

Appendix A

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Hurricanes/Tropical Storms

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

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? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Tornadoes

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

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? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Floods

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	2111	28.631%	\$ 404,515,378	\$ 126,936,702	31.380%	18,073	5,175	28.631%
Commercial	744	152	20.430%	\$ 104,220,589	\$ 35,815,527	34.365%	0	0	0%
Industrial	36	17	47.222%	\$ 16,466,746	\$ 8,662,346	52.605%	0	0	0%
Agricultural	1613	1636	101.426%	\$ 305,086,106	\$ 405,341,721	132.861%	0	0	0%
Religious/ Non-profit	185	35	18.919%	\$ 31,167,132	\$ 5,243,060	16.822%	0	0	0%
Government	203	74	36.453%	\$ 56,558,808	\$ 44,773,929	79.163%	0	0	0%
Education	16	8	50.000%	\$ 23,863,810	\$ 21,257,144	89.077%	0	0	0%
Utilities	48	0	0.000%	\$ 49,827,058	\$ -	0.000%	0	0	0%
Total	10,218	4,033		991,705,627	648,030,429		18,073	5,175	

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 |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Windstorms/Hailstorms/Lightning

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

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? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Wildfires

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

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? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Extreme Heat

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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

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? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cook County and the Cities of Adel, Cecil, Lenox, and Sparks

Hazard: Drought

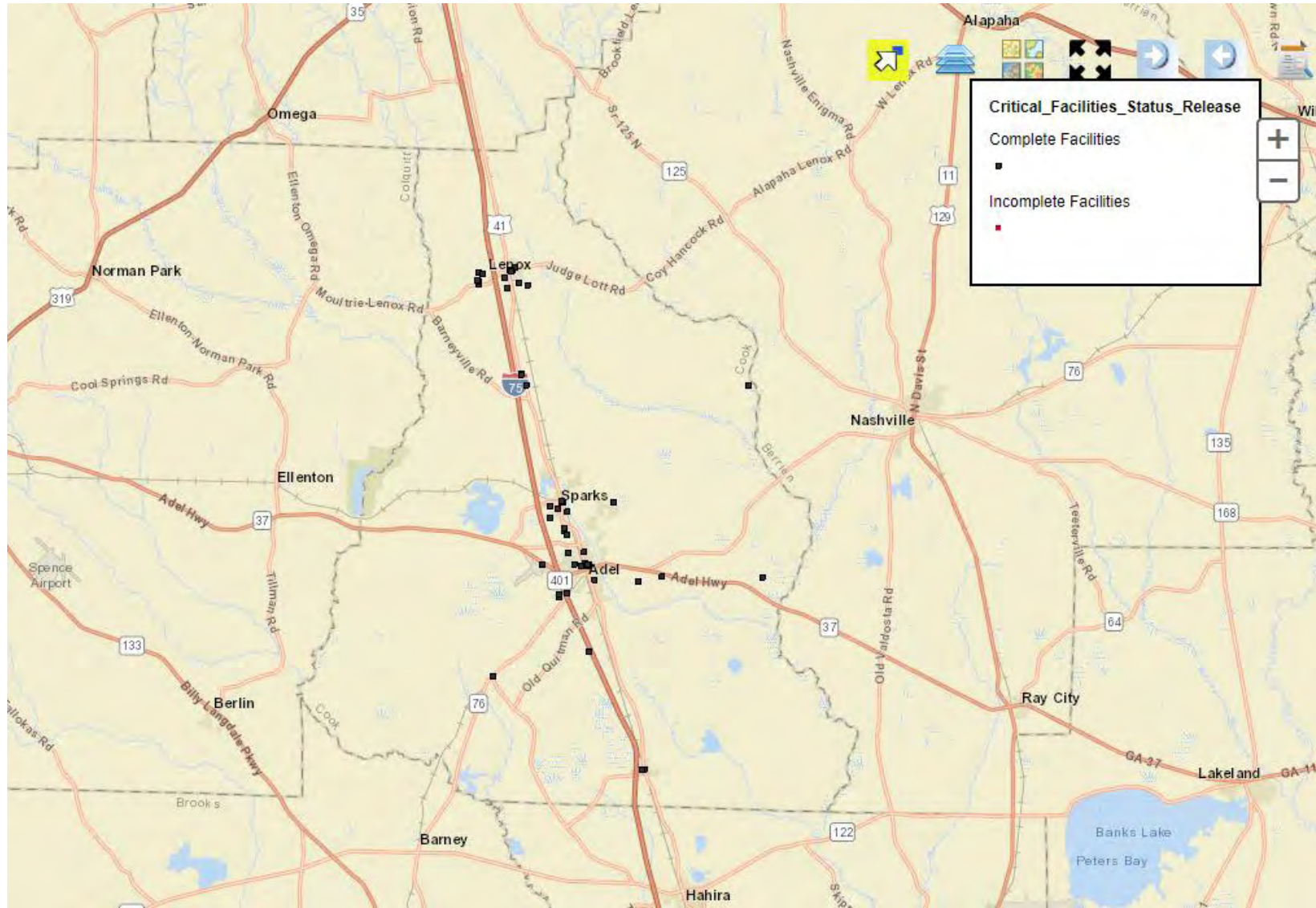
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	7373	7373	100.000%	\$ 404,515,378	\$ 404,515,378	100.000%	18,073	18,073	100.000%
Commercial	744	744	100.000%	\$ 104,220,589	\$ 104,220,589	100.000%	0	0	0%
Industrial	36	36	100.000%	\$ 16,466,746	\$ 16,466,746	100.000%	0	0	0%
Agricultural	1613	1613	100.000%	\$ 305,086,106	\$ 305,086,106	100.000%	0	0	0%
Religious/ Non-profit	185	185	100.000%	\$ 31,167,132	\$ 31,167,132	100.000%	0	0	0%
Government	203	203	100.000%	\$ 56,558,808	\$ 56,558,808	100.000%	0	0	0%
Education	16	16	100.000%	\$ 23,863,810	\$ 23,863,810	100.000%	0	0	0%
Utilities	48	48	100.000%	\$ 49,827,058	\$ 49,827,058	100.000%	0	0	0%
Total	10,218	10,218		991,705,627	991,705,627		18,073	18,073	

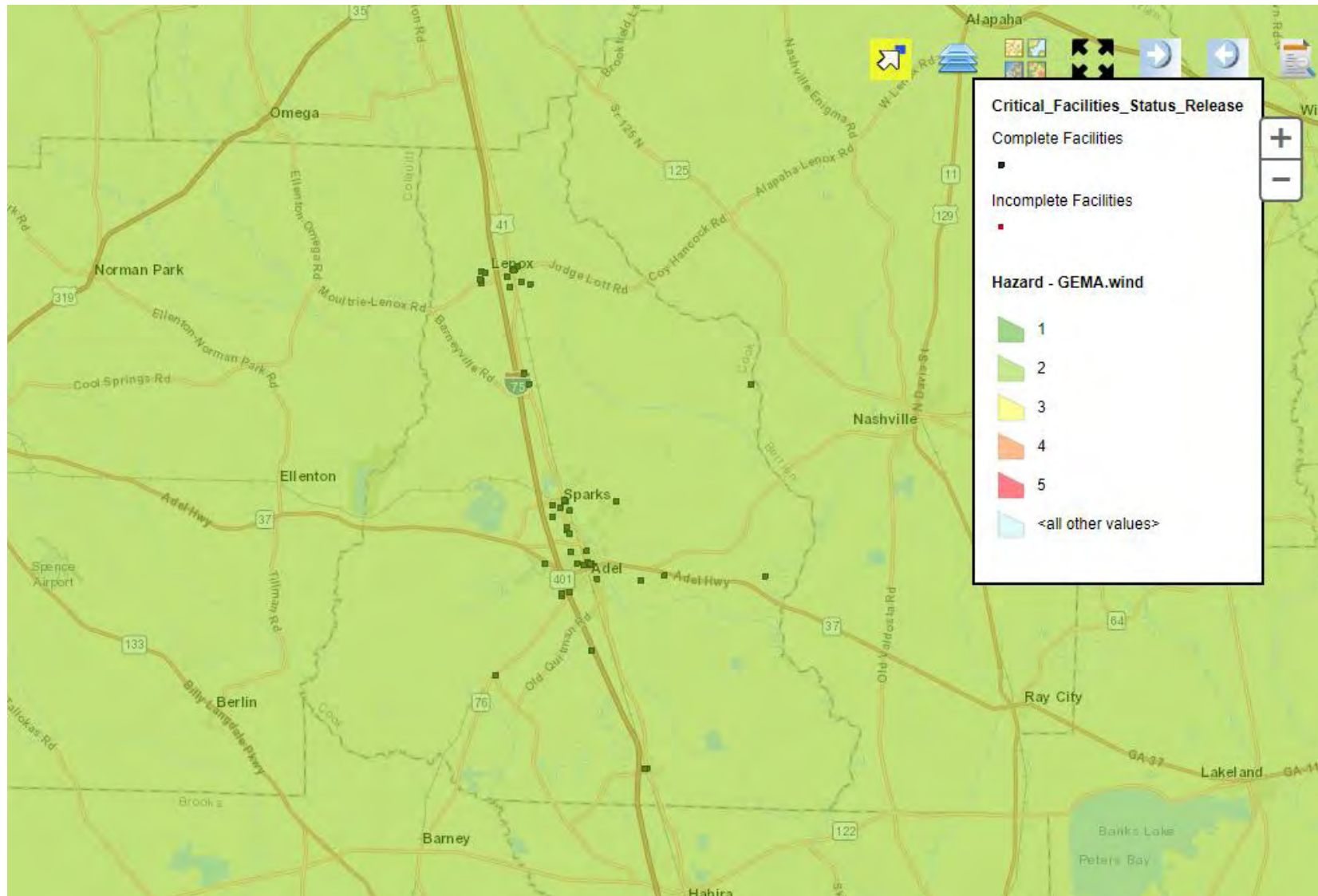
Task B. Determine whether (and where) you want to collect additional inventory data.

- | | |
|---|-------------------|
| | 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? | Y |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | N |

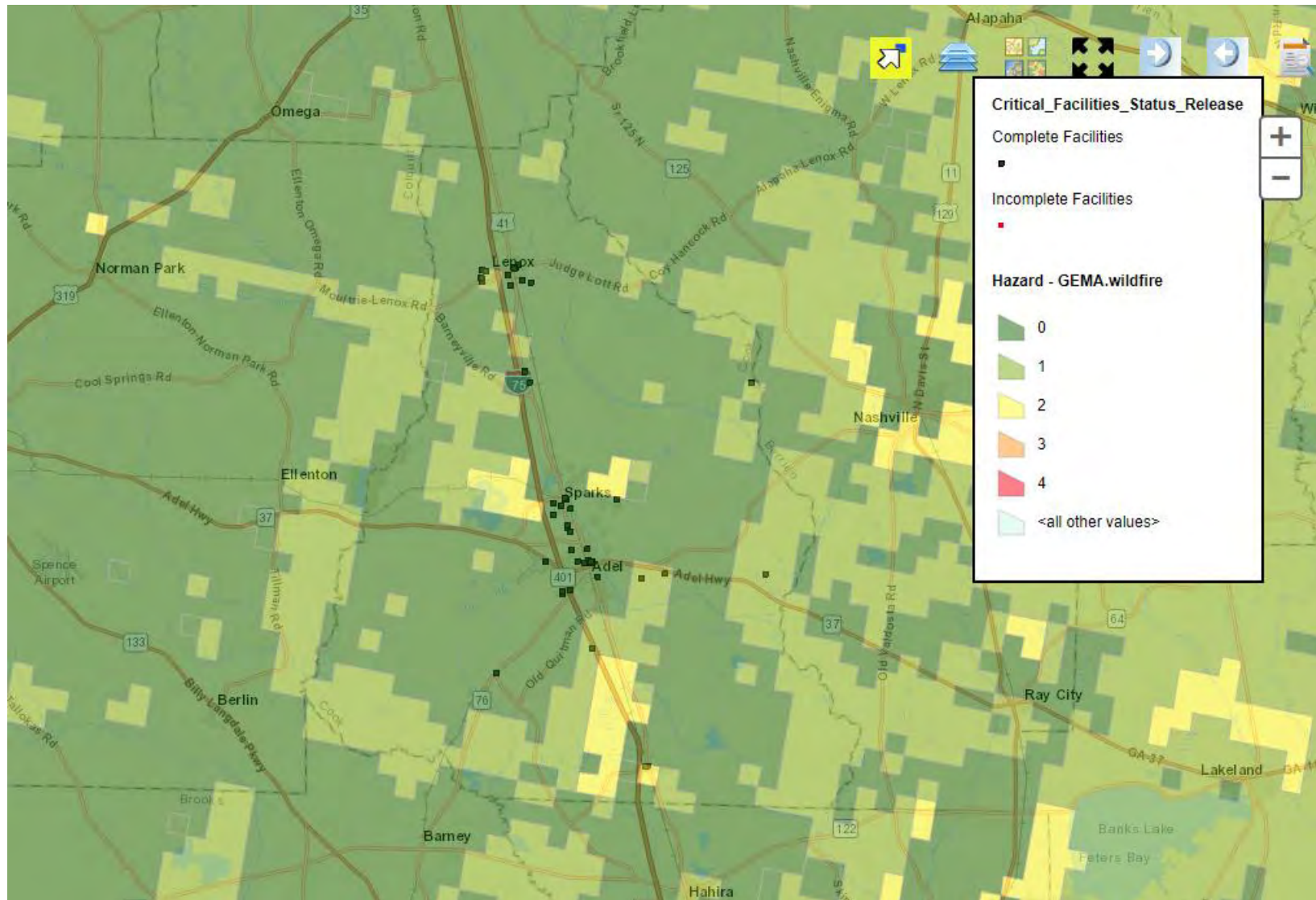
Critical Facilities and Hazard Potential for Hazards Affecting the Entire Community (Hurricanes/Tropical Storms, Tornadoes, Windstorms/Hailstorms/Lightning, Extreme Heat, and Drought)



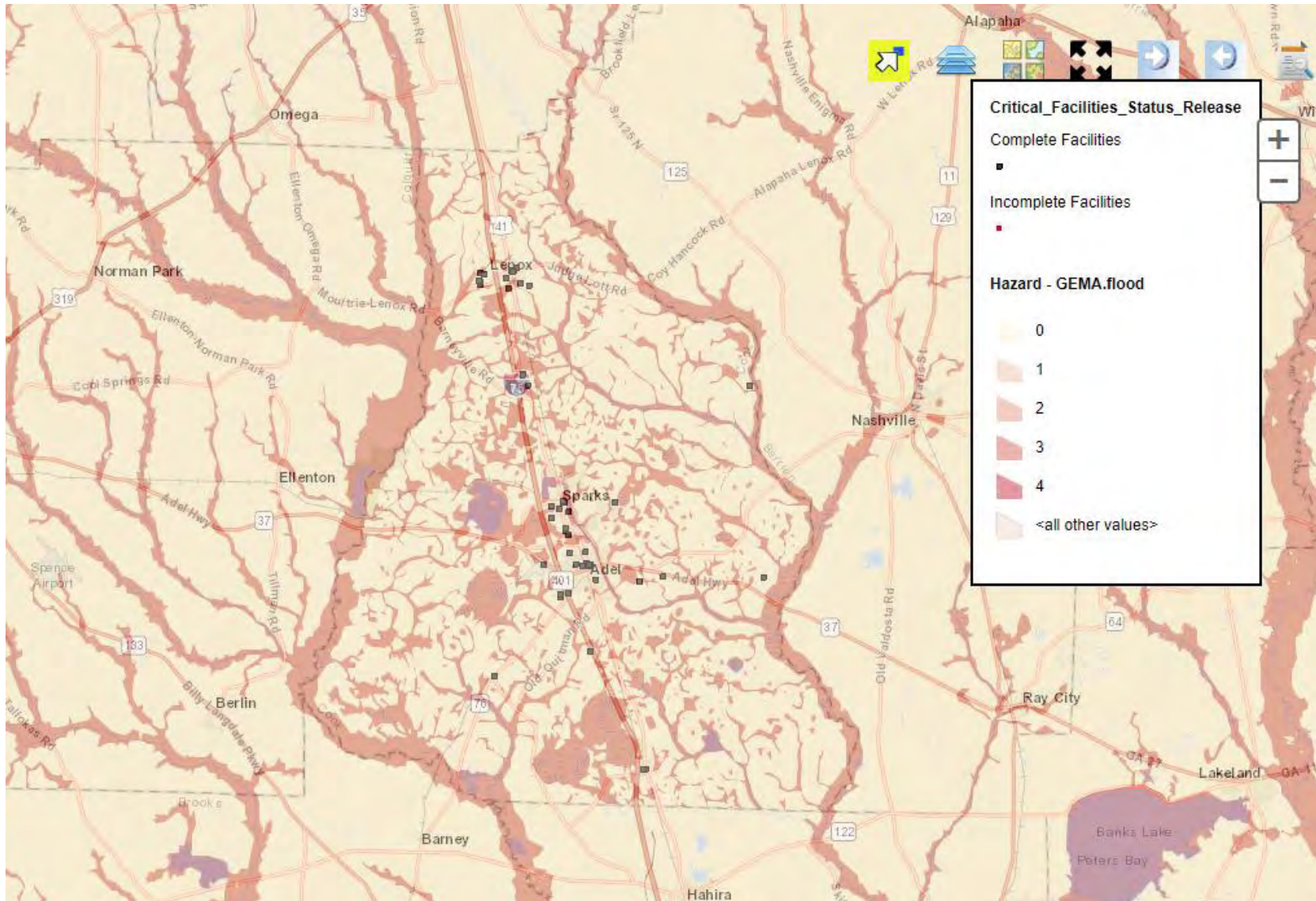
Critical Facilities and Wind Zones



Critical Facilities and Wildfire Hazard Areas (GMIS data)



