1911	August	5	NOTNAMED	20	TD
1912	July	15	NOTNAMED	45	TS
1912	July	15	NOTNAMED	40	TS
1912	September	6	NOTNAMED	30	TD
1912	September	6	NOTNAMED	25	TD
1914	September	17	NOTNAMED	60	TS
1915	August	2	NOTNAMED	40	TS
1915	August	3	NOTNAMED	40	TS
1916	October	4	NOTNAMED	50	TS
1919	October	1	NOTNAMED	40	TS
1919	October	1	NOTNAMED	35	TS
1924	September	16	NOTNAMED	40	TS
1924	September	30	NOTNAMED	55	E
1946	October	8	NOTNAMED	35	TS
1947	September	24	NOTNAMED	50	TS
1947	September	24	NOTNAMED	45	TS
1947	October	8	NOTNAMED	25	TD
1947	October	15	NOTNAMED	75	H1
1947	October	15	NOTNAMED	65	H1
1953	September	27	FLORENCE	50	E
1953	September	27	FLORENCE	40	E
1957	June	9	NOTNAMED	35	TS
1957	June	9	NOTNAMED	35	TS
1960	July	29	BRENDA	30	TD
1966	June	10	ALMA	55	TS
1966	June	10	ALMA	45	TS
1968	June	7	ABBY	50	TS
1968	June	7	ABBY	50	TS
1970	May	25	ALMA	25	TD
1976	May	23	SUBTROP1	40	SS
1976	May	24	SUBTROP1	40	SS
1985	September	11	ISABEL	30	TD
1985	October	11	ISABEL	30	TD
1987	August	17	NOTNAMED	10	TD
1994	November	21	GORDON	20	TD
1994	November	21	GORDON	20	TD
1996	October	8	JOSEPHINE	45	E
2000	September	18	GORDON	40	TS
2000	September	18	GORDON	30	TD
2004	August	12	BONNIE	30	TD
2005	October	6	TAMMY	45	TS
2006	June	14	ALBERTO	35	TS

Category Definitions:
TS – Tropical storm
TD – Tropical depression
CAT_1 – Category 1 (same format for 2, 3, 4 and 5)
E – Extra-tropical cyclone

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Category 1 storm with maximum winds of 84 mph.

Wind Damage Assessment

Wind losses were determined from probabilistic models run for the Category 1 storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled hurricane.

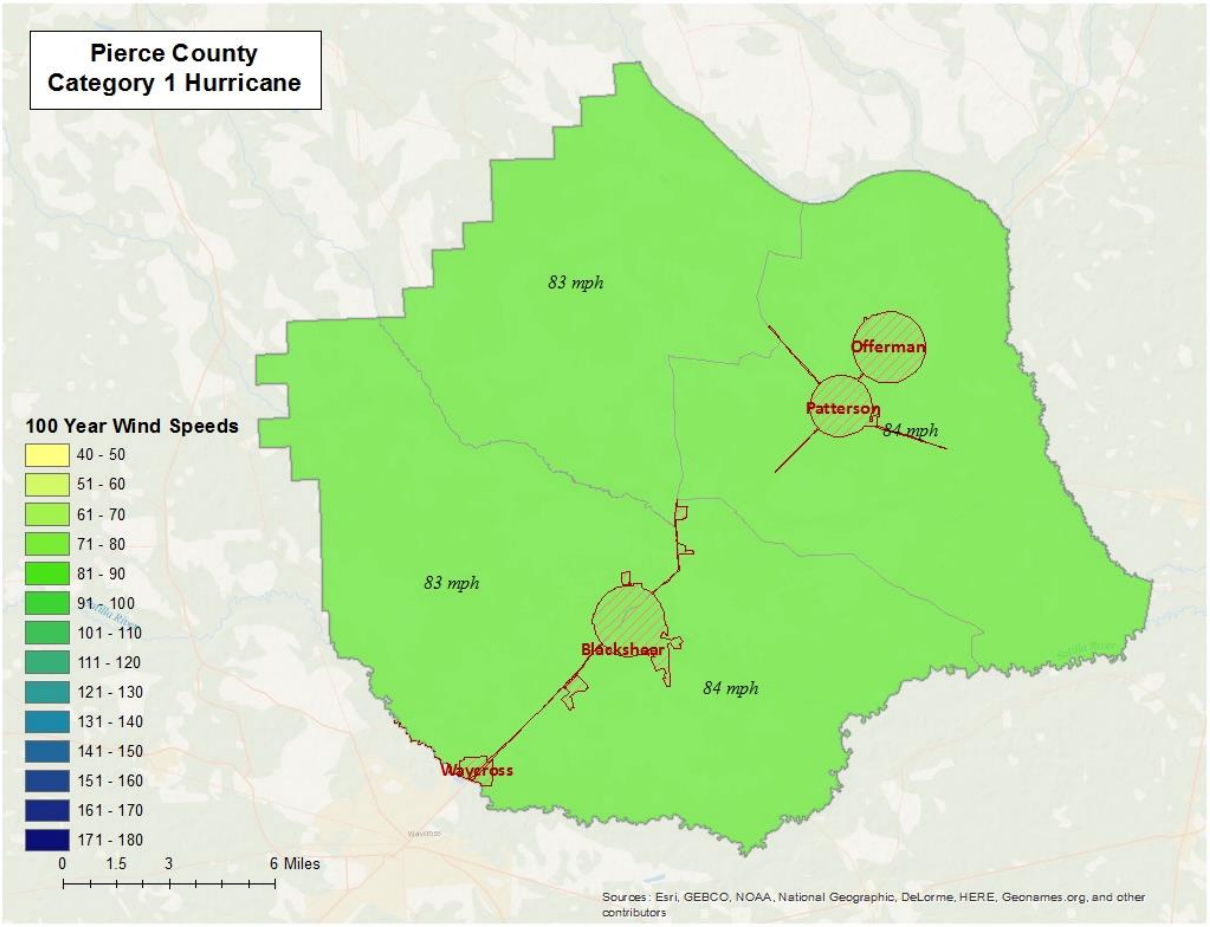

Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Pierce County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. The following table shows a summary of the results of wind-related building damage in Pierce County for the Category 1 (100 Year Event) storm. The loss ratio expresses building losses as a percentage of total building replacement cost in the county. Figure 4 illustrates the building loss ratios of the modeled Category 1 storm.