Critical Facilities and Flood Zones

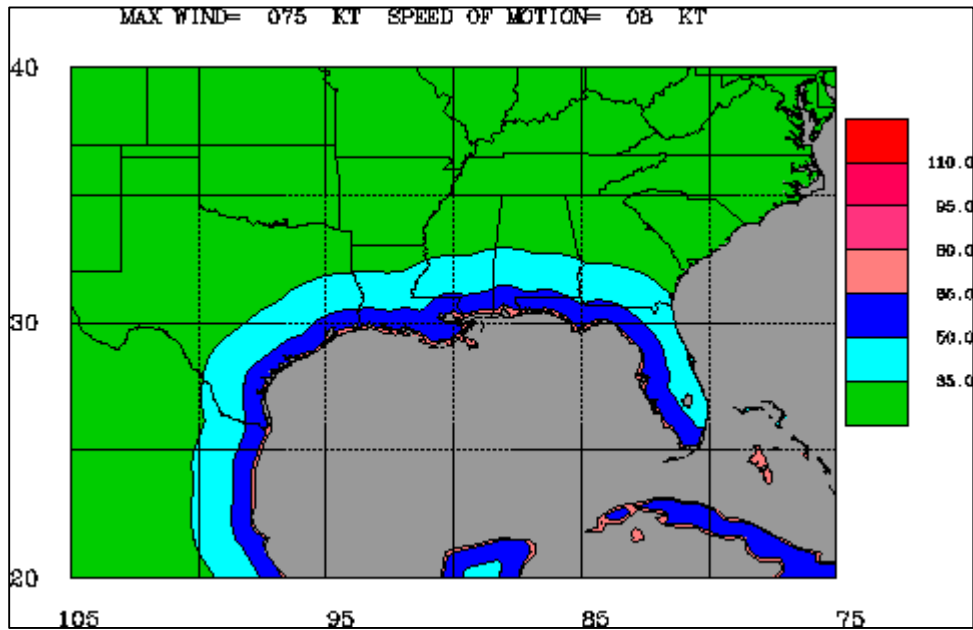


Examples of the Maximum Envelope of Wind

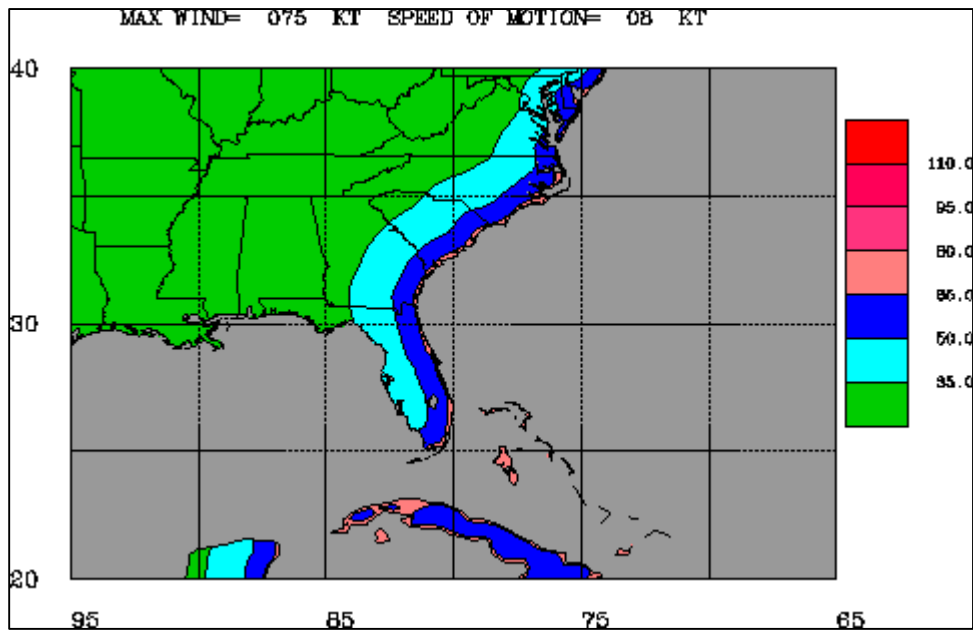
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

Mild case (Category 1, 8 knots forward motion)

Gulf Coast Region



East Coast Region

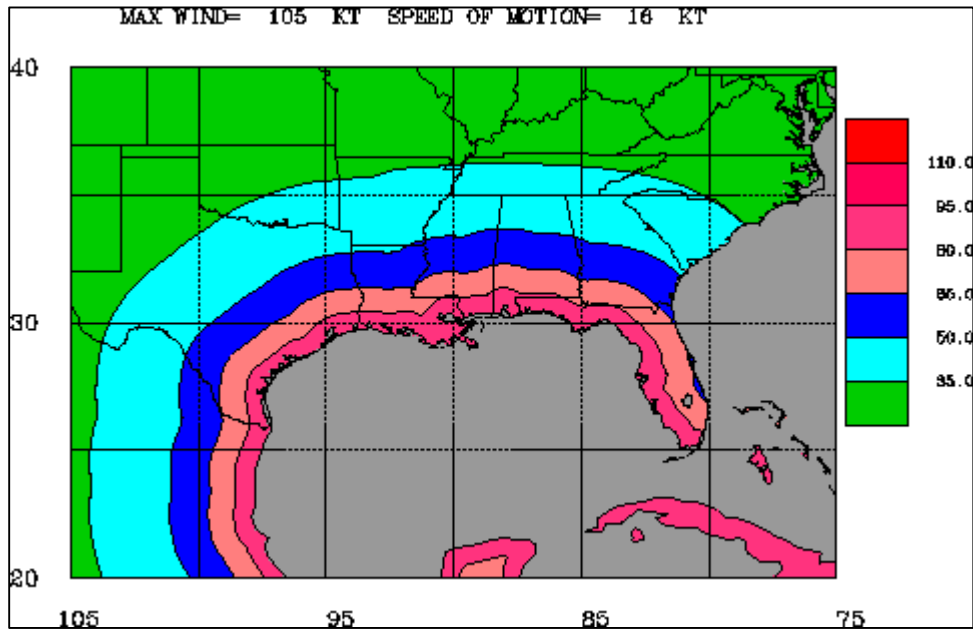


Examples of the Maximum Envelope of Wind

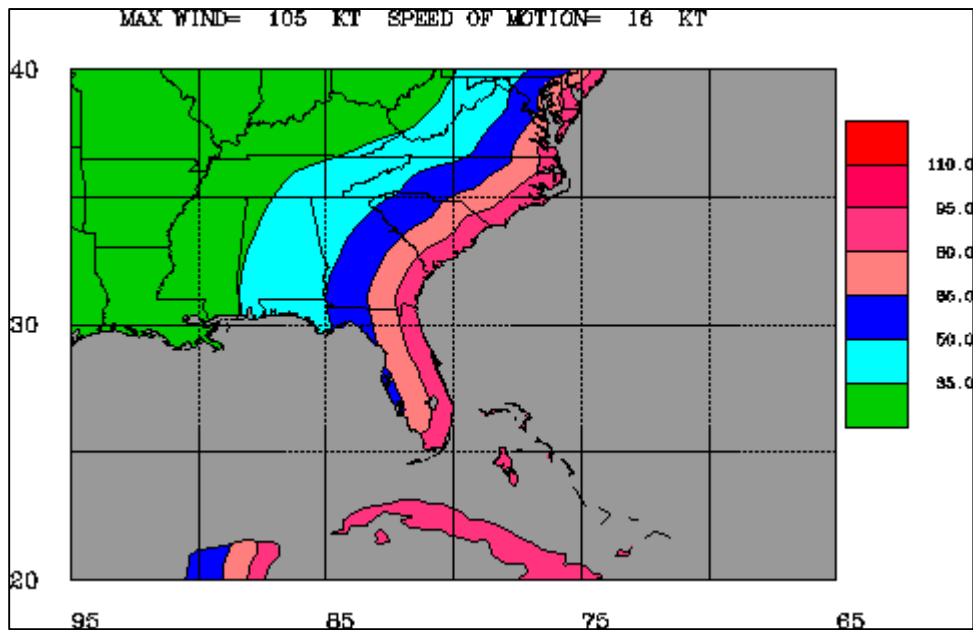
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

Mid-range case (Category 3, 16 knots forward motion)

Gulf Coast Region



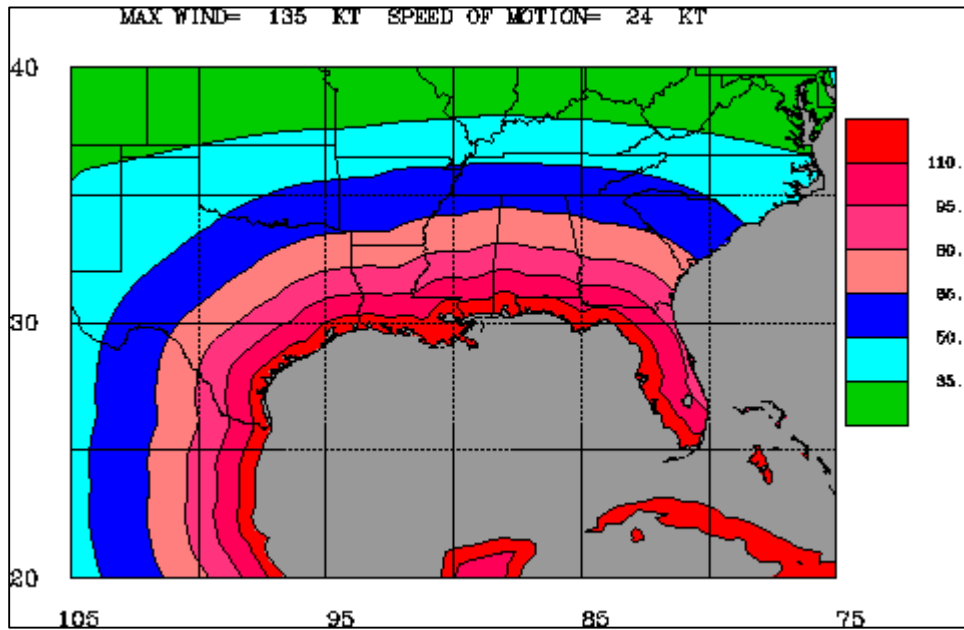
East Coast Region



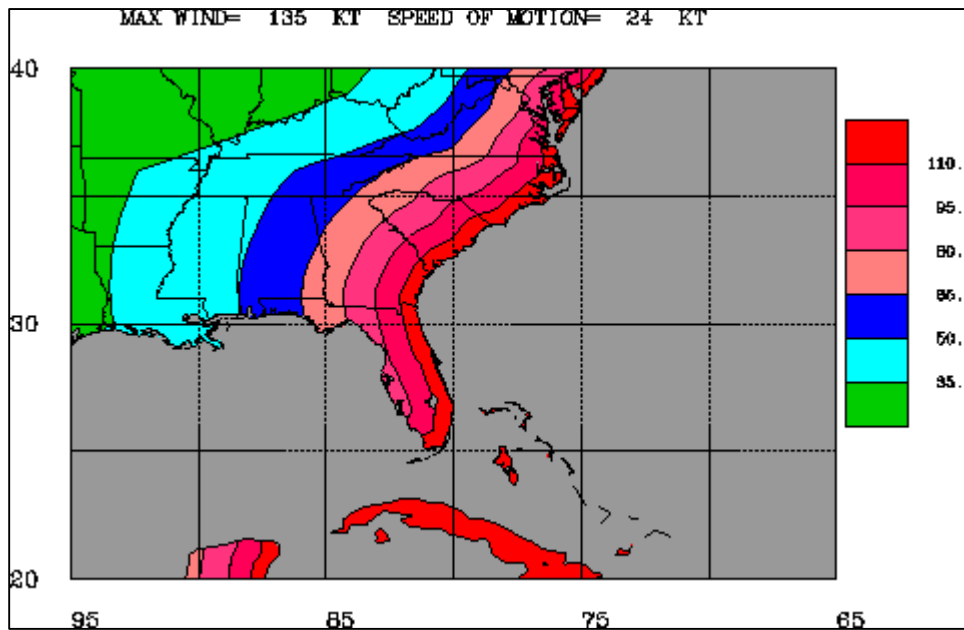
Examples of the Maximum Envelope of Wind
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

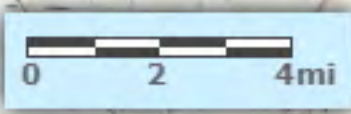
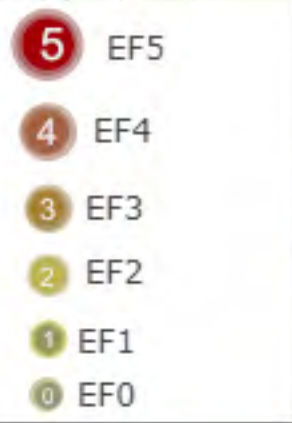
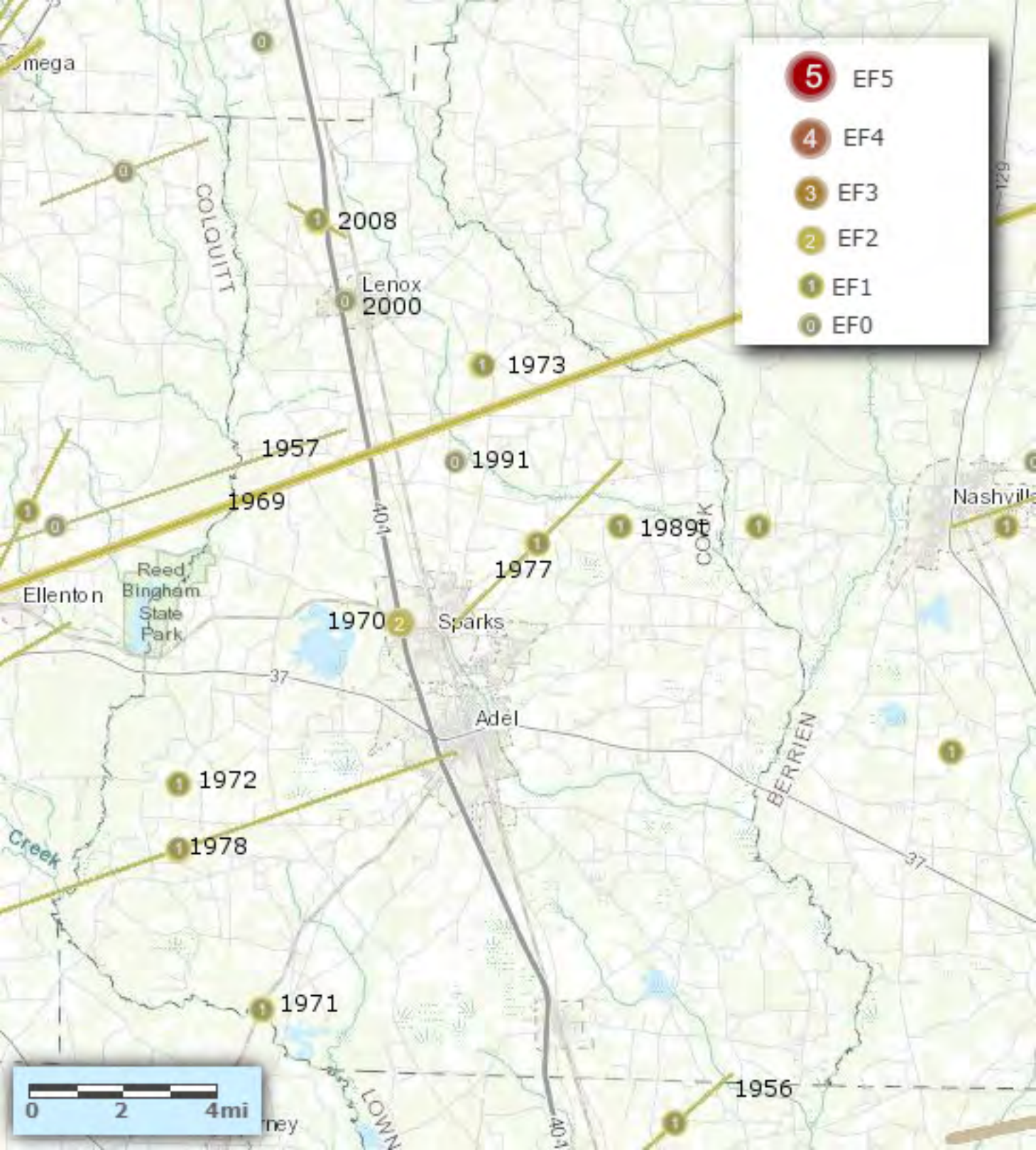
Worst case (Category 5, 24 knots forward motion)

Gulf Coast Region



East Coast Region



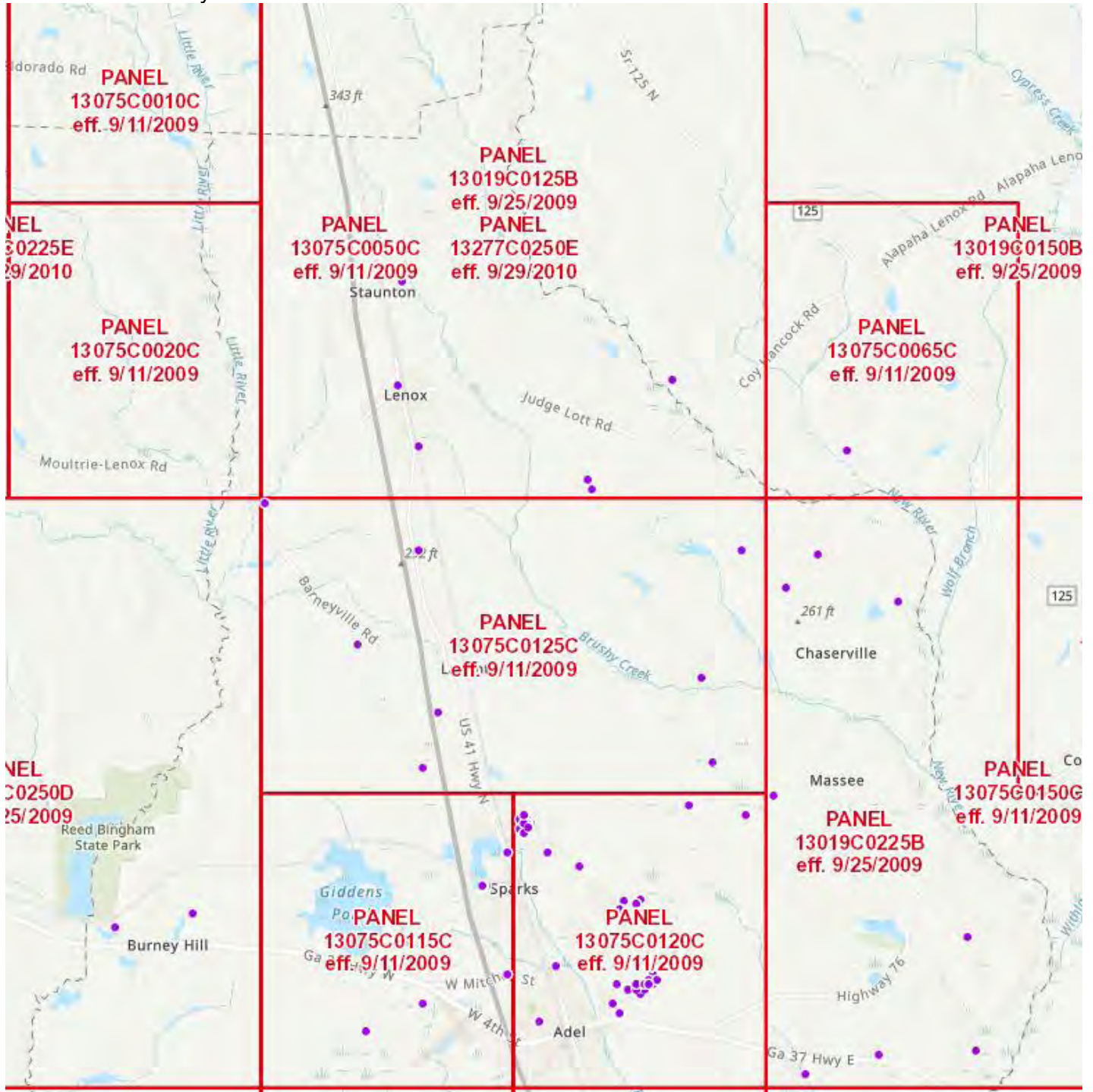


FEMA Flood Maps

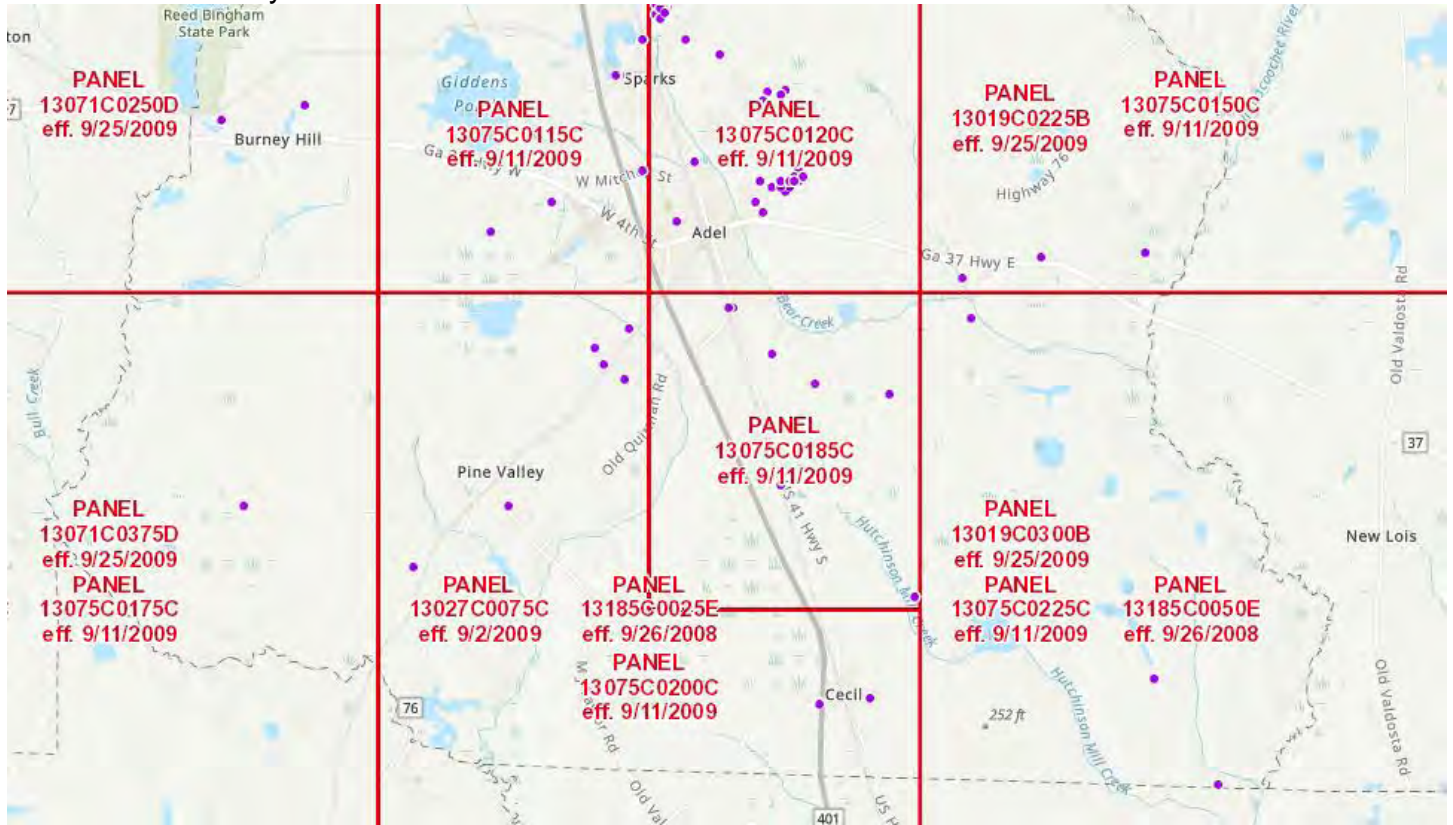
Source: ArcGIS Online (FEMA data)

<https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30>

North Cook County



South Cook County

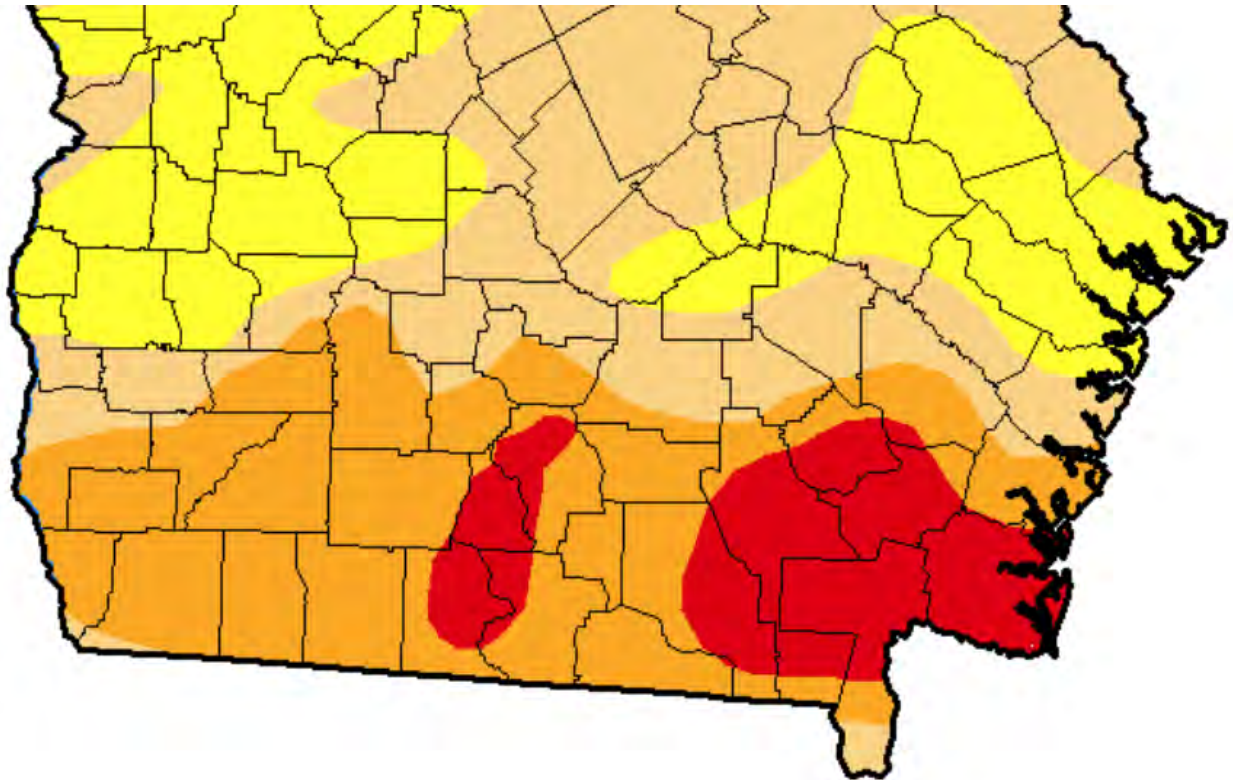


Drought

The example map below, from the week of May 16, 2017, shows moderate to extreme drought conditions throughout southern Georgia.

Source: U.S. Drought Monitor

(<http://droughtmonitor.unl.edu/Maps/ComparisonSlider.aspx>)



Drought Classification

None D0 (Abnormally Dry) D1 (Moderate Drought)

D2 (Severe Drought) D3 (Extreme Drought) D4 (Exceptional Drought)

Appendix B



QuickFacts

selected: **Cook County, Georgia**

QuickFacts provides statistics for all states and counties, and for cities and towns with a *population of 5,000 or more*.

Table

All Topics	Cook County, Georgia
Population estimates, July 1, 2016, (V2016)	17,167
PEOPLE	
Population	
Population estimates, July 1, 2016, (V2016)	17,167
Population estimates base, April 1, 2010, (V2016)	17,212
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)	-0.3%
Population, Census, April 1, 2010	17,212
Age and Sex	
Persons under 5 years, percent, July 1, 2016, (V2016)	6.7%
Persons under 5 years, percent, April 1, 2010	7.6%
Persons under 18 years, percent, July 1, 2016, (V2016)	26.7%
Persons under 18 years, percent, April 1, 2010	27.2%
Persons 65 years and over, percent, July 1, 2016, (V2016)	15.5%
Persons 65 years and over, percent, April 1, 2010	13.5%
Female persons, percent, July 1, 2016, (V2016)	51.8%
Female persons, percent, April 1, 2010	51.4%
Race and Hispanic Origin	
White alone, percent, July 1, 2016, (V2016) (a)	70.6%
Black or African American alone, percent, July 1, 2016, (V2016) (a)	26.9%
American Indian and Alaska Native alone, percent, July 1, 2016, (V2016) (a)	0.4%
Asian alone, percent, July 1, 2016, (V2016) (a)	0.8%
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016, (V2016) (a)	0.1%
Two or More Races, percent, July 1, 2016, (V2016)	1.2%
Hispanic or Latino, percent, July 1, 2016, (V2016) (b)	5.9%
White alone, not Hispanic or Latino, percent, July 1, 2016, (V2016)	65.3%
Population Characteristics	
Veterans, 2011-2015	1,042
Foreign born persons, percent, 2011-2015	3.1%
Housing	
Housing units, July 1, 2016, (V2016)	7,250
Housing units, April 1, 2010	7,287
Owner-occupied housing unit rate, 2011-2015	68.1%
Median value of owner-occupied housing units, 2011-2015	\$86,000
Median selected monthly owner costs -with a mortgage, 2011-2015	\$982
Median selected monthly owner costs -without a mortgage, 2011-2015	\$326
Median gross rent, 2011-2015	\$688
Building permits, 2016	27
Families & Living Arrangements	
Households, 2011-2015	6,157
Persons per household, 2011-2015	2.74
Living in same house 1 year ago, percent of persons age 1 year+, 2011-2015	83.0%
Language other than English spoken at home, percent of persons age 5 years+, 2011-2015	5.2%
Education	
High school graduate or higher, percent of persons age 25 years+, 2011-2015	75.2%
Bachelor's degree or higher, percent of persons age 25 years+, 2011-2015	12.9%
Health	
With a disability, under age 65 years, percent, 2011-2015	11.4%
Persons without health insurance, under age 65 years, percent	▲ 18.8%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2011-2015	58.0%

In civilian labor force, female, percent of population age 16 years+, 2011-2015	53.4%
Total accommodation and food services sales, 2012 (\$1,000) (c)	D
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	D
Total manufacturers shipments, 2012 (\$1,000) (c)	201,847
Total merchant wholesaler sales, 2012 (\$1,000) (c)	40,341
Total retail sales, 2012 (\$1,000) (c)	136,640
Total retail sales per capita, 2012 (c)	\$8,074
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2011-2015	26.3
Income & Poverty	
Median household income (in 2015 dollars), 2011-2015	\$35,683
Per capita income in past 12 months (in 2015 dollars), 2011-2015	\$18,790
Persons in poverty, percent	▲ 24.1%


BUSINESSES

Businesses	
Total employer establishments, 2015	305
Total employment, 2015	2,796
Total annual payroll, 2015 (\$1,000)	83,376
Total employment, percent change, 2014-2015	-4.3%
Total nonemployer establishments, 2015	1,050
All firms, 2012	1,406
Men-owned firms, 2012	804
Women-owned firms, 2012	452
Minority-owned firms, 2012	258
Nonminority-owned firms, 2012	1,093
Veteran-owned firms, 2012	188
Nonveteran-owned firms, 2012	1,183

GEOGRAPHY

Geography	
Population per square mile, 2010	75.8
Land area in square miles, 2010	227.16
FIPS Code	13075

Value Notes

 This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2016) refers to the final year of the series (2010 thru 2016). *Different vintage years of estimates are not comparable.*

Fact Notes

- (a) Includes persons reporting only one race
- (b) Hispanics may be of any race, so also are included in applicable race categories
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval of an open ended distribution.
- D** Suppressed to avoid disclosure of confidential information
- F** Fewer than 25 firms
- FN** Footnote on this item in place of data
- NA** Not available
- S** Suppressed; does not meet publication standards
- X** Not applicable
- Z** Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

QuickFacts

selected: **Adel city, Georgia**

QuickFacts provides statistics for all states and counties, and for cities and towns with a **population of 5,000 or more**.