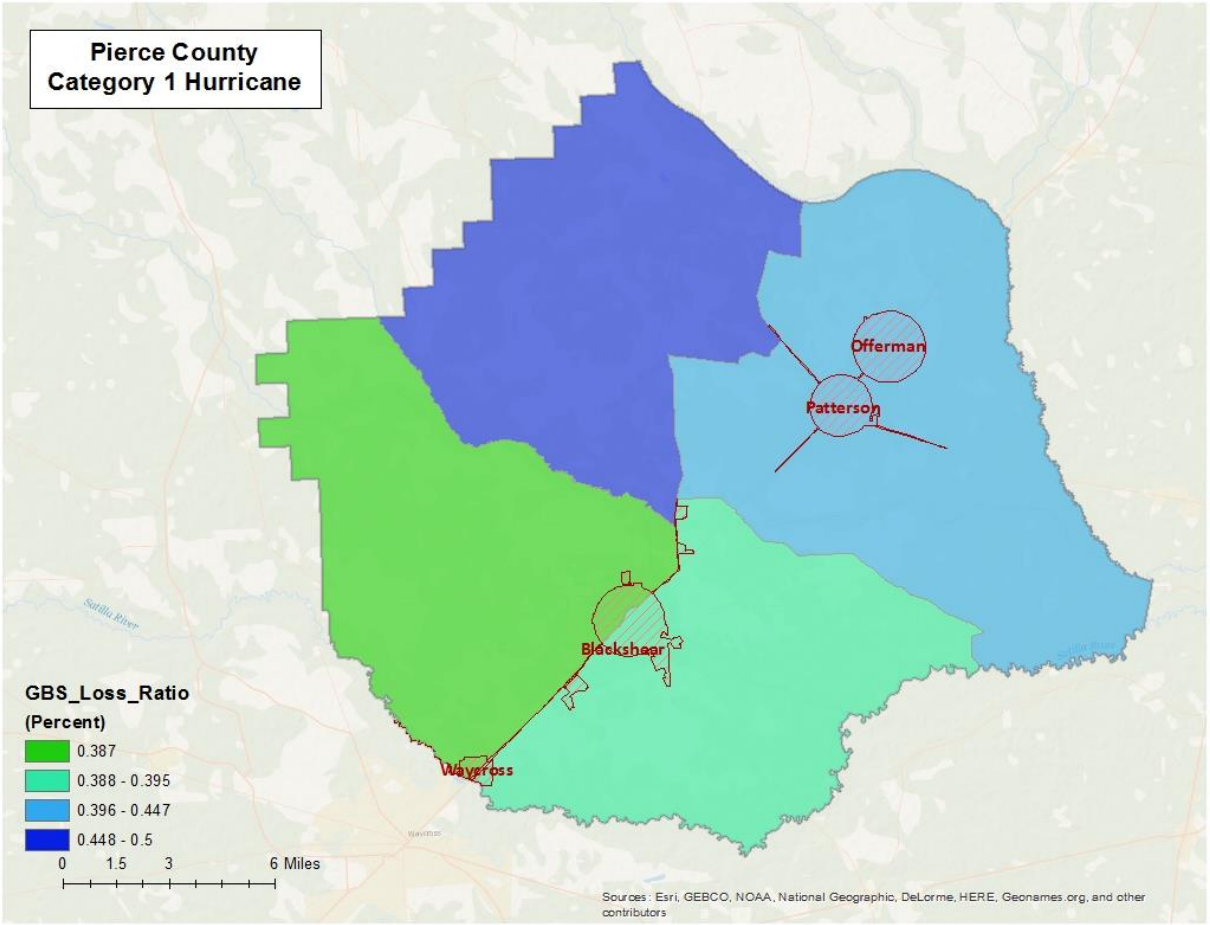

Figure 4: Hurricane Wind GBS Loss Ratios

Table 5 shows the Hurricane Wind Building Damage results including the number of buildings damaged, total building damage, and economic loss.

Table 5: Hurricane Wind Building Damage

Storm Classification	Number of Damaged Buildings	Building Damages	Total Economic Loss	Loss Ratio
Category 1	260	$ 8,763,220	$ 9,315,310	0.41

Essential Facility Losses

Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds. The results are compiled in Table 6.

There are 32 essential facilities in Pierce County.

Classification	Number
EOC	1
Care	5
Fire	12
Police	7
School	7
Total	**32**

Table 6: Wind-Damaged Essential Facility Losses

Storm Classification	Facilities Moderately Damaged (>50%)	Facilities Completely Damaged (>50%)	Facilities with expected loss (<1day)
Category 1	0	0	32

Shelter Requirements

Hazus-MH estimates the number of households evacuated from buildings with severe damage from high velocity winds as well as the number of people who will require short-term sheltering. The results are listed in Table 7 and mapped in Figure 5.

Table 7: Displaced Households and People

Storm Classification	# of Displaced Households	# of People Needing Short-Term Shelter
Category 1	1	0

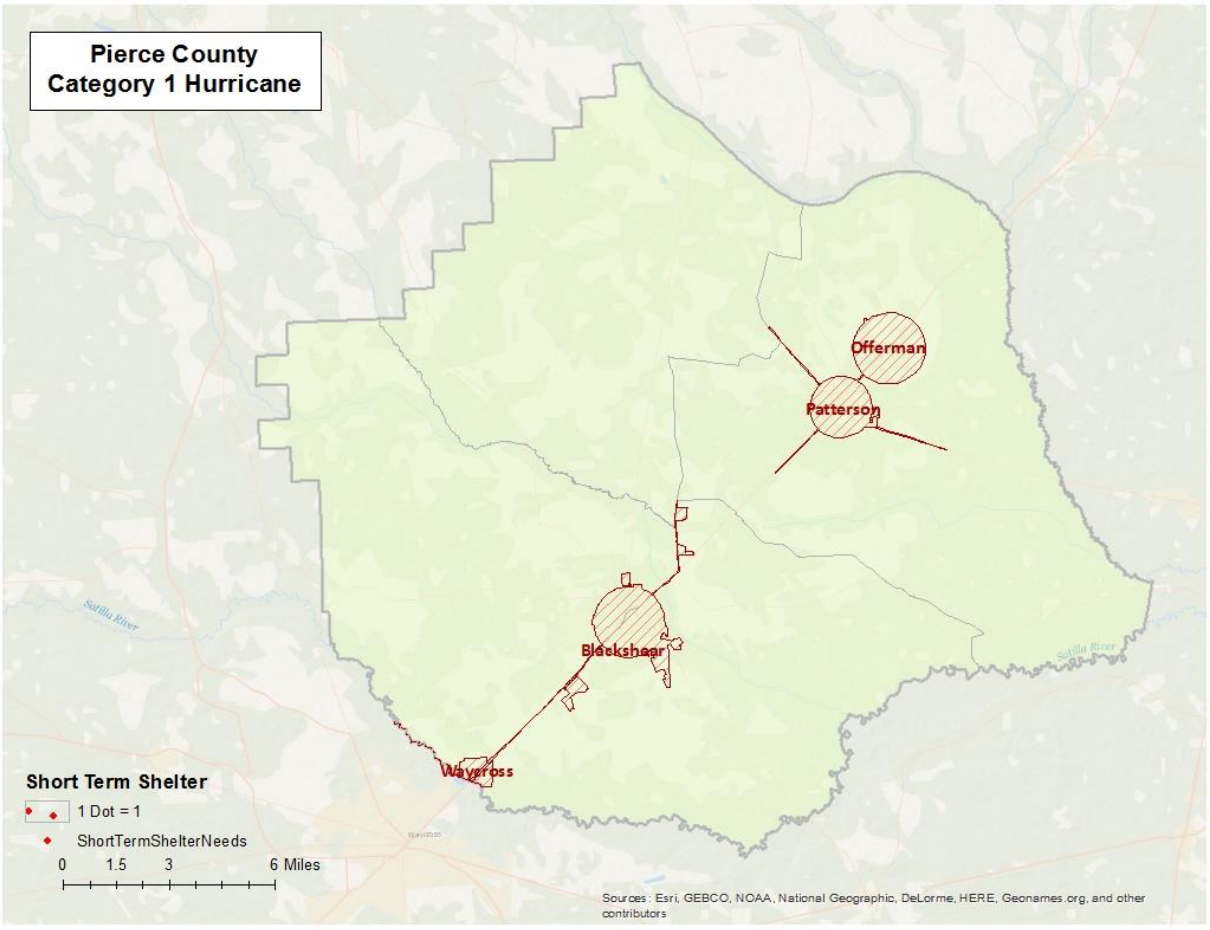

Figure 5: Hurricane Wind Shelter Requirements

Debris Generated from Hurricane Wind

Hazus-MH estimates the amount of debris that will be generated by high velocity hurricane winds and quantifies it into three broad categories to determine the material handling equipment needed:

- Reinforced Concrete and Steel Debris
- Brick and Wood and Other Building Debris
- Tree Debris

Different material handling equipment is required for each category of debris. The estimates of debris for this scenario are listed in Table 8. The amount of hurricane wind related tree debris that is estimated to require pick up at the public's expense is listed in the eligible tree debris column.

Table 8: Wind-Related Debris Weight (Tons)

Storm Classification	Brick, Wood, and Other	Reinforced Concrete/Steel	Tree Debris	Other Tree Debris	Total
Category 1	577	-	6,684	92,619	99,880

Figure 6 shows the distribution of all wind related debris resulting from a Category 1 hurricane. Each dot represents 20 tons of debris within the census tract in which it is located. The dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

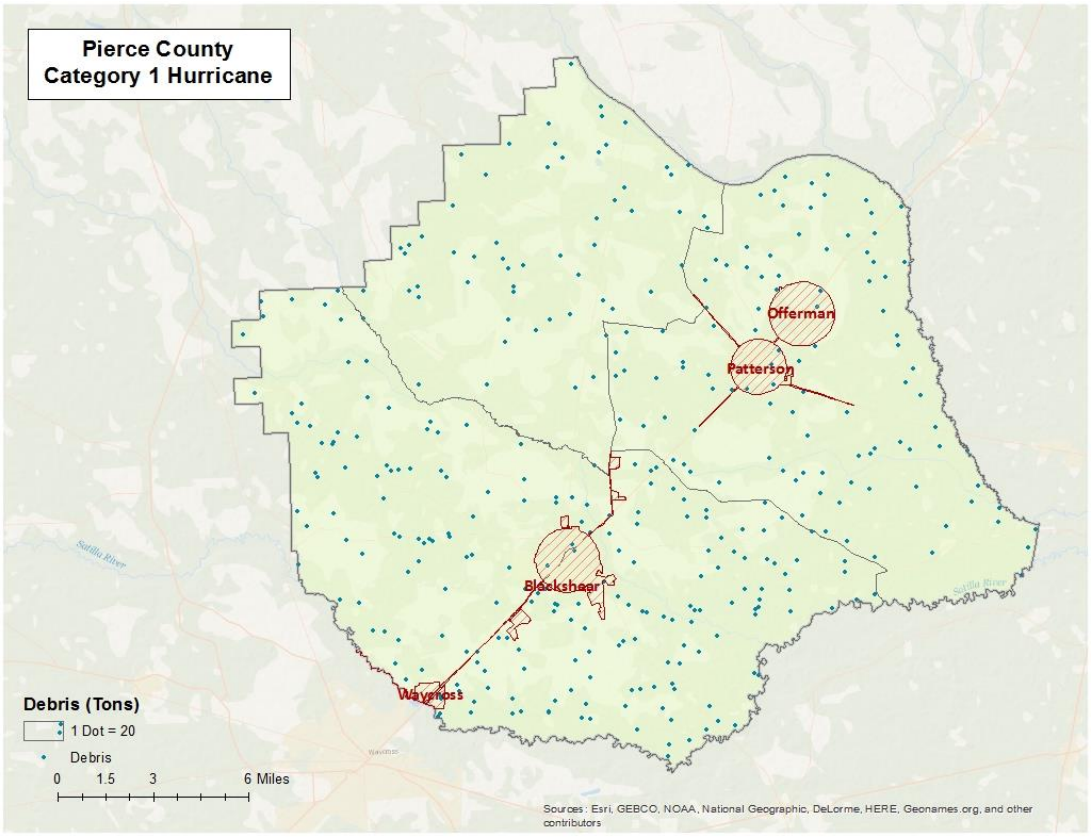

Figure 6: Wind-Related Debris Weight (Tons)

Flood Risk Assessment

Hazard Definition

Flooding is a significant natural hazard throughout the United States. The type, magnitude, and severity of flooding are functions of the amount and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Floods can be classified as one of three types: upstream floods, downstream floods, or coastal floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause damage over relatively localized areas, but they can be quite severe in the local areas in which they occur. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Georgia, but they are most common in the spring and summer months.

Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage.

Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings, leading to challenges in the determination of the base (1-percent-annual-chance) flood for hazard mapping purposes. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The Pierce County flood risk assessment analyzed at risk structures in the SFHA.

The SFHA is the area where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The owner of a structure in a high-risk area must carry flood insurance, if the owner carries a mortgage from a federally regulated or insured lender or servicer.

The following probabilistic risk assessment involves an analysis of a 1% annual chance riverine flood event.

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in October 2017. The flood boundaries were overlaid with the USGS 10 meter DEM using the Hazus-MH Enhanced Quick Look tool to generate riverine depth grids. The riverine flood depth grid was then imported into Hazus-MH to calculate the riverine flood loss estimates. Figure 7 illustrates the riverine inundation boundary associated with the 1% annual chance. Please note that the riverine flooding may not take into account elevated housing or raised Base Flood Elevation.

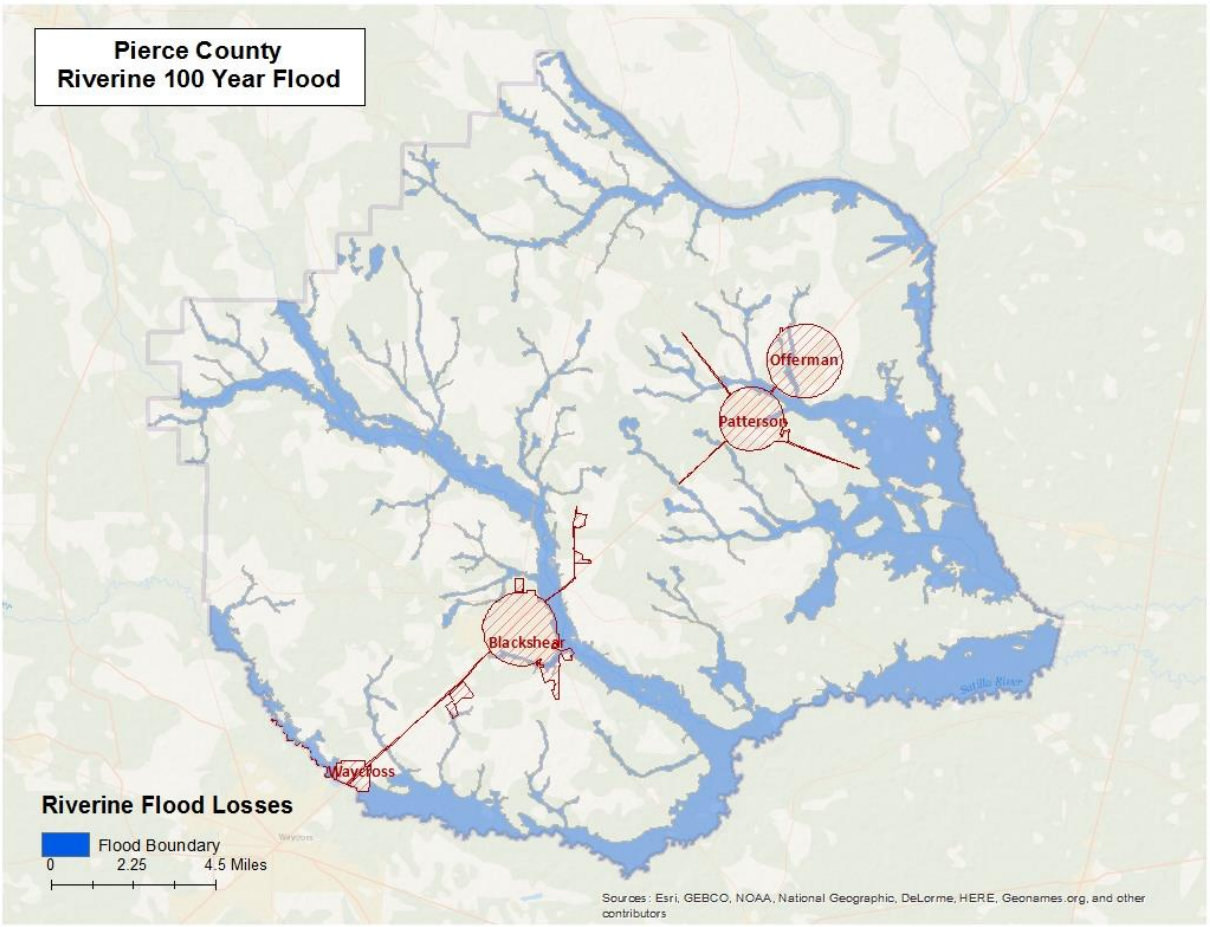

Figure 7: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Pierce County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 9 provides a summary of the potential flood-related building damage in Pierce County by jurisdiction that might be experienced from the 1% flood. Figure 8 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 9 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 9: Pierce County Riverine 1% Building Losses