Table

All Topics	Adel city, Georgia
Population estimates, July 1, 2016, (V2016)	5,355
 PEOPLE	
Population	
Population estimates, July 1, 2016, (V2016)	5,355
Population estimates base, April 1, 2010, (V2016)	5,332
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)	0.4%
Population, Census, April 1, 2010	5,334
Age and Sex	
Persons under 5 years, percent, July 1, 2016, (V2016)	X
Persons under 5 years, percent, April 1, 2010	7.9%
Persons under 18 years, percent, July 1, 2016, (V2016)	X
Persons under 18 years, percent, April 1, 2010	26.8%
Persons 65 years and over, percent, July 1, 2016, (V2016)	X
Persons 65 years and over, percent, April 1, 2010	14.4%
Female persons, percent, July 1, 2016, (V2016)	X
Female persons, percent, April 1, 2010	51.9%
Race and Hispanic Origin	
White alone, percent, July 1, 2016, (V2016) (a)	X
Black or African American alone, percent, July 1, 2016, (V2016) (a)	X
American Indian and Alaska Native alone, percent, July 1, 2016, (V2016) (a)	X
Asian alone, percent, July 1, 2016, (V2016) (a)	X
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016, (V2016) (a)	X
Two or More Races, percent, July 1, 2016, (V2016)	X
Hispanic or Latino, percent, July 1, 2016, (V2016) (b)	X
White alone, not Hispanic or Latino, percent, July 1, 2016, (V2016)	X
Population Characteristics	
Veterans, 2011-2015	380
Foreign born persons, percent, 2011-2015	3.9%
Housing	
Housing units, July 1, 2016, (V2016)	X
Housing units, April 1, 2010	2,368
Owner-occupied housing unit rate, 2011-2015	59.2%
Median value of owner-occupied housing units, 2011-2015	\$98,400
Median selected monthly owner costs -with a mortgage, 2011-2015	\$1,034
Median selected monthly owner costs -without a mortgage, 2011-2015	\$361
Median gross rent, 2011-2015	\$693
Building permits, 2016	X
Families & Living Arrangements	
Households, 2011-2015	1,948
Persons per household, 2011-2015	2.64
Living in same house 1 year ago, percent of persons age 1 year+, 2011-2015	76.0%
Language other than English spoken at home, percent of persons age 5 years+, 2011-2015	5.3%
Education	
High school graduate or higher, percent of persons age 25 years+, 2011-2015	75.9%
Bachelor's degree or higher, percent of persons age 25 years+, 2011-2015	18.4%
Health	
With a disability, under age 65 years, percent, 2011-2015	13.8%
Persons without health insurance, under age 65 years, percent	 28.4%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2011-2015	53.6%

In civilian labor force, female, percent of population age 16 years+, 2011-2015	49.9%
Total accommodation and food services sales, 2012 (\$1,000) (c)	D
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	D
Total manufacturers shipments, 2012 (\$1,000) (c)	180,562
Total merchant wholesaler sales, 2012 (\$1,000) (c)	D
Total retail sales, 2012 (\$1,000) (c)	105,279
Total retail sales per capita, 2012 (c)	\$19,977
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2011-2015	22.2
Income & Poverty	
Median household income (in 2015 dollars), 2011-2015	\$35,301
Per capita income in past 12 months (in 2015 dollars), 2011-2015	\$18,279
Persons in poverty, percent	▲ 30.3%


BUSINESSES

Businesses	
Total employer establishments, 2015	X
Total employment, 2015	X
Total annual payroll, 2015 (\$1,000)	X
Total employment, percent change, 2014-2015	X
Total nonemployer establishments, 2015	X
All firms, 2012	659
Men-owned firms, 2012	414
Women-owned firms, 2012	150
Minority-owned firms, 2012	147
Nonminority-owned firms, 2012	487
Veteran-owned firms, 2012	112
Nonveteran-owned firms, 2012	515

GEOGRAPHY

Geography	
Population per square mile, 2010	662.0
Land area in square miles, 2010	8.06
FIPS Code	1300576

Value Notes

 This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info left of each row in TABLE view to learn about sampling error.

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3. Community Work Program

Cook County FY2016 – FY2020 Community Work Program

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Cultural Resources									
Participate in the Greater Cook County Historic Preservation Task Force when active	x	x	x	x	x	2	Historical Society, Chamber	Staff Time	General Fund/Grants

Activity	2016	2017	2018	2020	2019	Goal	Responsible Party	Estimated Cost	Funding Source
Economic Development									
Coordinate with the Airport Authority to grow the airport in response to business needs	x	x	x	x	x	6, 7, 10	County Airport Authority EDA	Staff Time	General Fund, Grants, Splost
Foster all EDC job prospecting, marketing of vacant spec buildings and land; job training & education programs	x	x	x	x	x	3	Chamber, IDA, EDC, County	Staff Time	General Fund, Grants, Private Sector funds
Support the Industrial Development Authority (IDA) efforts to prepare financial packages for existing and new businesses/industries	x	x	x	x	x	3	Chamber, IDA, EDC, County	Staff Time	General Fund, Grants, Private Sector funds
Support the development of the Industrial Corridor between I-75 and US 41 through incentives and marketing	x	x	x	x	x	3	Chamber, IDA, EDC, County	Staff Time	General Fund, Grants, Private Sector funds

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Natural Resources/Land Use:									
Develop Floodplain elevations for the County	x	x	x	x	x	1	County	Staff Time/GIS	General Funds, Grants

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Community Facilities:									
Lower ISO rating for unincorporated areas of Cook County	x	x	x	x	x	6	County	\$200,000-\$500,000	General Fund, Grants
Maintain and upgrade stormwater systems to meet current regulatory requirements and capacity needs.	x	x	x	x	x	6	County	\$200,000	General Fund, Grants
Improve solid waste management services	x	x	x	x	x	6	County	Staff Time	General Fund, Grants
Continue to maintain all roads and streets, including paving and resurfacing of dirt and asphalt facilities.	x	x	x	x	x	8	County	\$150,000	General Fund, Grants
Plan and develop a new recreational complex and expand recreational services throughout the county	x	x	x	x	x	8, 10	County City	\$100,000	General Fund, Grants Splost
Coordinate with the City to expand water & sewer services in the County where needed	x	x	x	x	x	6	County	Staff Time	General Fund
Intersection Nell Purvis Rd and McConnell Bridge Rd	x	x	x	x	x	7	County	75,000	SPLOST/ LMIG/ General Fund
Intersection Evergreen Church Rd and Rountree Bridge Rd	x	x	x	x	x	7	County	75,000	SPLOST/ LMIG/ General Fund
Reed Bingham Park	x	x	x	x	x	7	County	75,000	SPLOST/ LMIG/ General Fund
Intersection McConnell Bridge Rd and Old Union	x	x	x	x	x	7	County	75,000	SPLOST/ LMIG/ General Fund
Daughtrey Rutland Rd	x	x	x	x	x	7	County	315000	SPLOST/ LMIG/ General Fund
Brushy Creek Church Rd	x	x	x	x	x	7	County	\$100,000	State Grants/ SPLOST / General Fund
Beulah Church Rd	x	x	x	x	x	7	County	\$100,000	State Grants/ SPLOST / General Fund
Burnett Rd	x	x	x	x	x	7	County	\$50,000	State Grants/ SPLOST / General Fund
South Ave / County portion						7	County	25000	State Grants/ SPLOST / General Fund
Lydia and Green Streets	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Billy Browning and William Browning Rds	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Road Repair Policy	x	x	x	x	x	7	County	10000	COUNTY
Loren Rd	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Roberts Rd	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Bridges:						7			
Massee Post Rd over Brushy Creek	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Brushy Creed Rd over Brushy Creek	x	x	x	x	x	7	County	50000	State Grants/ SPLOST / General Fund
Antioch Church Rd over Little River	x	x	x	x	x	7	County	25000	State Grants/ SPLOST / General Fund
Barneyville Rd over Brushy Creek	x	x	x	x	x	7	County	25000	State Grants/ SPLOST / General Fund
Barneyville Rd over New River	x	x	x	x	x	7	County	25000	State Grants/ SPLOST / General Fund
Futch Rd over Lindsey Branch	x	x	x	x	x	7	County	25000	State Grants/ SPLOST / General Fund
Old Coffee Rd over Withlacoochee River	x	x	x	x	x	7	County	200000	State Grants/ SPLOST / General Fund
Boyette Rd over Bear Creek	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Hutchinson Parrish over Youngs Mill	x	x	x	x	x	7	County	50000	State Grants/ SPLOST / General Fund
Rutland Bridge over New River	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Whiddon Rowan Rd over Brushy Creek	x	x	x	x	x	7	County	100000	State Grants/ SPLOST / General Fund
Fellowship Rd over Hutchinson Mill Creek	x	x	x	x	x	7	County	50000	State Grants/ SPLOST / General Fund
Register Rd over Youngs Mill Creek	x	x	x	x	x	7	County	50000	State Grants/ SPLOST / General Fund
Lott Bridge Rd over Little River	x	x	x	x	x	7	County	50000	State Grants/ SPLOST / General Fund
Massee Post Rd over New River	x	x	x	x	x	7	County	150000	State Grants/ SPLOST / General Fund

City of Adel FY2016 - FY2020 Community Work Program

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Cultural Resources:									
Renovate the old Sowega Building	x					1	City/private	n/a	private
Annually re-evaluate goals and apply for State Funds to assist with HP projects in the City	x	x	x	x	x	1	City/private	n/a	grants

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Economic Development:									
Continue to support Industrial Development Authority's and Chamber of Commerce's efforts to prepare financial packages for existing and new businesses and industries in Greater Cook County	x	x	x	x	x	2	EDC, Chamber, IDA, County	Staff Time	General Funds

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Housing:									
Build Public Housing	x	x				4	Private	\$5,000,000	Private/Public

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Community Facilities & Services:									
Continue to develop and expand countywide recreational services	x	x	x	x	x	6	City	varies by project	Splost
Annually update the gas system GIS database	x	x	x	x	x	6	City	\$5,000	General Fund
Extend the natural gas lines	x		x			6	City	\$1,400,000	Splost
Annually update the electric system GIS database	x	x	x	x	x	6	City	\$5,000	General Fund
Annually update the water system GIS database	x	x	x	x	x	6	City	\$5,000	General Fund
Upgrade the water & sewer systems in targeted neighborhoods	x					6	City	\$500,000	CDBG
Annually update the sewer system GIS database	x	x	x	x	x	6	City	\$5,000	General Fund
Expand the Wastewater Treatment Facility			x			6	City	\$1,000,000	Federal, State, CDBG, Splost
Replace Metering	x	x				6	City	\$1,500,000	General Fund

City of Cecil FY2016 - FY2020 Community Work Program

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Coordinate with Cook County, Adel, Lenox, and Sparks to promote quality urban development/redevelopment/reuse of all I-75 interchanges	x	x	x	x	x	6	Cecil	Staff Time	General Funds
Continue to participate in state loan and grant programs, and prepare applications for new projects.	x	x	x	x	x	6	Cecil	Staff Time	General Funds
Resurfacing of City streets	x					6	Cecil	Staff Time	General Funds

Town of Lenox FY2016 - FY2020 Community Work Program

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Economic Development:									
Coordinate with Cook County, Adel, Cecil, and Sparks to promote quality urban development/redevelopment/reuse of all I-75 interchanges	x	x				3	Town of Lenox	Staff Time	General Fund
Development of infill/vacant lots within the City	x					3	Town of Lenox	Staff Time /private	General Fund/Private
Encourage more downtown development through marketing and incentives	x	x	x	x	x	3	Town of Lenox	Staff Time	General Fund
Expansion and development of the Scott Corbitt bio-fuels plant									

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Transportation:									
Pave all local roads to meet the needs of the local neighborhoods and communities.	x	x	x	x	x	7	Town of Lenox	\$500,000	Federal, State, CDBG
Provide sidewalks along city streets					x	7	Town of Lenox		

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Historic Resources:									
Preserve the old Elementary School, RESA			x	x		2	Town of Lenox	\$75,000	CDBG, Splost

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Community Facilities & Services:									
Fire Protection:									
Update all fire hydrants within the City				x	x	6	Town of Lenox	\$70,000	GEMA, Georgia Rural Water Grants
Public Utilities:									
Provide natural gas lines for city residents		x	x	x		6	Town of Lenox/Cook County	based on engineering and design	CDBG, Splost
Public Water & Sewer System:									
Refurbish and repair all old water lines within the City		x	x	x		6	Town of Lenox	\$500,000	CDBG
Continue expansion of the water and sewer systems to underserved neighborhoods and areas	x	x	x	x	x	6	Town of Lenox	\$500,000	CDBG
Construct a new Wastewater Treatment Plant				x	x	6	Town of Lenox	\$6,000,000	USDA
Continue to maintain public sewer and stormwater services including dredging of holding drainage ponds	x	x	x	x	x	6	Town of Lenox	\$10,000	General Fund
Dredge the oxidation pond			x	x		6	Town of Lenox	\$10,000	General Fund
Parks and Recreation Facilities:									
Construct a walking track within the city.	x					7	Town of Lenox	\$45,000	Splost
Government Buildings:									
Refurbish and update City Hall and other older buildings, to be identified later, as funds and/or grants become available.			x	x	x	8	Town of Lenox	\$500,000	CDBG

Town of Sparks FY2016 - FY2020 Community Work Program

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Revise the City's Zoning Ordinance	x					5	Town of Sparks	Staff Time	General Funds
Revise the City's Zoning Map	x					5	Town of Sparks	Staff Time	General Funds

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Economic Development:									
Coordinate with Cook County, Adel, Cecil and Lenox to promote quality urban development/redevelopment/reuse of all I-75 interchanges	x	x				3	Town of Sparks	Staff Time	General Funds
Develop a Downtown Development Authority				x		3	Town of Sparks	25,000/year	General Funds
Purchase vacant downtown property			x			3	Town of Sparks	Staff Time and TBA	General Funds

Activity	2016	2017	2018	2019	2020	Goal	Responsible Party	Estimated Cost	Funding Source
Community Facilities & Services:									
Apply for a grant to put a new well on the East side of the City	x					6	Town of Sparks	\$15,000	CDBG
Continue to expand the water systems to underserved neighborhoods and areas		x				6	Town of Sparks	\$25,000/year	CDBG
Continue to maintain public water infrastructure, including replacement as needed	x					6	Town of Sparks	\$25,000/year	General Funds, CDBG
Conduct a complete Inflow and Infiltration Study				x		6	Town of Sparks	\$30,000	General Funds
Upgrade all sewer and stormwater systems to meet current regulatory requirements.	x	x	x	x	x	6	Town of Sparks	\$25,000/year	General Funds
Continue to maintain public sewer and stormwater services	x	x	x	x	x	6	Town of Sparks	\$18,000	General Funds
Stormwater Drainage Improvements			x			6	Town of Sparks	\$15,000	General Funds
Develop a second entrance/exit to the Fox Run subdivision				x		6	Town of Sparks	\$12,000	General Funds
Continue to maintain all roads and streets, including paving and resurfacing of dirt and asphalt facilities.	x	x	x	x	x	6	Town of Sparks	\$24,000/year	General Funds
Develop a network of local roads and streets to meet the needs of the local neighborhoods and communities	x	x	x	x	x	6	Town of Sparks	Staff Time	General Funds



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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY
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County:COOK County #:037 Tax District:COOK COUNTY

Dist #: 00 Assessment %: 040 Tot Parcels:10288

RESIDENTIAL				UTILITY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
R1	10,371		120,974,632	U1			
R3	6,369	6,655.69	29,849,645	U2	35	0	19,876,744
R4	953	5,614.9	9,860,394	U3			
R5	52	814.47	1,072,354	U4	12	0	35,558
R6	41		96,280	U5	1	0	18,520
R7				U7			
R9				U9			
RA	16		501,925	UA			
RB	828		929,318	UB			
RF	1		18,530	UF			
RI	1		100	UZ			
RZ							
RESIDENTIAL TRANSITIONAL				EXEMPT PROPERTY			
Code	Count	Acres	40% Value	Code	Count	40% Value	
T1				E0			
T3				E1	410	34,192,552	
T4				E2	301	9,148,119	
				E3	29	420,424	
HISTORIC				E4	28	861,987	
Code	Count	Acres	40% Value	E5	12	1,200,353	
H1				E6	58	9,769,964	
H3				E7			
AGRICULTURAL				E8			
Code	Count	Acres	40% Value	E9	14	3,604,693	
A1	1,683		14,542,810				
A3	12	151.78	174,706	TOTAL	852	59,198,092	
A4	54	436.59	462,836	HOMESTEAD AND PROPERTY EXEMPTIONS			
A5	392	13,761.65	11,789,468	Code	Count	M&O	Bond
A6	298		889,026	S1	2,241	4,481,025	
A7				SC	121	242,000	
A9				S2	0	0	
AA				S3	57	114,000	
AB				S4	784	3,134,696	
AF				S5	50	1,649,562	
AI				SD	5	245,279	
AZ				SS	5	209,488	
PREFERENTIAL				SE	0	0	
Code	Count	Acres	40% Value	SG	0	0	

P3	1	6.41	10,769
P4	3	34.22	31,470
P5	19	1,229.83	899,818
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3	34	635.92	762,237
V4	131	1,780.83	2,181,756
V5	1,074	96,287.95	84,006,111
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	25	7,365.73	4,925,052
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5	25	7,365.73	4,729,322
F9			
<hr/>			
Total	25	7,365.73	4,729,322

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	1,122		26,979,480
C3	652	847.32	8,885,616
C4	67	408.24	1,610,564
C5	27	1,292.43	2,099,387
C7			
C9			
CA			
CB	5		13,200
CF	594		14,907,776
CI	247		5,133,742
CP	17		20,804,884
CZ	1		15,588

INDUSTRIAL

Code	Count	Acres	40% Value
I1	57		5,226,054
I3	20	198.61	471,330
I4	4	38.52	84,070
I5	12	600.12	805,244