Occupancy Classification	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged
Blackshear					
Residential	1,299	13	$ 229,202,978	$ 576,041	0.25%
Commercial	237	1	$ 148,664,062	$ 224,002	0.15%
Offerman					
Residential	191	1	$ 20,593,267	$ 36,346	0.18%
Patterson					
Residential	343	1	$ 47,290,618	$ 28,088	0.06%
Unincorporated					
Residential	6,626	114	$ 712,874,710	$ 4,219,043	0.59%
Commercial	106	6	$ 63,274,348	$ 246,350	0.39%
County Total					
Total	8,802	136	$ 1,221,899,983	$ 5,329,870	

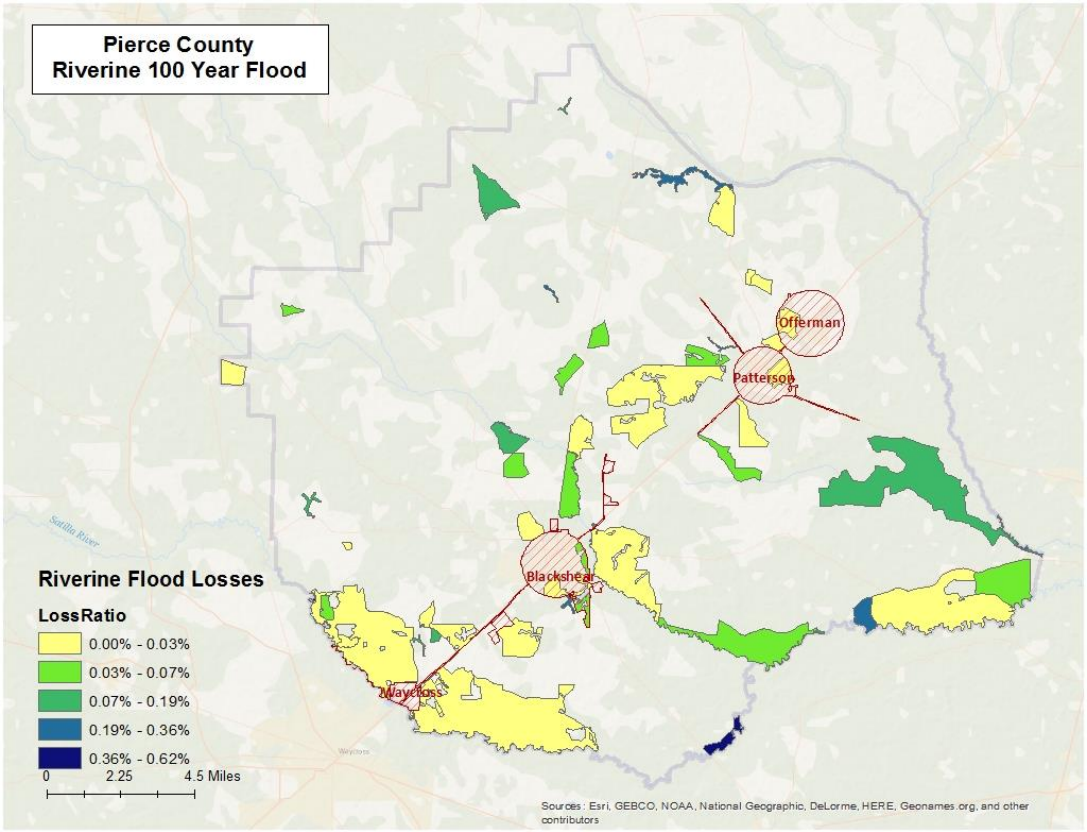

Figure 8: Potential UDF Loss Ratios from the 1% Riverine Flood

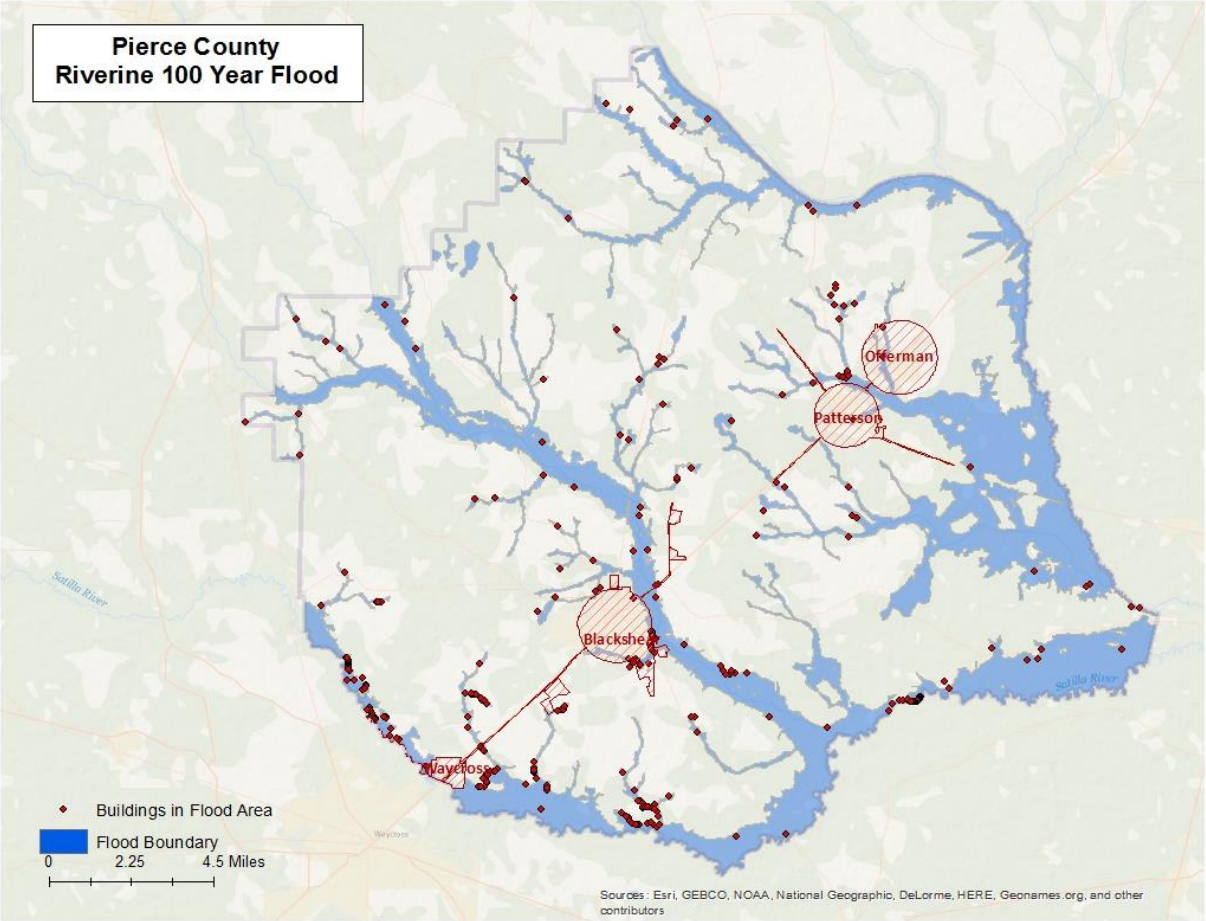

Figure 9: Damaged Buildings in 1% Riverine Flood

Riverine 1% Flood Essential Facility Losses

An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis has identified that were 0 Essential Facilities subject to damage in the Pierce County riverine 1% probability floodplain.

Table 10: Expected Damage to Essential Facilities in 1% Riverine Flood

Classification	Total	Moderate	Substantial	Loss of Use
Fire Station	12	0	0	0
Hospitals	5	0	0	0
Police Stations	7	0	0	0
Schools	7	0	0	0
EOCs	0	0	0	0

Riverine 1% Flood Shelter Requirements

Hazus-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 531 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 1,592 individuals, of which 911 may require short term publicly provided shelter. The results are mapped in Figure 10. These numbers may be overestimated for two reasons: elevated housing not taken into account and parcel centroids (not aligned exactly with actual structures).

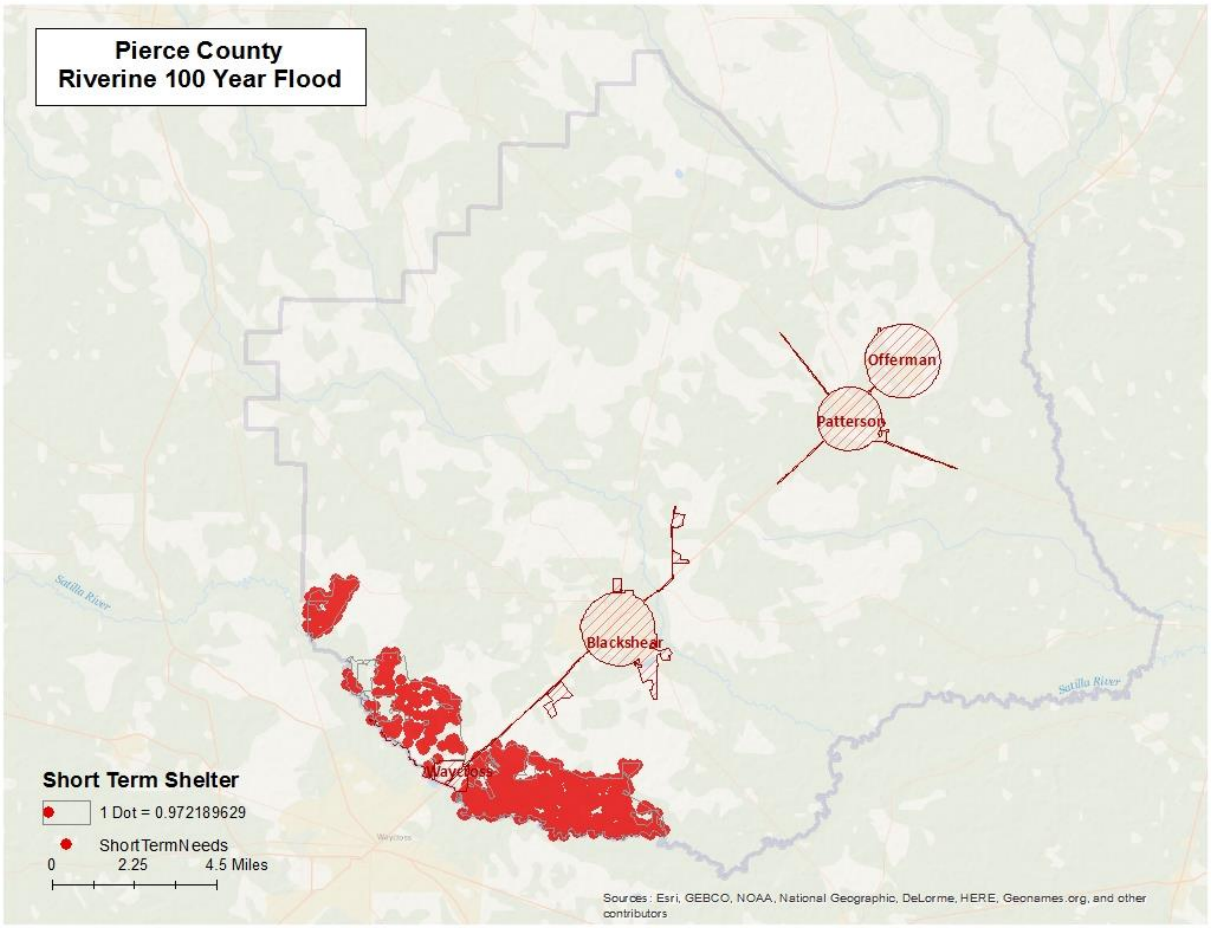

Figure 10: Estimated Flood Shelter Requirements in 1% Riverine Flood

Riverine 1% Flood Debris

Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 4,559 tons of debris might be generated: 1) Finishes – 1,741 tons; 2) Structural – 1,035 tons; and 3) Foundations- 1,783 tons. The results are mapped in Figure 11.