S6			
S7			
S8			
S9			
SF	21	46,526,420	
SA	23	235,517	
SB	0	0	
SP	990	728,216	
SH	0	0	
ST	0	0	
SV	1,239	63,426,674	
SJ	25	3,775,638	
SW	0	0	
SX			
SN	186	0	
DO NOT USE CODES L1-L9 ON STATE SHEET			
L1	0	0	
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			

TOTAL	5,747	124,768,515	0
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SUMMARY

Code	Count	Acres	40% Value
Residential	18,632	13,085.06	163,303,178
Residential Transitional			
Historical			
Agricultural	2,439	14,350.02	27,858,846
Preferential	23	1,270.46	942,057
Conservation Use	1,239	98,704.7	86,950,104
Brownfield Property			
Forest Land Cons Use	25	7,365.73	4,925,052
Environmentally Sensitive			
Commercial	2,732	2,547.99	80,450,237
Industrial	113	837.25	47,270,631
Utility	48	0	19,930,822
Motor Vehicle	10,362		17,527,710
Mobile Home	1,589		6,519,398
Timber 100%	50	3,587	2,514,118
Heavy Equipment	1		132,300
Gross Digest	37,253	141,748.21	458,324,453
Exemptions Bond			
Net Bond Digest			458,324,453
Gross Digest	37,253	141,748.21	458,324,453
Exemptions-M&O			124,768,515
Net M&O Digest			333,555,938

			TAX LEVIED			
			TYPE	ASSESSED VALUE	MILLAGE	TAX
I7						
I9						
IA						
IB			M & O	333,555,938	.000	0.00
IF	10	12,662,986	BOND	458,324,453	.000	0.00
II	5	1,021,544				
IP	4	25,747,342				
IZ	1	1,252,061				

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY
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County:COOK County #:037 Tax District:ADEL

Dist #: 05 Assessment %: 040 Tot Parcels:4121

RESIDENTIAL				UTILITY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
R1	2,453		40,492,752	U1			
R3	2,177	398.42	10,261,930	U2	8	0	1,963,075
R4	21	91.14	228,689	U3			
R5	2	49.98	89,904	U4	4	0	26,792
R6	4		6,207	U5			
R7				U7			
R9				U9			
RA	15		499,840	UA			
RB	163		185,280	UB			
RF				UF			
RI				UZ			
RZ							
RESIDENTIAL TRANSITIONAL				EXEMPT PROPERTY			
Code	Count	Acres	40% Value	Code	Count	40% Value	
T1				E0			
T3				E1	218	16,427,193	
T4				E2	114	3,833,949	
HISTORIC				E3	8	166,537	
Code	Count	Acres	40% Value	E4	6	285,568	
H1				E5	12	1,200,353	
H3				E6	30	3,519,194	
AGRICULTURAL				E7			
Code	Count	Acres	40% Value	E8			
A1	15		447,595	E9	11	3,555,342	
A3	2	3.32	10,856	TOTAL	399	28,988,136	
A4	1	8.29	6,300	HOMESTEAD AND PROPERTY EXEMPTIONS			
A5	10	344.32	288,726	Code	Count	M&O	Bond
A6	2		5,106	S1			
A7				SC			
A9				S2			
AA				S3			
AB				S4			
AF				S5	19	656,220	
AI				SD	4	181,181	
AZ				SS	3	104,005	
PREFERENTIAL				SE	0	0	
Code	Count	Acres	40% Value	SG	0	0	

P3				S6			
P4				S7			
P5				S8			
P6				S9			
P7				SF	12	20,534,897	
P9				SA	0	0	
CONSERVATION USE				SB	0	0	
Code	Count	Acres	40% Value	SP	293	247,621	
V3				SH	0	0	
V4	2	11.25	13,698	ST	0	0	
V5	8	255.82	209,793	SV	10	172,513	
V6				SJ	0	0	
BROWNFIELD PROPERTY				SW	0	0	
Code	Count	Acres	40% Value	SX			
B1				SN	122	0	
B3				DO NOT USE CODES L1-L9 ON STATE SHEET			
B4				L1			
B5				L2			
B6				L3			
FOREST LAND CONSERVATION USE				L4			
Code	Count	Acres	40% Value	L5			
J3				L6			
J4				L7			
J5				L8			
J9				L9			
FLPA FAIR MARKET ASSMT				TOTAL	463	21,896,437	0
Code	Count	Acres	40% Value	SUMMARY			
F3				Code	Count	Acres	40% Value
F4				Residential	4,835	539.54	51,764,602
F5				Residential			
F9				Transitional			
Total				Historical			
ENVIRONMENTALLY SENSITIVE				Agricultural	30	355.93	758,583
Code	Count	Acres	40% Value	Preferential			
W3				Conservation	10	267.07	223,491
W4				Use			
W5				Brownfield			
COMMERCIAL				Property			
Code	Count	Acres	40% Value	Forest Land			
C1	705		18,405,309	Cons Use			
C3	404	232.33	7,098,498	Environmentally			
C4	31	137.04	1,142,354	Sensitive			
C5	13	347.93	1,114,945	Commercial	1,664	717.3	59,087,337
C7				Industrial	64	208.63	7,235,853
C9				Utility	12	0	1,989,867
CA				Motor Vehicle	2,500		5,033,980
CB	2		7,036	Mobile Home	249		775,663
CF	334		7,064,067	Timber 100%	0	0	0
CI	165		4,310,549	Heavy			
CP	10		19,944,579	Equipment	1		132,300
CZ				Gross Digest	9,365	2,088.47	127,001,676
INDUSTRIAL				Exemptions			
Code	Count	Acres	40% Value	Bond			
I1	31		3,233,578	Net Bond Digest			127,001,676
I3	18	174.96	436,950	Gross Digest	9,365	2,088.47	127,001,676
				Exemptions-			
				M&O			21,896,437
				Net M&O Digest			105,105,239

				TAX LEVIED			
				TYPE	ASSESSED VALUE	MILLAGE	TAX
I4	2	22.13	53,112				
I5	1	11.54	27,696				
I7							
I9				M & O	105,105,239	6.401	672,778.63
IA				BOND	127,001,676	.000	0.00
IB							
IF	7		2,114,544				
II	3		779,655				
IP	2		590,318				
IZ							

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY
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County:COOK County #:037 Tax District:CECIL

Dist #: 10 Assessment %: 040 Tot Parcels:219

RESIDENTIAL				UTILITY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
R1	174		1,791,116	U1			
R3	175	163.22	575,544	U2	6	0	505,617
R4	8	22.98	49,737	U3			
R5				U4	1	0	1,024
R6				U5			
R7				U7			
R9				U9			
RA				UA			
RB	13		9,054	UB			
RF				UF			
RI				UZ			
RZ							
RESIDENTIAL TRANSITIONAL				EXEMPT PROPERTY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
T1				E0			
T3				E1	9		104,698
T4				E2	12		157,653
				E3			
				E4	2		3,801
				E5			
				E6			
				E7			
				E8			
				E9			
				TOTAL	23		266,152
HISTORIC				HOMESTEAD AND PROPERTY EXEMPTIONS			
Code	Count	Acres	40% Value	Code	Count	M&O	Bond
H1				S1			
H3				SC			
				S2			
				S3			
				S4			
				S5	2	100,263	
				SD	0	0	
				SS	1	37,195	
AGRICULTURAL							
Code	Count	Acres	40% Value				
A1	6		26,857				
A3							
A4	1	2	2,240				
A5	4	49.98	47,279				
A6							
A7							
A9							
AA							
AB							
AF							

Code	Count	Acres	40% Value																																																																																																
AI				SE	0	0																																																																																													
AZ				SG	0	0																																																																																													
PREFERENTIAL				S6																																																																																															
				S7																																																																																															
				S8																																																																																															
P3				S9																																																																																															
P4				SF	0	0																																																																																													
P5				SA	0	0																																																																																													
P6				SB	0	0																																																																																													
P7				SP	17	10,252																																																																																													
P9				SH	0	0																																																																																													
CONSERVATION USE				ST	0	0																																																																																													
				SV	6	98,052																																																																																													
				SJ	0	0																																																																																													
V3				SW	0	0																																																																																													
V4	3	47.51	56,979	SX																																																																																															
V5	3	88.68	77,438	SN	5	0																																																																																													
V6				DO NOT USE CODES L1-L9 ON STATE SHEET																																																																																															
BROWNFIELD PROPERTY				L1																																																																																															
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FOREST LAND CONSERVATION USE				L9																																																																																															
				<table border="1"> <thead> <tr> <th>TOTAL</th> <th>31</th> <th>245,762</th> <th>0</th> </tr> </thead> <tbody> <tr> <td colspan="4">SUMMARY</td> </tr> <tr> <td>Code</td> <td>Count</td> <td>Acres</td> <td>40% Value</td> </tr> <tr> <td>Residential</td> <td>370</td> <td>186.2</td> <td>2,425,451</td> </tr> <tr> <td>Residential Transitional</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Historical</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Agricultural</td> <td>11</td> <td>51.98</td> <td>76,376</td> </tr> <tr> <td>Preferential</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Conservation Use</td> <td>6</td> <td>136.19</td> <td>134,417</td> </tr> <tr> <td>Brownfield Property</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Forest Land Cons Use</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Environmentally Sensitive</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Commercial</td> <td>68</td> <td>68.3</td> <td>838,329</td> </tr> <tr> <td>Industrial</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Utility</td> <td>7</td> <td>0</td> <td>506,641</td> </tr> <tr> <td>Motor Vehicle</td> <td>113</td> <td></td> <td>137,090</td> </tr> <tr> <td>Mobile Home</td> <td>36</td> <td></td> <td>113,835</td> </tr> <tr> <td>Timber 100%</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Heavy Equipment</td> <td>0</td> <td></td> <td>0</td> </tr> <tr> <td>Gross Digest</td> <td>611</td> <td>442.67</td> <td>4,232,139</td> </tr> <tr> <td>Exemptions Bond</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Net Bond Digest</td> <td></td> <td></td> <td>4,232,139</td> </tr> <tr> <td>Gross Digest</td> <td>611</td> <td>442.67</td> <td>4,232,139</td> </tr> </tbody> </table>				TOTAL	31	245,762	0	SUMMARY				Code	Count	Acres	40% Value	Residential	370	186.2	2,425,451	Residential Transitional				Historical				Agricultural	11	51.98	76,376	Preferential				Conservation Use	6	136.19	134,417	Brownfield Property				Forest Land Cons Use				Environmentally Sensitive				Commercial	68	68.3	838,329	Industrial				Utility	7	0	506,641	Motor Vehicle	113		137,090	Mobile Home	36		113,835	Timber 100%	0	0	0	Heavy Equipment	0		0	Gross Digest	611	442.67	4,232,139	Exemptions Bond				Net Bond Digest			4,232,139	Gross Digest	611	442.67	4,232,139
TOTAL	31	245,762	0																																																																																																
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Code	Count	Acres	40% Value																																																																																																
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W4																																																																																																			
W5																																																																																																			
COMMERCIAL																																																																																																			
Code	Count	Acres	40% Value																																																																																																
C1	29		388,940																																																																																																
C3	13	23.75	199,015																																																																																																
C4																																																																																																			
C5	1	44.55	50,067																																																																																																
C7																																																																																																			
C9																																																																																																			

CA			Exemptions-			245,762
CB			M&O			
CF	17	87,277	Net M&O Digest			3,986,377
CI	8	113,030	TAX LEVIED			
CP			TYPE	ASSESSED	MILLAGE	TAX
CZ				VALUE		
INDUSTRIAL			M & O	3,986,377	12.912	51,472.10
			BOND	4,232,139	.000	0.00
Code	Count	Acres	40%			
			Value			

- I1
- I3
- I4
- I5
- I7
- I9
- IA
- IB
- IF
- II
- IP
- IZ

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY
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County:COOK County #:037 Tax District:LENOX

Dist #: 15 Assessment %: 040 Tot Parcels:629

RESIDENTIAL				UTILITY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
R1	379		3,868,068	U1			
R3	472	92.49	1,156,387	U2	4		1,154,799
R4	7	40.55	55,123	U3			
R5				U4			
R6				U5			
R7				U7			
R9				U9			
RA				UA			
RB	19		15,827	UB			
RF				UF			
RI				UZ			
RZ							
RESIDENTIAL TRANSITIONAL				EXEMPT PROPERTY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
T1				E0			
T3				E1	47		994,112
T4				E2	48		876,475
				E3	4		10,564
				E4	2		31,458
				E5			
				E6	2		395,389
				E7			
				E8			
				E9			
				TOTAL	103		2,307,998
HISTORIC				HOMESTEAD AND PROPERTY EXEMPTIONS			
Code	Count	Acres	40% Value	Code	Count	M&O	Bond
H1				S1			
H3				SC			
				S2			
				S3			
				S4			
				S5			
				SD			
				SS			
				SE			
A1	3		13,488				
A3							
A4							
A5	2	32	22,935				
A6							
A7							
A9							
AA							
AB							
AF							

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

CONSERVATION USE			
Code	Count	Acres	40% Value
V3			
V4			
V5	5	114.55	108,976
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			

ENVIRONMENTALLY SENSITIVE			
Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL			
Code	Count	Acres	40% Value
C1	96		2,254,719
C3	84	34.97	513,980
C4	6	40.92	85,494
C5	2	151.29	230,556
C7			
C9			

SG	
S6	
S7	
S8	
S9	
SF	
SA	
SB	
SP	
SH	
ST	
SV	
SJ	
SW	
SX	
SN	
DO NOT USE CODES L1-L9 ON STATE SHEET	

L1
L2
L3
L4
L5
L6
L7
L8
L9

TOTAL

SUMMARY

Code	Count	Acres	40% Value
Residential	877	133.04	5,095,405
Residential Transitional			
Historical			
Agricultural	5	32	36,423
Preferential			
Conservation Use	5	114.55	108,976
Brownfield Property			
Forest Land Cons Use			
Environmentally Sensitive			
Commercial	266	227.18	4,583,735
Industrial	4	71.89	117,724
Utility	4		1,154,799
Motor Vehicle	455		633,040
Mobile Home	104		335,890
Timber 100%			
Heavy Equipment			
Gross Digest	1,720	578.66	12,065,992
Exemptions Bond			0
Net Bond Digest			12,065,992
Gross Digest	1,720	578.66	12,065,992
Exemptions-M&O			0

CA			Net M&O Digest		12,065,992
CB			TAX LEVIED		
CF	59	1,049,979	TYPE	ASSESSED VALUE	MILLAGE TAX
CI	18	261,458			
CP	1	187,549	M & O	12,065,992	.000 0.00
CZ			BOND	12,065,992	.000 0.00

INDUSTRIAL

Code	Count	Acres	40% Value
I1			
I3	2	23.65	34,380
I4	1		1,456
I5	1	48.24	81,888
I7			
I9			
IA			
IB			
IF			
II			
IP			
IZ			

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY
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County:COOK County #:037 Tax District:SPARKS

Dist #: 20 Assessment %: 040 Tot Parcels:1119

RESIDENTIAL				UTILITY			
Code	Count	Acres	40% Value	Code	Count	Acres	40% Value
R1	688		6,366,687	U1			
R3	936	337.14	2,351,673	U2	6	0	1,283,983
R4	27	117.42	209,933	U3			
R5	3	52.84	69,923	U4	5	0	7,302
R6				U5			
R7				U7			
R9				U9			
RA				UA			
RB	45		37,908	UB			
RF				UF			
RI	1		100	UZ			
RZ							
RESIDENTIAL TRANSITIONAL				EXEMPT PROPERTY			
Code	Count	Acres	40% Value	Code	Count	40% Value	
T1				E0			
T3				E1	33	1,055,718	
T4				E2	33	845,654	
				E3	4	109,672	
				E4	4	233,278	
				E5			
				E6	24	5,511,917	
				E7			
				E8			
				E9			
				TOTAL	98	7,756,239	
AGRICULTURAL				HOMESTEAD AND PROPERTY EXEMPTIONS			
Code	Count	Acres	40% Value	Code	Count	M&O	Bond
A1	8		65,773	S1			
A3				SC			
A4				S2			
A5	6	92.79	75,190	S3			
A6				S4			
A7				S5	1	22,622	
A9				SD	0	0	
AA				SS	0	0	
AB				SE	0	0	
AF							

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

CONSERVATION USE			
Code	Count	Acres	40% Value
V3	1	9.55	15,280
V4	3	25.66	31,675
V5	13	598.76	620,095
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			

ENVIRONMENTALLY SENSITIVE			
Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL			
Code	Count	Acres	40% Value
C1	131		1,864,933
C3	87	68.48	518,625
C4	7	53.6	95,324
C5			
C7			
C9			

SG	0	0
S6		
S7		
S8		
S9		
SF	0	0
SA	0	0
SB	0	0
SP	61	44,627
SH	0	0
ST	0	0
SV	17	496,043
SJ	0	0
SW	0	0
SX		
SN	11	0

DO NOT USE CODES L1-L9 ON STATE SHEET

L1		
L2		
L3		
L4		
L5		
L6		
L7		
L8		
L9		

TOTAL	90	563,292	0
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SUMMARY				
Code	Count	Acres	40% Value	
Residential	1,700	507.4	9,036,224	
Residential Transitional				
Historical				
Agricultural	14	92.79	140,963	
Preferential				
Conservation Use	17	633.97	667,050	
Brownfield Property				
Forest Land Cons Use				
Environmentally Sensitive				
Commercial	288	122.08	3,100,852	
Industrial	10	275.94	472,084	
Utility	11	0	1,291,285	
Motor Vehicle	756		935,010	
Mobile Home	244		847,694	
Timber 100%	0	0	0	
Heavy Equipment	0		0	
Gross Digest	3,040	1,632.18	16,491,162	
Exemptions Bond				
Net Bond Digest			16,491,162	
Gross Digest	3,040	1,632.18	16,491,162	
Exemptions-M&O			563,292	

CA			Net M&O Digest		15,927,870
CB			TAX LEVIED		
CF	48	403,550	TYPE	ASSESSED VALUE	MILLAGE TAX
CI	15	218,420			
CP			M & O	15,927,870	7.704 122,708.31
CZ			BOND	16,491,162	.000 0.00

INDUSTRIAL

Code	Count	Acres	40% Value
I1	5		68,446
I3			
I4	1	16.39	29,502
I5	4	259.55	374,136
I7			
I9			
IA			
IB			
IF			
II			
IP			
IZ			

Return

Appendix C

**COOK COUNTY
COMMUNITY WILDFIRE
PROTECTION PLAN**

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Executive Summary

The extreme weather conditions that are conducive to wildfire disasters (usually a combination of extended drought, low humidity and high winds) occur in this area of Georgia every 10-15 years. This is not a regular event, but, the number of homes that have been built in or adjacent to forested or wildland areas, 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 includes an evaluation of the wildland fire susceptibility of wildland/urban interface “communities-at-risk”, an analysis of fire service resources and training and an Action Plan to address the increasing threat of wildfire. 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 grants through the National Fire Plan, FEMA mitigation grants, and others. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities (counties) that seek grants from the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

The plan will:

- Enhance public safety
- Improve community sustainability
- Protect ecosystem health
- Raise public awareness of wildfire hazards and wildfire risk
- Educate landowners 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 engines and firefighters on the scene. It takes planning and commitment at the community level BEFORE the wildfire disaster occurs --- and that is what the Community Wildfire Protection Plan is all about.