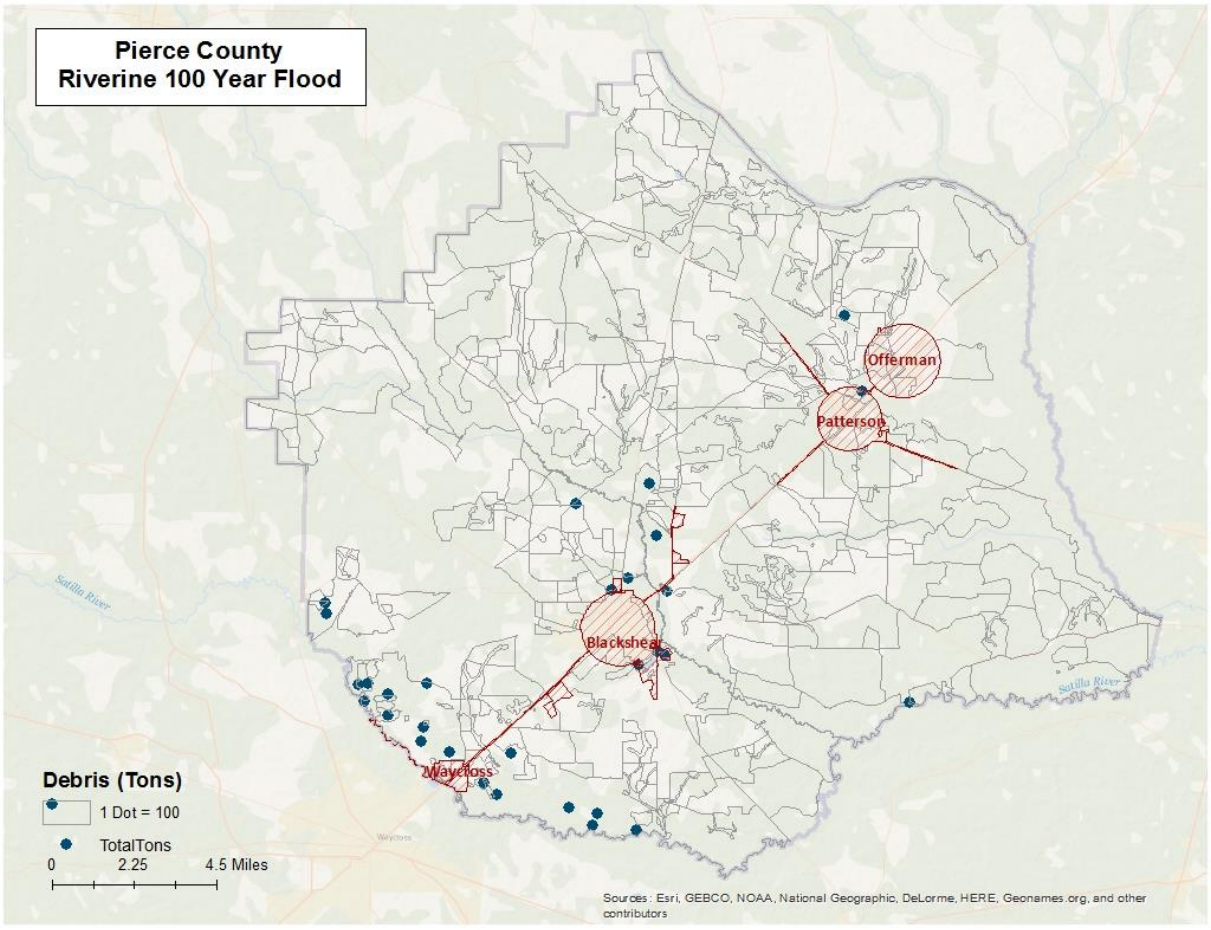

Figure 11: Flood Debris Weight (Tons) in 1% Riverine Flood

Tornado Risk Assessment

Hazard Definition

Tornadoes pose a great risk to the state of Georgia and its citizens. Tornadoes can occur at any time during the day or night. They can also happen during any month of the year. The unpredictability of tornadoes makes them one of Georgia's most dangerous hazards. Their extreme winds are violently destructive when they touch down in the region's developed and populated areas. Current estimates place the maximum velocity at about 300 miles per hour, but higher and lower values can occur. A wind velocity of 200 miles per hour will result in a wind pressure of 102.4 pounds per square foot of surface area—a load that exceeds the tolerance limits of most buildings. Considering these factors, it is easy to understand why tornadoes can be so devastating for the communities they hit.

Tornadoes are defined as violently-rotating columns of air extending from thunderstorms and cyclonic events. Funnel clouds are rotating columns of air not in contact with the ground; however, the violently-rotating column of air can reach the ground very quickly and become a tornado. If the funnel cloud picks up and blows debris, it has reached the ground and is a tornado.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 11.

Table 11: Enhanced Fujita Tornado Rating

Fujita Number	Estimated Wind Speed	Path Width	Path Length	Description of Destruction
EF0 *Gale*	65-85 mph	6-17 yards	0.3-0.9 miles	Light damage, some damage to chimneys, branches broken, sign boards damaged, shallow-rooted trees blown over.
EF1 *Moderate*	86-110 mph	18-55 yards	1.0-3.1 miles	Moderate damage, roof surfaces peeled off, mobile homes pushed off foundations, attached garages damaged.
EF2 *Significant*	111-135 mph	56-175 yards	3.2-9.9 miles	Considerable damage, entire roofs torn from frame houses, mobile homes demolished, boxcars pushed over, large trees snapped or uprooted.
EF3 *Severe*	136-165 mph	176-566 yards	10-31 miles	Severe damage, walls torn from well-constructed houses, trains overturned, most trees in forests uprooted, heavy cars thrown about.
EF4 *Devastating*	166-200 mph	0.3-0.9 miles	32-99 miles	Complete damage, well-constructed houses leveled, structures with weak foundations blown off for some distance, large missiles generated.
EF5 *ncredible*	Over 200 mph	1.0-3.1 miles	100-315 miles	Foundations swept clean, automobiles become missiles and thrown for 100 yards or more, steel-reinforced concrete structures badly damaged.

Source: http://www.srh.noaa.gov

Hypothetical Tornado Scenario

For this report, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados (southeast to northwest). The tornado path was placed to travel through Blackshear. The selected widths were modeled after a re-creation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths. There is no guarantee that every tornado will fit exactly into one of these categories. Table 12 depicts tornado path widths and expected damage.

Table 12: Tornado Path Widths and Damage Curves

Enhanced Fujita Scale	Path Width (feet)	Maximum Expected Damage
EF5	2,400	100%
EF4	1,800	100%
EF3	1,200	80%
EF2	600	50%
EF1	300	10%

Within any given tornado path there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. After the hypothetical path is digitized on a map, the process is modeled in GIS by adding buffers (damage zones) around the tornado path. Figure 12 describes the zone analysis.

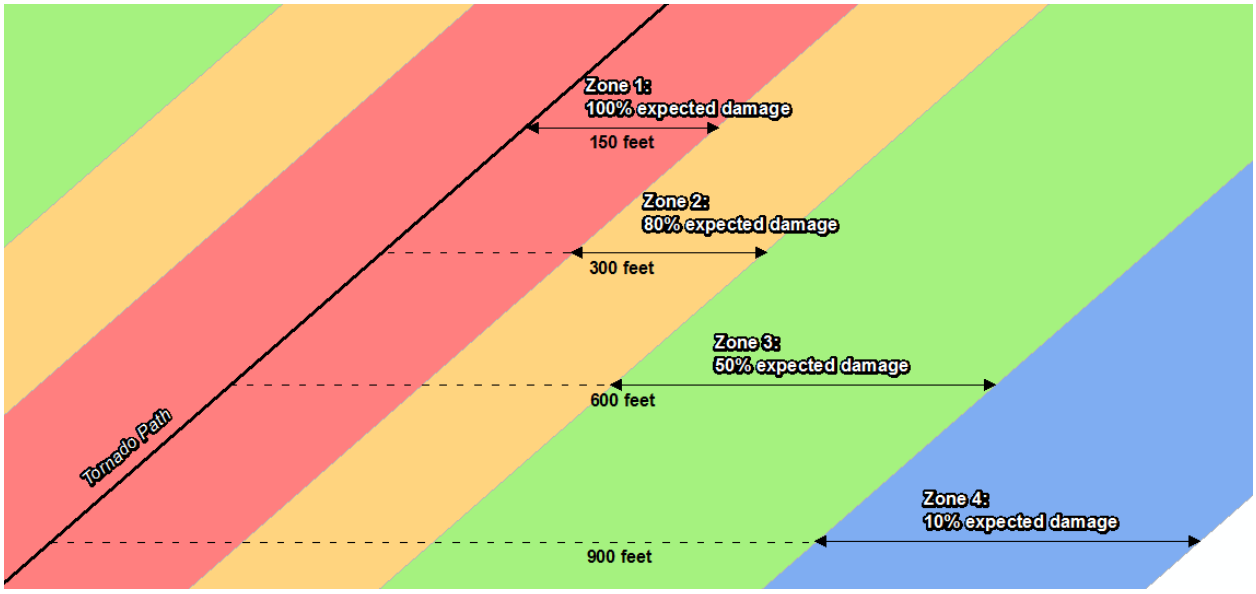

Figure 12: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 13. Major damage is estimated within 150 feet of the tornado path. The outer buffer is 900 feet from the tornado path, within which buildings will not experience any damage. The selected hypothetical tornado path is depicted in Figure 13 and the damage curve buffer zones are shown in Figure 14.

Table 13: EF3 Tornado Zones and Damage Curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%
4	600-900	0%

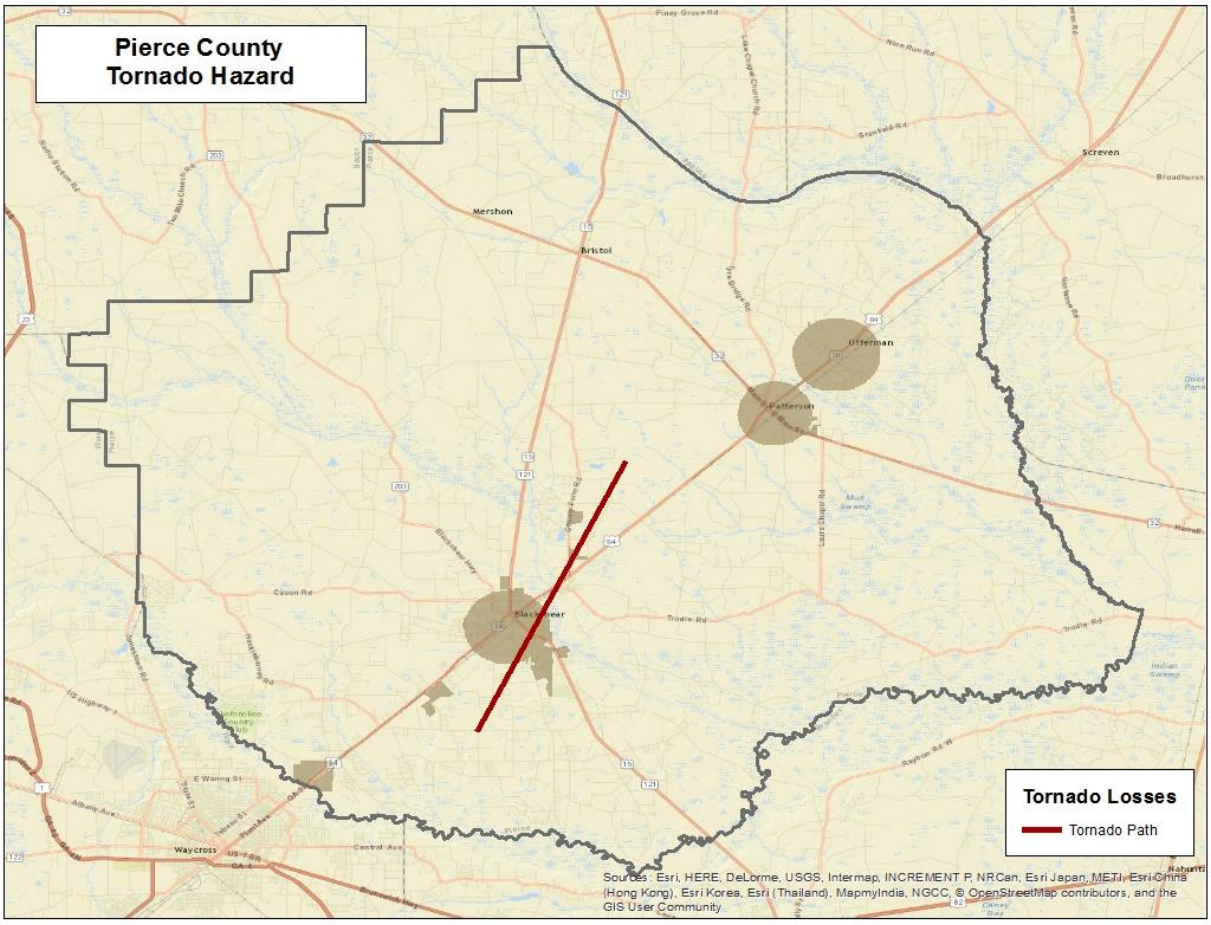

Figure 13: Hypothetical EF3 Tornado Path

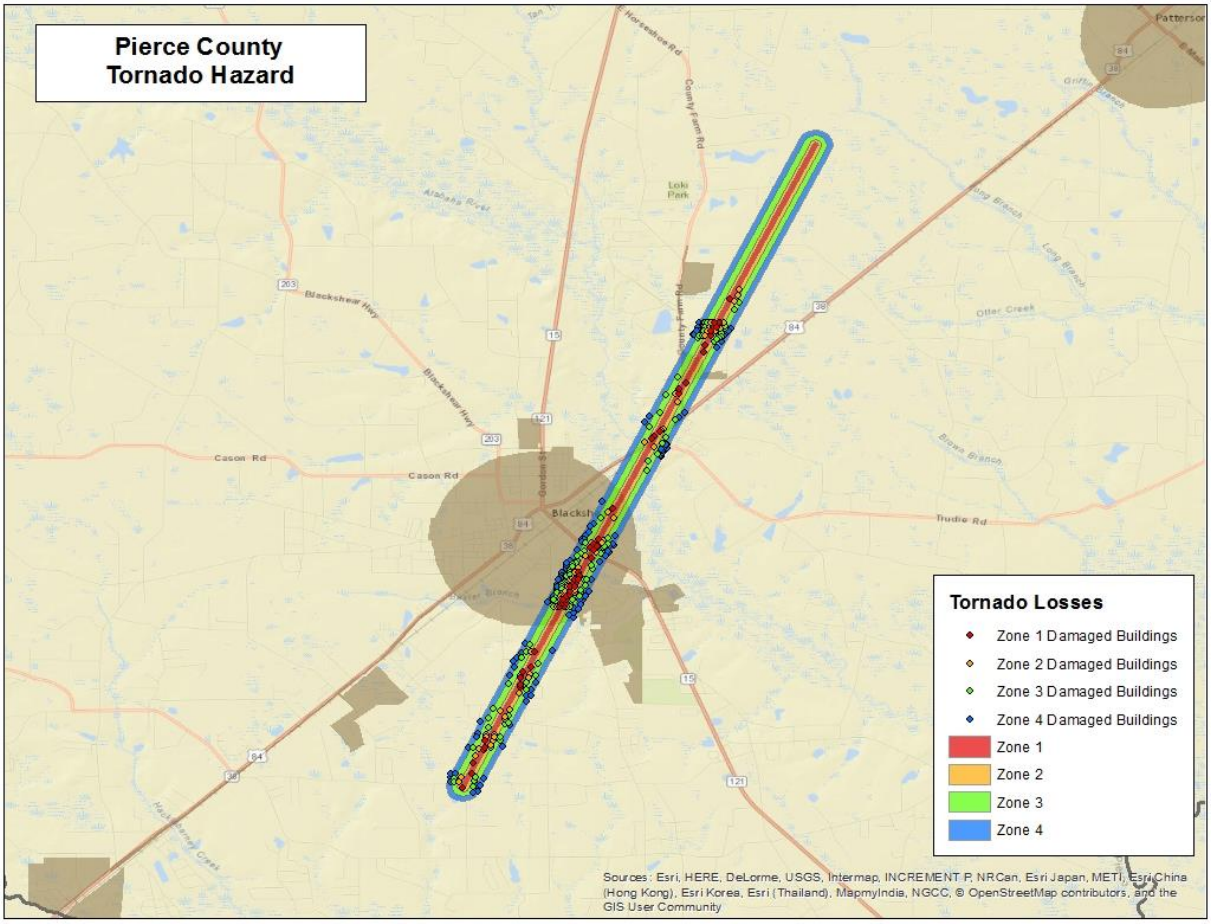

Figure 14: Modeled EF3 Tornado Damage Buffers

EF3 Tornado Building Damages

The analysis estimated that approximately 387 buildings could be damaged, with estimated building losses of approximately $18 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Pierce County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 14.

Table 14: Estimated Building Losses by Occupancy Type

Occupancy Classification	Buildings Damaged	Building Losses	
Commerical	12	$	749,382
Religious	3	$	430,863
Governmental	3	$	-
Industrial	16	$	5,076,089
Residential	353	$	11,766,680
Total	**387**	**$**	**18,023,014**

EF3 Tornado Essential Facility Damage

There were 4 essential facilities located in the tornado path according to the modeling, these 4 facilities would suffer moderate to major damage should such a tornado strike occur.

The location of the damaged Essential Facilities is mapped in Figure 15.