SIGNATURE PAGE

Honorable Jeff Lane
Chairman, Cook County Board of County Commissioners

Date

Jody L. Meeler, Fire Coordinator, Cook County

Date

GFC Chief Ranger Levy Rentz

Date

WILDLAND/URBAN INTERFACE FIRE DISASTERS

Fire influenced and defined the landscape we call the United States, well before the arrival of the first Europeans. Scientists, in fact, think that fires started by lightning or Native Americans occurred over most of the Southeast every 3 to 7 years. These were typically low intensity fires (because of their frequency) which kept the forests open and “park-like” in appearance and prevented heavy accumulations of dense underbrush. When communities became well established across the South, wildfires began to impact public safety and had to be controlled. State forestry agencies became established between 1915 and 1928 and the landscape was generally segregated into communities (or human habitations) and natural or wildland areas.

In the mid 1980’s, following a new wave of development in what was previously forest or wildland areas, agencies across the country became aware of an increasingly common phenomena – wildfires were more and more frequently impacting communities . In 1985, a milestone year, over 1400 homes nationwide were lost to wildfire. The catastrophes became known as wildland/urban interface fires and occur when the fuel feeding the fire changes from natural vegetation (trees, shrubs and herbs) and begins to include manmade structures (homes, outbuildings and vehicles). Wildland/urban interface fires can occur anywhere in the United States and can become major disasters when associated with extremes in weather (extended droughts, high winds, and low relative humidity).

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 engines and firefighters on the scene. But, it takes planning and commitment at the community level BEFORE a wildfire emergency occurs.

CWPP PLAN PARTICIPANTS

CWPP Core Committee

Jody L. Meeler, County Fire Coor.	Joe Perry, Chief, Lenox VFD	Joe Dent, Chief, Sparks VFD
Timmy Guthrie, Chief, Pine Valley VFD	Doyle L. Tatem, Chief, Cecil.	Ken Lewis, Chief S.E. Cook VFD
Jake Weeks, Chief, Chaserville VFD,	Denny Folsom, Cook Co. EMA/911	
Jeff Lane, Chairman, Cook County BCC	Brett Kelly, Vice-Chairman, Cook County BCC	

GFC Representatives

GFC Chief Ranger Levy Rentz
CWPP Program Specialist Jim Harrell

Meeting Dates

Initial Core Committee Meeting: May 26, 2011
Follow-Up Meeting #1: June 23, 2011
Follow-Up Meeting #2: July 7, 2011

OBJECTIVE OF THE CWPP

There are several great reasons to develop a Community Wildfire Protection Plan (CWPP). First and foremost, a successful Community Wildfire Protection Plan provides a community with a set of objectives and actions specifically designed to address the threat of wildfire. These objectives and actions can help:

- Enhance public safety
- Improve community sustainability
- Protect ecosystem health
- Raise public awareness of wildfire hazards and wildfire risk
- Educate landowners on how to reduce home ignitability
- Build and improve collaboration at multiple levels

A Community Wildfire Protection Plan is a critical tool required to obtain hazard mitigation grants through the National Fire Plan, FEMA mitigation grants, and others. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities that seek grants from the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

The minimum requirements for a Community Wildfire Protection Plan as described in the HFRA are:

- **Collaboration:** A Community Wildfire Protection Plan must be collaboratively developed by local and state government representatives, in consultation with federal agencies* and other interested parties.
- **Prioritized Fuel Reduction:** A Community Wildfire Protection Plan must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- **Treatment of Structural ignitability:** A Community Wildfire Protection Plan must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

* Federal agencies are involved in the CWPP process if U.S. Forest Service or BLM lands exist in the county.

OTHER STAKEHOLDERS

It is important that a collaborative approach be taken in the development of a successful Community Wildfire Protection Plan. This means allowing for the involvement of multiple interested parties in the Core CWPP Committee that develops the CWPP and providing the opportunity for other interested stakeholders in the community (county) to review and comment on the CWPP. Collaboration is a requirement of the Healthy Forests Restoration Act.

During development of the Cook County CWPP, opportunities for collaboration major stakeholders were invited to participate as members of the CWPP Core Committee.

DESCRIPTION OF COOK COUNTY

Cook County was created in 1918 from part of Berrien County. The county is 58.9% rural with a 2008 population estimated by the Georgia Center for Agribusiness and Economic Development at 16,608. The county seat is Adel.

Total area of Cook County is 233.2 square miles (149,248 acres), of which 229 square miles (146,560 acres) is land and 4.2 square miles (2,688 acres) is water. Forested area is 73,928 acres or 50.43 percent of the county land area.

WILDFIRE HISTORY

The Georgia Forestry Commission (GFC) is the state agency responsible for providing leadership, service, and education in the protection and conservation of Georgia's forest resources. Commission professionals provide a wide variety of services including fire detection, issuing burn permits, wildfire suppression and prevention services, emergency and incident command system expertise, rural fire department assistance, forest management assistance to landowners and communities, the marketing and utilization of forest resources and nature services, and growing and selling quality tree seedlings for planting. Forestry is a \$28.7 billion a year industry in the State of Georgia creating 128,000 jobs statewide. Forestry is a valuable part of the Cook County economy.

Vision: Healthy sustainable forests providing clean air, clean water and abundant products for future generations.

Mission: To provide leadership, service and education in protection and conservation of Georgia's forest resources.

Local GFC Office

The Georgia Forestry Commission office serving Cook County is located at: 260 M.J. Taylor Road, Adel, Georgia, 31620. Telephone Number is: 229-896-2925.

Personnel

Levy Rentz, Chief Ranger

Tony Betts, Ranger I

Vacant, Ranger I

Wildland Firefighting Equipment

2 Tractor/Transports with John Deere 650

1 Type VII Engine

1 Type VI Engine

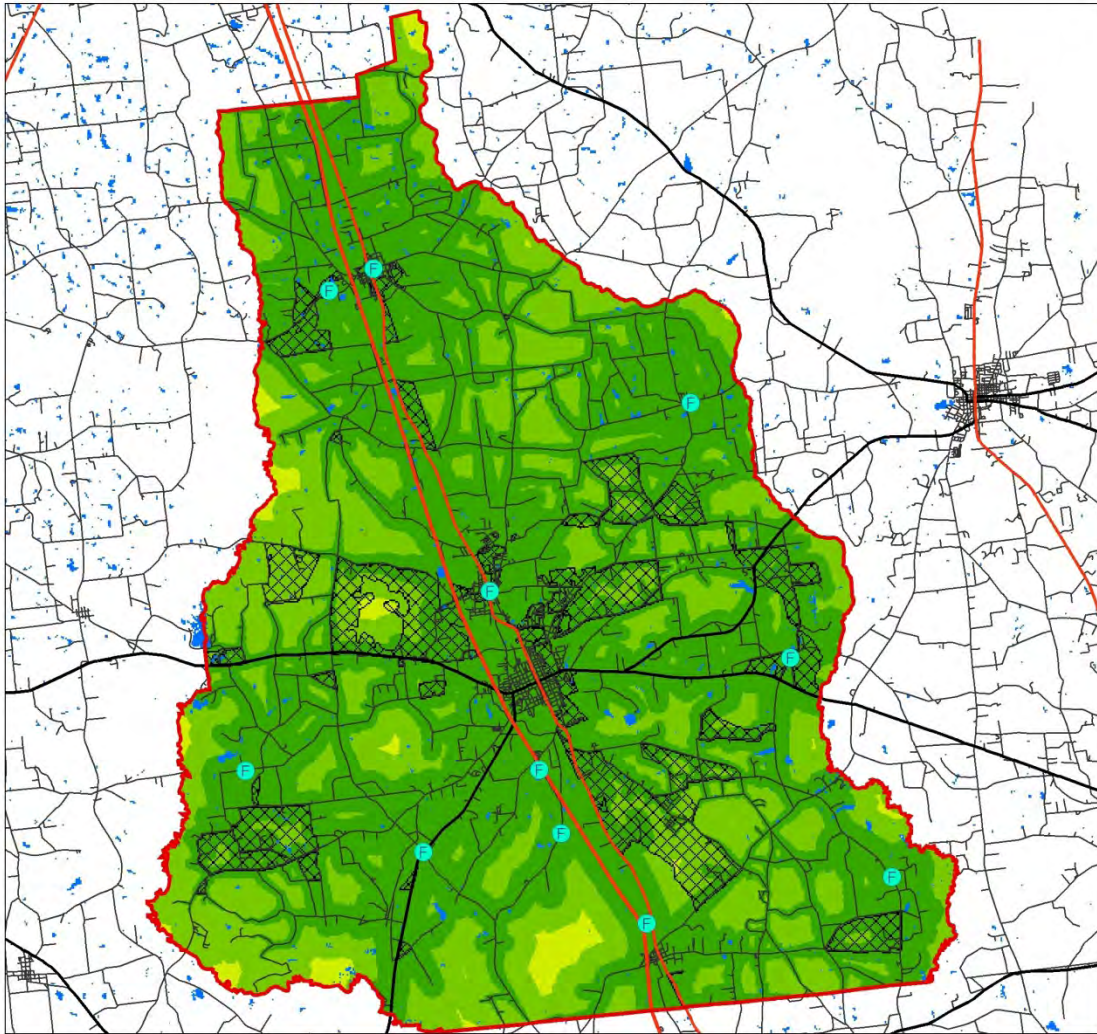
Wildfire Causes

On a year-to-year basis, the leading cause (#1) of wildfires in Cook County is escaped debris fires (all types), followed by (#2) wildfires caused by machine use (example: combine in a wheatfield) and then (#3) escaped campfires and (#4) incendiary fires.

<u>Cause</u>	<u>FY 2011</u>	<u>5 Year Avg.</u>
Debris Fires (All Types)	48/280.12 acres	32/155.08 acres
Machine Use	10/26.91 acres	10.60/14.01 acres
Campfires	3/6.83 acres	1.20/5.61 acres
Incendiary	3/2.50 acres	1.20/ 1.22 acres

Cook Co Fire Response Accessibility Index

Wildland Urban Interface and Initial Dispatch Locations



- Area of Interest (AOI)
- Initial Dispatch Locations
- Roads, Level 1
- Roads, Level 2
- Roads, Level 3
- Roads, Level 4
- Water
- Within WUI
- FRAS**
- <VALUE>**
- 0 - 15 minutes
- 16 - 30 minutes
- 31 - 45 minutes
- 46 - 60 minutes
- 1 - 2 hours
- > 2 hours



8/31/2011

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This Base Map of Cook County on the previous page illustrates where wildland/urban interface areas (cross-hatched) are located near or adjacent to wildlands (areas that could potentially be threatened by a wildfire) and the estimated time to respond to wildfires in the county.

WHAT ARE “COMMUNITIES-AT-RISK”?

Communities-at-risk are locations where a group of two or more structures in close proximity to a forested or wildland area places homes and residents at some degree of risk from wildfire. Other characteristics of the “community” such as the closeness of structures, building materials, accumulated debris near the structures, access in and out and the distance from the nearest fire station or a permanent water source such as a pond or dry hydrant may contribute to the risk.

While there may be relatively few groups of homes that fit the above description in Cook County, that does not mean there is not a significant risk of structural damage during the severe weather conditions are conducive to a disastrous wildfire (severe drought, low relative humidity and high winds).

In Cook County, there are many individual (isolated) homes and outbuildings on farms and small properties that could be damaged or destroyed in the event of a disastrous wildfire. On these properties, the owners must assume a greater responsibility for wildfire protection - - - by making improvements to the landscape and structures that will provide some degree of wildfire protection until the fire department can arrive. This can only be accomplished if rural residents know how to make their homes and properties “Firewise”.

Improvements to the community infrastructure (roads, utilities, etc.) may be beyond the capabilities of the homeowners. However, if access by emergency vehicles can be enhanced by widening the entrance right-of-way(s), creating “hammerhead-T’s” or other ways for fire trucks to turn around and operate safely and identifying residences with reflective “911 addresses” wildfire protection can be greatly improved.

More extensive modifications in and around individual residences may need to be budgeted by the residents over time (for example, making a roof more fire resistant may have to wait until it is time to replace the current roof covering). Moving firewood away from the home, skirting raised decks and keeping roofs free of accumulated flammable debris are improvements that can be accomplished in the short-run.

In most instances, communities-at-risk will benefit from (vegetative) fuel reduction within 100 feet of homes and outbuildings through prescribed burning or by mechanical means. Fuel management within the home ignition zone (within 100 feet of the home) either by removing highly flammable vegetation or by replacing the vegetation with fire resistant plant species will significantly improve wildfire safety.