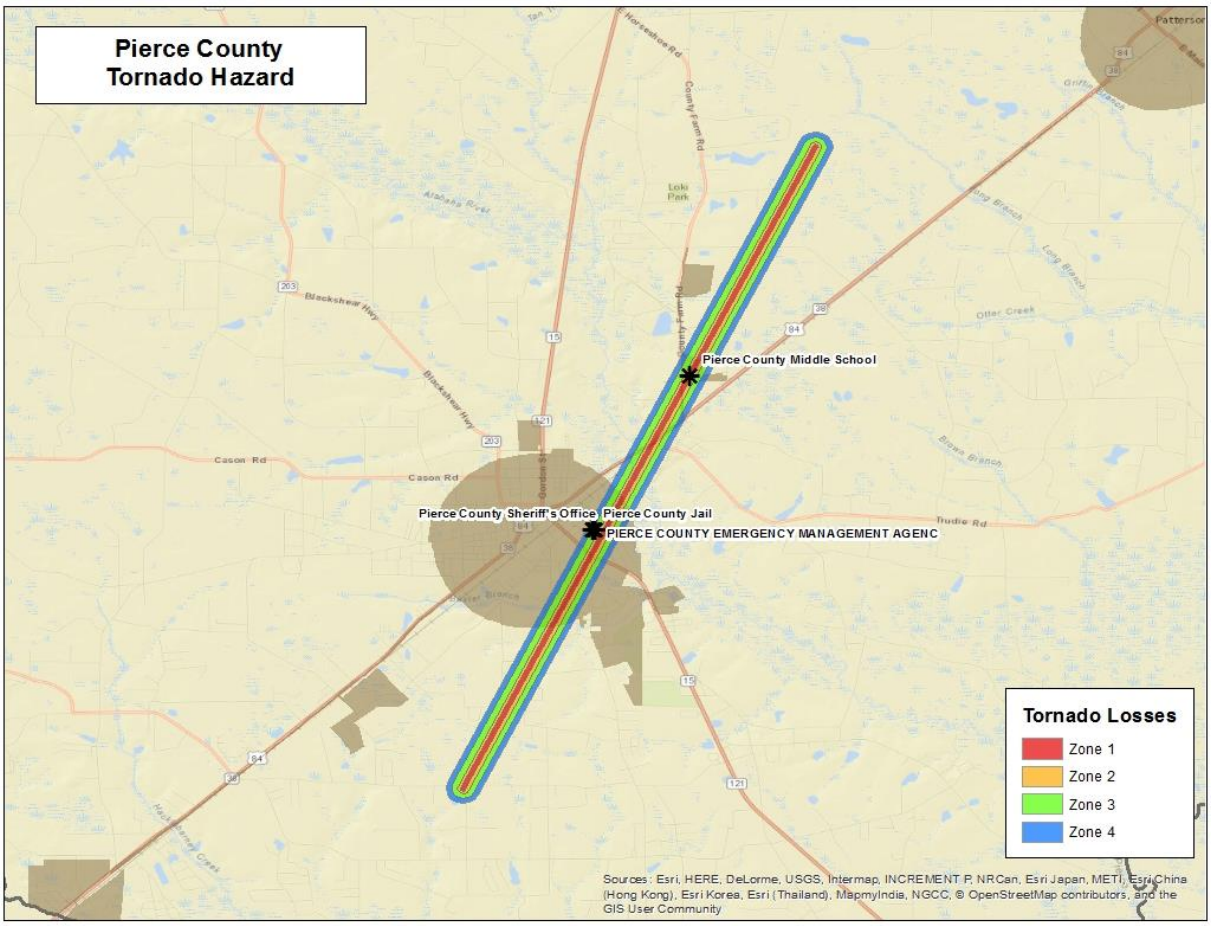

Figure 15: Modeled Essential Facility Damage in Pierce County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Pierce County, Georgia. Changes made to the default Hazus-MH inventory and the modeling parameters used to setup the hazard scenarios are described within this document.

Reported losses reflect the updated data sets. Steps, algorithms and assumptions used during the data update process are documented in the project workflow developed by the Polis Center.

Statewide Inventory Changes

The default Hazus-MH Essential Facility inventory was updated for the entire state prior to running the hazard scenarios for Pierce County.

Statewide facility data were supplied by GEMA through the GMIS in June 2015. The Regional Commission updated the essential facilities in 2017. The updated data was used for this analysis. Table 15 summarizes the difference between the original Hazus-MH default data and the updated data for Pierce County.

Table 15: Essential Facility Updates

Occupancy Classification	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
Care	$ 17,602,000	8	$ 15,911,000	5
EOC	$ 880,000	1	$ 880,000	1
Fire	$ 19,179,000	14	$ 10,010,000	12
Police	$ 28,588,000	7	$ 28,588,000	7
School	$ 27,245,000	4	$ 25,445,000	7

County Inventory Changes

The GBS records for Pierce County were replaced with data derived from parcel and property assessment data obtained from Pierce County. The county provided property assessment data was current as of December 2016 and the parcel data current as of January 2017.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Pierce County. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary unless there were building footprints. Each parcel point was linked to an assessor record based upon matching parcel numbers. The generated Building Inventory represents the approximate locations (within a parcel) of building exposure. The Building Inventory was aggregated by Census Block and imported into Hazus-MH using the Hazus-MH Comprehensive Data Management System (CDMS). Both the 2010 Census Tract and Census Block tables were updated.

The match between parcel records and assessor records was based upon a common Parcel ID. For this type of project, unless the hit rate is better than 85%, the records are not used to update the default aggregate inventory in Hazus-MH. The Parcel-Assessor hit rate for Pierce County was 99.7%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 16 outlines the adjustments made to Pierce County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	442	5%
Construction Unknown	385	4%
Condition Unknown	342	4%
Foundation Unknown	254	3%
Year Built Unknown	1840	20%

Portions of the CAMA values were either missing (<Null> or '0'), did not match CAMA domains or were unusable ('Unknown', 'Other', 'Pending'). These were replaced with 'best available' values. Missing YearBuilt values were populated from average values per Census Block. Missing Condition, Construction and Foundation values were populated with the highest-frequency CAMA values per Occupancy Class. Missing Area values were populated with the average CAMA values per Occupancy Class.

The resulting Building Inventory was used to populate the Hazus-MH General Building Stock and User Defined Facility tables. The updated General Building Stock was used to calculate flood and tornado losses. Changes to the building counts and exposure that were modeled in Pierce County are sorted by General Occupancy in Table 1 at the beginning of this report. If replacements cost or building value were not present for a given record in the Assessor data, replacement costs were calculated from the Building Area (sqft) multiplied by the Hazus-MH RS Means ($/sqft) values for each Occupancy Class.

Differences between the default and updated data are due to various factors. The Assessor records often do not distinguish parcels by occupancy class when the parcels are not taxable; therefore, the total number of buildings and the building replacement costs for government, religious/non-profit, and education may be underestimated.

User Defined Facilities

Local parcel and CAMA data were used to develop points representing the locations of buildings in the county, referred to as User Defined Facilities (UDF) in the Hazus model. For the flood model, this includes only buildings located in the 1% Annual Chance Riverine Flood Area. Table 17 identifies the total building count & exposure for the county and the total building count & exposure for buildings located in the 1% Annual Chance Riverine Flood Area.

Table 17: Building Count and Exposure for County and Riverine Flood Area

Feature	Counts	Exposure
Total buildings in the County	3,734	$741,959,009
Total buildings inside the 1% Annual Chance Riverine Flood Area	340	$45,112,930

It should be noted that UDFs are only used in the flood modeling process, due to the fact that it is important to identify if individual buildings are located within the flood area to obtain the depth of flood.

Assumptions

- Flood analysis was performed on UDF. The point locations are parcel centroid accuracy.
- The analysis is restricted to the county boundary within the flood area. Events that occur near the county boundary do not contain loss estimates from adjacent counties.
- The following attributes were defaulted or calculated:
  First Floor Height was set from Foundation Type
  Content Cost was calculated from Building Cost