COOK COUNTY COMMUNITIES AT RISK

FIRE DEPT and Community	Score	Hazard Rating
1. LENOX Trailer Park / Old Union Road	45	Low Hazard
2. SE Wilkes Road	75	High Hazard
3. SE Oak Ridge Lane	86	High Hazard
4. LENOX 605/603/1007 Kinardbridge Road	94	High Hazard
5. SE Smokey Wood Lane	95	High Hazard
6. SE Shady Grove/Roberts Road	97	High Hazard
7. LENOX 1150-1360 Kinardbridge Road	98	High Hazard
8. SE Giddens Road	98	High Hazard
9. LENOX Colonial Park Apartments	99	High Hazard
10. SE Gallie Lizzimore	100	Very High Hazard
11. SE Browning Road	101	Very High Hazard
12. Trailer Park, Green St/Lydia St	105	Very High Hazard
12. CECIL Sunshine Acres Trailer Park	116	Very High Hazard
13. SPARKS Branch Trailer Park/Lauren Drive	118	Very High Hazard
14. CMV Chaserville Mall	127	Extreme Hazard
15. PV Felts Trailer Park	129	Extreme Hazard
16. SPARKS Gay Avenue	129	Extreme Hazard

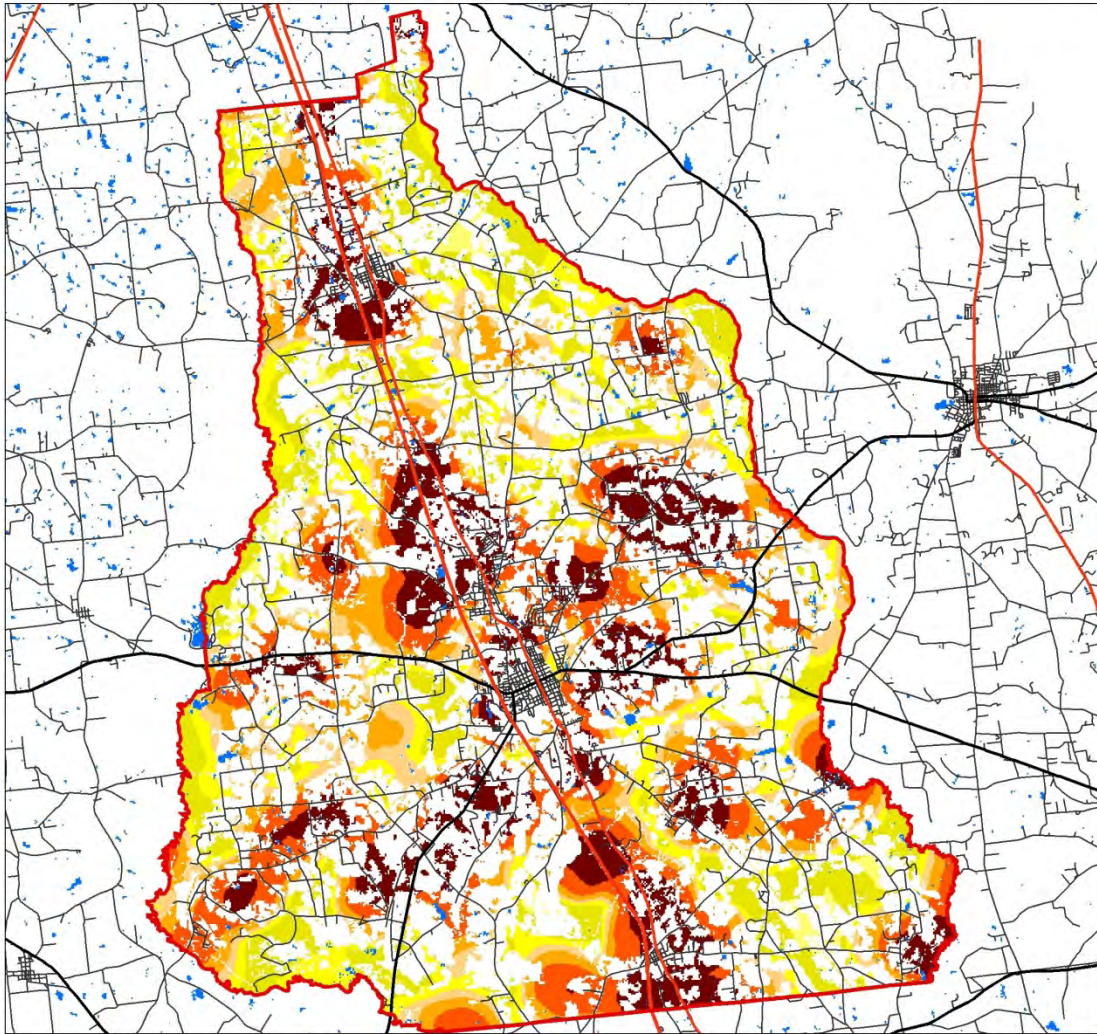
COOK COUNTY COMMUNITIES AT RISK (Continued)

FIRE DEPT and Community	Score	Hazard Rating
17. SPARKS Fox Run	131	Extreme Hazard
18. SPARKS MLK / Rhome Street	132	Extreme Hazard
19. SPARKS Gandy / Spires Lane	133	Extreme Hazard
21. PV Stripling Lane	137	Extreme Hazard
22. PV Reed Bingham State Park	148	Extreme Hazard
23. SPARKS Wood Subdivision	142	Extreme Hazard
24. CMV Tulip Lane	142	Extreme Hazard
25. CECIL County Line Road	146	Extreme Hazard
26. PV Harrell Lane	149	Extreme Hazard
27. PV Elk Lane / Guthrie Trailer Park	153	Extreme Hazard
28. SPARKS Gibbs Lane / Brandy Lane	154	Extreme Hazard
29. PV Hemspring Circle	163	Extreme Hazard
29. SPARKS Willis Lane	164	Extreme Hazard

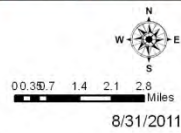
These hazard ratings were completed by Cook County Volunteer Fire Department personnel and Georgia Forestry Commission Rangers during the months of May and June, 2011. The Georgia Forestry Commission Hazard and Wildfire Risk Assessment Scoresheet was used. This document evaluates communities (groups of homes) based upon six criteria: community access, surrounding vegetation, building construction, fire protection, utilities and additional rating factors. The cumulative wildfire hazard rating scores range from a low rating of 0 to 50 points to an extreme hazard rating with over 120 points. The cumulative wildfire hazard rating scores help establish priorities for mitigation activities in the CWPP Action Plan on page 19.

Cook Co Fire Occurrence Areas

AOI: Cook Description: Published Results Dataset for the AOI



- Legend**
- Area of Interest (AOI)
 - Roads, Level 1
 - Roads, Level 2
 - Roads, Level 3
 - Roads, Level 4
 - Water
- Fire Occurrence Areas (fires/1000 acres/year)**
- <VALUE>**
- Non-Burnable
 - 0 - 0.024
 - 0.025 - 0.049
 - 0.050 - 0.099
 - 0.100 - 0.199
 - 0.200 - 0.299
 - 0.291 - 0.399
 - 0.400 - 0.599
 - 0.600 - 0.999
 - 1.000 - 1.000



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PROTECTING EXISTING STRUCTURES

Critical Facilities

Critical facilities are unique structures which may require special consideration in the event of an emergency such as a wildland/urban interface fire. Every county will have some critical facilities and some more urbanized counties will have many. Critical facilities include: a nursing home that may need special consideration because the smoke accompanying a wildfire may be hazardous to the health of elderly residents, a law enforcement dispatch center is a critical facility that will need special consideration to insure there is no disruption of emergency communications in the event of a disastrous wildfire. Other examples of critical facilities are ethanol plants, auto junkyards and facilities such as the BASF chemical plant local to Cook County.

Owner/operators of critical facilities need to be aware of the hazards that an approaching wildfire could present. There may be immediate action that could be taken by owner/operators to lessen the impact of a wildfire in the immediate area (such as the elimination of encroaching wildland vegetation in and around the critical facility).

RECOMMENDATION:

- Meet with owner/operators of Critical Facilities to evaluate any wildfire hazard and suggest what owner/operators might do to mitigate any observed hazards and improve wildfire protection.

Public Education Needs

“Firewise” structures are homes and other buildings in the wildland/urban interface that have been built, designed or maintained to survive a wildfire event even in the absence of firefighters on the scene. Over the past fifty years, many Georgia residents have left the city or the suburbs to build homes in or adjacent to forested areas with a desire to be “close to nature”. Unfortunately, this has resulted in neighborhoods or single-family dwellings with one way in and out, with long narrow driveways, no pressurized hydrants or draft source for water and so close to wildland fuel that even the best equipped fire department could not be successful in a severe wildfire event. Most of these homeowners don’t understand the risk associated with living in the wildland/urban interface and expect to be rescued by the fire department in the event of a wildfire emergency.

The key to the reduction of structural losses in the wildland/urban interface cannot rest solely with improved response by the local fire services. There will never be enough fire trucks and firefighters to adequately protect homes in the wildland/urban interface. A major part of the solution to this problem lies with the homeowner – homeowners in the wildland/urban interface must become “partners” with the fire services and assume some responsibility for maintaining their home (structure) and landscape (yard) so that ignitions in and around the home are less likely should a wildfire occur in the immediate area. This means a home with no debris on the roof and in the gutters, wood decks that are skirted underneath, chunky bark or lava rock mulch near the house instead of pine straw or cypress mulch and a “lean, clean and green” landscape of less-flammable plants within 30 feet of the structure.

RECOMMENDATIONS:

- Initiate a community public education program for Cook County residents
- Make Firewise Communities brochures available to the public at central locations such as: Farm Services Agency, Chamber of Commerce and the County Courthouse.
- Encourage communities (neighborhoods) that qualify to apply for recognition as a Firewise Community/USA.

Reduction of Hazardous Fuels

Because over 50 percent of Cook County is forested, the accumulation of brush and other (mostly ground) vegetation can create conditions over extensive areas that could fuel a disastrous wildfire. Treatment of forested areas with prescribed fire can significantly reduce this hazard while improving pulpwood and sawtimber production and enhancing wildlife habitat. Prescribed burning, however, must be conducted by experienced personnel when weather conditions are conducive to a safe burn and when an authorization has been obtained from the local office of the Georgia Forestry Commission. Other ways to reduce wildland fuel (vegetation) include:

- Mechanical treatment
- Chemical treatment (herbicides)
- Livestock grazing

The above alternatives to prescribed burning are more intensive and hence, more costly and generally suitable only for smaller acreages.

The goal for structural protection should be a “Firewise” landscape. A Firewise landscape is characterized by trees, shrubs and grasses that are carefully managed within 100 feet of structures - an area called the Home Ignition Zone (HIZ). Most critical is the space within 30 feet of a structure which is usually referred to as the area of Defensible Space. The Defensible Space should include a landscape of less flammable plants, coarse bark or lava rock as mulch adjacent the structure, tree limbs trimmed away from the structure and any decks skirted so leaves and other debris cannot accumulate underneath. The idea is to create a landscape that will prevent flames or fire brands (aerial borne embers) from igniting the structure.

Smoke on the highway from prescribed burning or wildfires can create hazardous conditions on roadways when certain weather conditions exist. It is important that motorists be warned when visibility deteriorates due to smoke.

RECOMMENDATION: Promote prescribed burning in Cook County.

- Help landowners understand how to prescribe burn legally and safely.
- Educate the general public on the benefits of prescribed burning.
- Work with the Georgia State Patrol and local law enforcement to ensure motorists are alerted to smoke hazards on local roadways.

NEW DEVELOPMENT

Site Plan Review

Growth pressure is expected to increase new home starts in Cook County over the next 20 years. If farm and ranch land is conserved as a mainstay of the County's rural economy, new development will, by necessity, occur more frequently on forest and wildland areas. The County Planning and Zoning Board 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 multi-unit subdivisions are built in rural areas (sometimes referred to as 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,

RECOMMENDATION:

Strengthen the site plan review process for multi-unit residential development in rural areas subject to wildfires.

- Evaluate the wildfire hazard of proposed new development in rural areas as part of the site plan review process (GFC Hazard & Wildfire Risk Assessment Scoresheet).
- Consider the "adoption by reference" of 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.

FIRE SERVICES CAPABILITY

Cook County has six Volunteer Fire Departments with 9 stations that are strategically located throughout the county. While the primary responsibility of these firefighters is structural protection, the firefighters regularly provide support to the Georgia Forestry Commission or find themselves the first units on the scene fighting brush fires (wildfires) that threaten homes and businesses.

<u>VFD</u>	<u># Engines</u>	<u># Water Tenders</u>	<u># Brush Trucks</u>	<u># Firefighters</u>
Cecil	1	0	1	6
Pine Valley	2	1 (2,000 gal.)	0	16
Sparks	2	0	1*	15
Chaserville/Massee	1	1 (1,500 gal.)	0	11
SE Cook	2	1 (2,000 gal.)	1	14
Lenox	2	1 (1,250 gal.)	1	11

*This brush truck on loan from Pine Valley

Wildland Fire Training

All volunteer firefighters have completed the National Incident Management System (NIIMS) training courses, I-100, I-400, I-700 & I-800. None of the firefighters have completed NWCG (National Wildfire Coordinating Group) basic wildfire training courses (S-130: Standards for Survival and S-190: Basic Wildfire Behavior).

Personal Protective Equipment (PPE)

Countywide there is no wildland personal protective equipment for use by volunteer firefighters when fighting brush fires and no fire shelters. Most engines are equipped with basic wildland fire hand tools (shovels, fire flaps and council rakes).

Hydrants

Pressurized hydrants exist in a number of developed areas of Cook County (Lenox, Sparks, Adel and Cecil). There are in addition an estimated 22 dry hydrants in unincorporated areas.

COOK COUNTY ACTION PLAN

Community/Area	Project	Agency	Funding	Priority	Community Recommendation
Countywide	Firefighter PPE & Wildland Fire Hand Tools	County	\$20,000 PPE	H	Personal protective equipment, fire shelters and wildland fire hand tools
Countywide	Firefighter Training	County	\$15,000	H	Standards for Survival & Wildland Fire Behavior (Courses: S-130 & S-190)
Countywide	3,000 Gallon Water Tenders	County	Three at \$225,000 each	H	Mobile water supply for W/UI areas: station at Cecil VFD, Sparks VFD and Lenox VFD
Countywide	Water Storage Tanks (2,500-3,000 gallon capacity)	County	\$25,000 (\$5,000 each)	H	5 water storage tanks to be located in strategic areas of the county
Countywide	Drafting Equipment "Turbo draft"	County	Six at \$2,700 each	H	Enhanced water delivery
Countywide	Brush Trucks	County	Five at \$90,000 each	H	Improve emergency access in remote areas and off-road firefighting capability.
Countywide	Wildland Fire Hose	County	\$3,000 (hose) and \$12,000 (nozzles)	M	1 ¼ inch fire hose with nozzles and 15 nozzles
Countywide	Homeowner Education For Communities-at-Risk	GFC/County	-0-	M	Provide Firewise educational materials and interpretative display at local festivals

This table summarizes a recommended course of action for implementation of this Community Wildfire Protection Plan. Although some actions could be implemented at little or no added cost, the county (or assigned agency) will be able to implement most projects only if grant funding is available.

GRANT FUNDING AND MITIGATION ASSISTANCE

- Community Protection Grant: U.S.F.S. sponsored prescribed fire program. Communities with “at-risk” properties that lie within three miles of a national forest or Bureau of Land Management tracts may apply with the Georgia Forestry Commission to have their land prescribe burned free-of-charge.
- FEMA Mitigation Policy MRR-2-08-01: through GEMA – Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Program (PDM).
 1. Provides technical and financial assistance to local governments to assist in the implementation of long term, cost effective hazard mitigation accomplishments.
 2. 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 fuel reduction to protect life and property.
 3. Allows counties to apply for pre-mitigation funding with a complete registered plan (addendum to the State Plan), and also be eligible for HMGP funding if the county is declared under a wildfire disaster.
- FEMA – Assistance to Firefighters Grant Program
 1. Assistance to Firefighters Grants (AFG). The purpose of AFG’s is to award one-year grants directly to fire departments and emergency medical services (EMS) organizations of a State to enhance their abilities with respect to fire and related hazards.
 2. Fire Prevention and Safety Grants. The purpose of these grants is to assist State, regional, national or local organizations to address fire prevention and safety. Emphasis of the program is on prevention of fire-related injuries to children.
 3. Staffing for Adequate Fire and Emergency Response (SAFER). The purpose of SAFER is to award grants directly to volunteer, combination and career fire departments to help the departments increase their cadre of firefighters (enhance their ability for 24-hour response).
- Georgia Forestry Commission: Plowing and prescribed burning assistance can be obtained from the GFC as an economical way to reduce accumulated wildland fuel.

- Individual Homeowners:
 1. The mitigation of hazardous conditions around a structure is ultimately the responsibility of the community and the homeowner. They will bear the cost and reap the benefits from properly implemented mitigation and wildfire protection efforts.
 2. GEMA: Pre-Disaster Mitigation Grant Program

ASSESSMENT OF ACCOMPLISHMENTS

To accurately assess progress and effectiveness of the action plan, Cook County would implement the following:

- An annual wildfire risk assessment (of “communities-at-risk”) would be conducted by the CWPP Committee to reassess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning or clearing of defensible space) would be incorporated into annual revisions of the original CWPP Action Plan.
- Mitigation efforts that could not be funded in the requested year will be incorporated into the annual revision/update of the original CWPP Action Plan.
- Continuing education and outreach programs will be conducted and assessed for effectiveness. Workshops will be evaluated based upon attendance and post-workshop surveys that are distributed by mail.
- The Cook County CWPP Core Committee will continue a year-to-year focus on the wildland/urban interface fire challenges in the County. The Committee will annually update this CWPP, summarizing mitigation projects initiated and completed, progress for ongoing actions, funds received, funds expended and in-kind services utilized. Recommendations will be incorporated into the CWPP Action Plan.

DEFINITIONS

Community-At-Risk – A group of two or more structures whose proximity to forested or wildland area places homes and residents at some degree of risk.

Critical Facilities – Buildings, structures or other parts of the community infrastructure that require special protection from an approaching wildfire.

CWPP – The Community Wildfire Protection Plan

Defensible Space – The immediate landscaped area around a structure (usually a minimum of 30 ft.) kept “lean, clean and green” to prevent an approaching wildfire from igniting the structure.

Dry Hydrant - A non-pressurized pipe system permanently installed in existing lakes, ponds and streams that provides a suction supply of water to a fire department tank truck.

FEMA – The Federal Emergency Management Agency whose mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Firewise Communities Program – A national initiative whose purpose is the reduction of structural losses from wildland fires.

Firewise Communities/USA – A national recognition program for communities that take action to protect themselves from wildland fire.

Fuels – All combustible materials within the wildland/urban interface or intermix including, but not limited to, vegetation and structures.

Fuel Modification – Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

Hazard & Wildfire Risk Assessment – An evaluation to determine an area’s (community’s) potential to be impacted by an approaching wildland fire.

Healthy Forests Initiative - Launched in August 2002 by President Bush (following passage of the Healthy Forests Restoration Act by Congress) with the intent to reduce the risks severe wildfires pose to people, communities, and the environment.

Home Ignition Zone (Structure Ignition Zone) - Treatment area for wildfire protection. The “zone” includes the structure(s) and their immediate surroundings from 0-200 ft.

Mitigation – An action that moderates the severity of a fire hazard or risk.

National Fire Plan – *National initiative, passed by Congress in the year 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future.*

National Fire Protection Association (NFPA) - *An international nonprofit organization established in 1896, whose mission is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.*

Southern Group of State Foresters – *Organization whose members are the agency heads of the forestry agencies of the 13 southern states, Puerto Rico and the Virgin Islands.*

Stakeholders– *Individuals, groups, organizations, businesses or others who have an interest in wildland fire protection and may wish to review and/or contribute to the CWPP content.*

Wildfire or Wildland Fire – *An unplanned and uncontrolled fire spreading through vegetative fuels.*

Wildland/Urban Interface - *The presence of structures in locations in which the authority having jurisdiction (AHJ) determines that topographical features, vegetation, fuel types, local weather conditions and prevailing winds result in the potential for ignition of the structures within the area from flames and firebrands from a wildland fire (NFPA 1144, 2008 edition).*

SOURCES OF INFORMATION

Publications/ Brochures/Websites

- FIREWISE materials are available for the cost of shipping only and can be ordered at www.firewise.org
- Examples of successful wildfire mitigation programs can be viewed at the website for National Database of State and Local wildfire Hazard Mitigation Programs sponsored by the U.S. Forest Service and the Southern Group of State Foresters www.wildfireprograms.com
- Information about a variety of interface issues (including wildfire) can be found at the USFS website for Interface South: www.interfacesouth.org
- Information on codes and standards for emergency services including wildfire can be found at www.nfpa.org
- Information on FEMA Assistance to Firefighters Grants (AFG) can be found at www.firegrantsupport.com
- Information on National Fire Plan grants can be found at <http://www.federalgrantswire.com/national-fire-plan--rural-fire-assistance.html>

ATTACHMENTS

1. EXAMPLE: Wildfire Hazard Assessment Scoresheet

Appendix D

COOK 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
Hurricanes/Tropical Storms	7	68	3	7	7	9.71	10.29	0.3	0.35	0.14
Tornadoes	13	68	4	5	13	5.23	19.12	0.4	0.25	0.26
Floods	5	68	3	5	5	13.60	7.35	0.3	0.25	0.1
Windstorms/Hailstorms/Lightning	72	68	35	47	70	0.94	105.88	3.5	2.35	1.4
Wildfires	2864	50	357	1177	2864	0.02	5728.00	35.7	58.85	57.28
Extreme Heat	35	11	34	35	35	0.31	318.18	3.4	1.75	0.7
Drought	25	68	24	25	25	2.72	36.76	2.4	1.25	0.5
Hazardous Materials Release	3	17	1	3	3	5.67	17.65	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 accuracy 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.

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

- 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 _____ ___ ___

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

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

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 <ol style="list-style-type: none"> 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. _____ 	<ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 1. Go to the http://geohazards.cr.usgs.gov Website. 2. Locate your planning area on the map. 3. Determine your PGA. _____ 	<ol style="list-style-type: none"> 1. Record your PGA: _____ 2. If you have more than one PGA print, download or order your PGA map.
Expansive Soils	
Extreme Heat	
Flood <ol style="list-style-type: none"> 1. Get a copy of your FIRM. _____ 2. Verify the FIRM is up-to-date and complete. _____ 	<ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 1. Map location of previous landslides. _____ 2. Map the topography. _____ 3. Map the geology. _____ 4. Identify thee high-hazard areas on your map. _____ 	<ol style="list-style-type: none"> 1. Mark the areas susceptible to landslides onto your base map.
Severe Winter Storm	
Tornado <ol style="list-style-type: none"> 1. Find your design wind speed. _____ 	<ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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. _____ 	<ol style="list-style-type: none"> 1. Draw the boundaries of your wildfire hazard areas onto your base map.
Other <ol style="list-style-type: none"> 1. Map the hazard. _____ 	<ol style="list-style-type: none"> 1. Record hazard event info on your base map.

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: Reduce the risks and vulnerability of citizens and critical facilities to damage resulting from hurricanes.

Objective 1: Protect the lives, health, and property of residents from the force of hurricanes.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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: Educate homeowners and builders on individual safe rooms.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 2: Distribute programs on personal emergency preparedness, e.g., emergency survival kits.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 3: Encourage the American Red Cross to teach the Citizen's Disaster Course on a frequent basis.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 4: Encourage businesses to develop emergency plans	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 5: Increase public awareness of the Early Warning Communication/Notifi cation System, NOAA weather radios, and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings, and providing bulletins to local churches and the schools.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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 6: Trim tree lines around roads, homes, utilities and businesses.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 7: Seek funding to retrofit government buildings and schools to reinforce windows, roofs and doors.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 8: Initiate an inspection program at critical facilities to identify construction weaknesses subject to high wind damage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 9: Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 10: Acquire and install auxiliary, mobile, and/or fixed generators (including transfer switches and soft start systems) where needed, including all designated evacuation and emergency shelters, community water systems, and critical facilities.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E								
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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 11: Upgrade communication capabilities among first responders, law enforcement, and other critical personnel and departments.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 12: Acquire and install weather alert sirens or equivalent early warning infrastructure.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: Reduce the risks and vulnerability of citizens and critical facilities to damage resulting from tornadoes.

Objective 1: Protect the lives, health, and property of residents from the force of tornadoes.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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: Educate homeowners and builders on individual safe rooms.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 2: Distribute programs on personal emergency preparedness, e.g., emergency survival kits.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 3: Encourage the American Red Cross to teach the Citizen's Disaster Course on a frequent basis.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 4: Encourage businesses to develop emergency plans	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 5: Increase public awareness of the Early Warning Communication/Notifi- cation System, NOAA weather radios, and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings, and providing bulletins to local churches and the schools.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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 6: Trim tree lines around roads, homes, utilities and businesses.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 7: Seek funding to retrofit government buildings and schools to reinforce windows, roofs and doors.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 8: Initiate an inspection program at critical facilities to identify construction weaknesses subject to high wind damage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 9: Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: Minimize losses to existing and future structures, especially community critical facilities, due to flooding caused by excessive rainfall.

Objective 1. Improve capacity of the Adel, Lenox, Cecil, Sparks, and Cook County existing drainage infrastructure to handle excessive rainfall.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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: Seek funding to develop a countywide Master Drainage Plan.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 2: Determine, in consultation with engineers, schedule for phased implementation of the countywide Master Drainage Plan.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 3: Seek funding for phased implementation of the countywide Master Drainage Plan.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 4: Continue to review and update storm water run-off, watershed plans and effectiveness of present drainage ditching, culverts, storm water and sanitation network.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 5: Review existing regulations to ensure adequacy in reducing the amount of future development in identified flood hazard areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	+

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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 6: Update and improve floodplain maps.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	+
Action Step 7: Distribute letters to all property owners in the county regarding potential flood hazards as required for participation in the Community Rating System (CRS).	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 8: Review all capital improvements plans to ensure that infrastructure improvements are not directed towards flood hazard areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	+
Action Step 9: Work with Georgia Department of Transportation to identify areas of frequent roadway flooding and develop mitigation strategies.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A
Action Step 10: Continue to enforce floodplain ordinances.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	+
Action Step 11: Review and amend the Adel, Lenox, Cecil, Sparks, and Cook County Building Codes as required due to mandatory changes in the National Flood Insurance Program.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	+

STAPLEE Criteria	S		T			A			P			L			E								
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Action Step 12: Collect updated information on the number and location of all repetitive loss structures throughout the county.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	+	+
Action Step 13: Seek funding to buy out all structures located in highest flood prone areas.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	+	+

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.

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: Minimize losses to existing and future structures, especially community critical facilities, due to flooding caused by excessive rainfall.

Objective 2: Protect and conserve flood-prone areas for community greenspace development.

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: Reduce the risks and vulnerability of citizens and critical facilities to damage resulting from windstorms/hailstorms/lightning.

Objective 1: Protect the lives, health, and property of residents from the force of windstorms/hailstorms/lightning.

STAPLEE Criteria	S		T			A			P			L			E								
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
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Action Step 1: Educate homeowners and builders on individual safe rooms.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 2: Distribute programs on personal emergency preparedness, e.g., emergency survival kits.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 3: Encourage the American Red Cross to teach the Citizen's Disaster Course on a frequent basis.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 4: Encourage businesses to develop emergency plans	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 5: Increase public awareness of the Early Warning Communication/Notification System, NOAA weather radios, and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings, and providing bulletins to local churches and the schools.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E				E				
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Action Step 6: Trim tree lines around roads, homes, utilities and businesses.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 7: Seek funding to retrofit government buildings and schools to reinforce windows, roofs and doors.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 8: Initiate an inspection program at critical facilities to identify construction weaknesses subject to high wind damage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 9: Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 10: Install lightning warning and protection equipment at outdoor recreational facilities countywide.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Worksheet #4 Evaluate Alternative Mitigation Actions

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Goal 1: Prevent damage resulting from wildfires in Cook County, reduce the threat of wildfires, and protect the life and property of residents.

Objective 1: Prevent destruction of forests and structures.

STAPLEE Criteria → for Alternative Actions ↓	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
	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: Improve communication with Georgia Environmental Protection Division in regard to illegal burning issues	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A
Action Step 2: Acquire all terrain vehicles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 3: Seek state and federal grants to acquire better fire equipment.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 4: Improve wildland fire training at the local fire department level.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E				E				
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Action Step 5: Improve public awareness of wildfire fighting techniques and the importance of fire buffers around the home by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 6: Support Georgia Forestry Public Outreach efforts.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 7: Enforce building, fire and safety codes.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 8: Develop an ordinance to enforce burn permits at the local level.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A
Action Step 9: Investigate methods to provide landowners an incentive to prescribe burn timberland thereby minimizing heavy fuel loads.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

STAPLEE Criteria	S		T			A			P			L			E								
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Action Step 10: Create more fire breaks.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 11: Build roads into areas that have no other access.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 12: Educate public and provide information on nighttime burning and smoke management.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal 1: Prevent damage resulting from wildfires in Cook County, reduce the threat of wildfires, and protect the life and property of residents.

Objective 2: Reduce threat of wildfire occurring during periods of drought.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(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 13: Acquire a new fire engine for the Town of Lenox.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 14: Become a designated "Firewise Community"	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 15: Install more dry hydrants.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 16: Seek funding to acquire more fire tankers (2000 to 3000 gallons) for local fire departments.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 17: Increase public awareness of wildfire dangers around the home and community, such as lighted matches, cigarettes, trash, and the process for obtaining burn permits by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 18: Construct a new fire station for the City of Adel.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal 1: Prevent heat-related injuries and deaths.

Objective 1: Provide potential heat-stress victims with emergency shelter.

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Action Step 1: Establish operating policies and procedures, identify managing entity, and determine needed equipment and supplies.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step 2: The Director, Cook County EMA, request assistance from the National Weather Service, using National Weather Service historical information and computer programming, to determine the number of “Heat Stress” days per year in Cook County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal 1: Reduce the economic impact of drought on the Cook County economy.

Objective 1: Minimize the economic impact of drought on agriculture.

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Action Step 1: Promote more efficient use of surface irrigation.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 2: Promote construction of farm ponds for irrigation.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 3: Identify funds to repair existing ponds.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 4: Promote the drilling of 4-inch wells to recharge farm ponds.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 5: Implement a support system through FFA and USDA.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A

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Goal 2: Educate the citizenry about the effects of drought on public health and safety, economic activity, and environmental resources.

Objective 1: Manage available water resources.

STAPLEE Criteria	S		T			A			P			L			E				E				
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Action Step 6: Heighten public awareness on actions citizens can take to conserve water.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 7: Utilize the media for the distribution and publication of drought information.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 8: Update community websites to provide drought related information that is readily accessible.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 9: Target conservation alerts to individual households through an Early Warning Communication/Notification bulletin board.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 10: Ensure the reasonable allocation of supply during drought events through a coordinated and cooperative inter-agency response.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step 11: Ensure the reasonable allocation of supply during drought events through a coordinated and cooperative inter-agency response.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Appendix E

FAMILY CAMP

Upcoming events at Reed Bingham State Park

Family Camp

Tuesday, July 25, 2017 9 a.m. to 3 p.m.

Looking for something to do with the family over summer break? Join us for quality family fun with a camp full of games and activities designed to bring the family closer together. The camp will end with a Family Challenge where you use skills learned to compete against other families. Awards will be given. All ages welcome. \$15-\$30 plus \$5 parking. 229-896-3551.

Shells and Scales

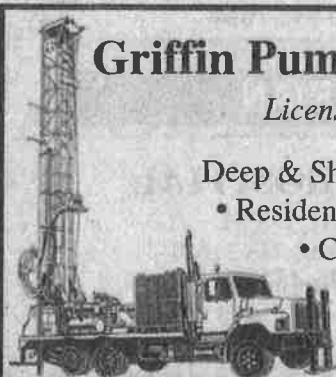
Friday, Jul 28, 2017 2:30 p.m.

Meet a Naturalist at the stage to learn about some of our native wildlife. Enjoy a hands-on experience and a chance to get up close and personal with some of the reptiles found in our area. Donations are welcome. \$5 parking. 229-896-3551.

Introduction to Paddling

Saturday, Aug. 5, 2017 10:30 a.m.

Have you ever wanted to learn the basics of paddling? We are holding a class to teach you about the equipment and how to properly use it. Pre-registration is required. \$10 plus \$5 parking. 229-896-3551.



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229-237-5898

2017 President's List

Georgia Southern University recently recognized more than 1,350 students for excellence in academics on the Spring 2017 semester President's List. To be eligible for the President's List, a student must have at least a 4.0 grade point average and carry a minimum of 12 hours for the semester.

Catherine Broyles of Hahira

Lindsey Heard of Adel
Georgia Southern Univer-

sity, a public Carnegie Doctoral/Research University founded in 1906, offers 118 degree programs serving 20,673 students. Through eight colleges, the University offers bachelor's, master's and doctoral degree programs built on more than a century of academic achievement. Georgia Southern is recognized for its student-centered and hands-on approach to education. Visit GeorgiaSouthern.edu.

GSU announces Spring 2017 Dean's List

Georgia Southern University recently recognized more than 2,600 students for excellence in academics on the Spring 2017 semester Dean's List. To be eligible for the Dean's List, a student must have at least a 3.5 grade point average and carry a minimum of 12

hours for the semester.

Local students are: Grant Allen of Hahira, Rebecca Folsom of Adel, Karla Garcia of Hahira, Jessica Griffith of Ray City, Christian Lindsey of Adel, Joseph Moreno of Hahira, Jylen Southerland of Adel, and Emily Wilkerson of Lenox.

Cook County EMA

The Cook 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 Adel, Cecil, Lenox, and Sparks, Fire/EMS, Sheriff's Department, Police Departments, Health Department, Code Enforcement, Public Works, Forestry, School Board, and hopefully...you.

The meeting will be for 1 hour on **Tuesday, August 15, 2017 at 2:00 p.m.** at the 911 Center, 3295 County Farm Rd., Adel, GA.

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Sept. 13 by the Hahira Department and charged with driving while license suspended, speeding, possession of marijuana.

Teon Byron, 22, was taken into custody Sept. 14 by the Cook Sheriff's Office as a under (judge's order). W. Sculley, 29, of Fla., was arrested by the Adel Police Department and charged with license suspension, speeding.

Alternative "fast" food.
Out Buffet
\$4.29 lb.

11am-2pm
 9 Mon-Fri



and charged with possession of marijuana, possession of a Schedule II controlled substance, possession of tools for the commission of a crime, probation violation, and obstruction of a law enforcement officer.

• Isaiah Charles Kinsey, 33, of Adel was arrested Sept. 14

ment and charged with shoplifting.
• Herbert Lee Rodriguez, 41, of Philadelphia, Pa., was arrested Sept. 14 by the Hahira Police Department and charged with driving while license suspended.

See ARREST, Page 10-B

PUBLIC HEARING NOTICE HAZARD MITIGATION PLAN

The Cook County Emergency Management Agency (EMA), in cooperation with the Southern Georgia Regional Commission (SGRC), invites the public to attend a Joint Public Hearing to review the Cook County and Cities of Adel, Cecil, Lenox and Sparks 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 on Monday, October 15, 2018 at 6:00 p.m. at County Administration Building, 1200 S. Hutchinson Ave., Adel, Georgia 31620.

Comments are being accepted by email at lhylton@sgrc.us, by fax at 229-333-5312, or by mailing them to Cook 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 Loretta Hylton, Senior Planner at 229-333-5277.

In accordance with the provisions of the Americans with Disabilities Act of 1990, any disabled person planning to attend the Public Hearing may contact the County Clerk 24 hours in advance of the meeting at 229.896.2266 and indicate their time of arrival in order to have a staff member assist them to the meeting room.

*Cook County is an Equal Opportunity Employer
and Title VI Compliant*

Southern Georgia Regional Commission
Cook County and the Cities of Adel, Cecil, Lenox, and Sparks
Hazard Mitigation Plan Update – Kick-off meeting
Date: August 15, 2017

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Email</u>
Lamar Ray	Cook EMA	Director	lray.cook911@yahoo.com
Cecilia Rowe	Adel P.D.	Mayor	crowe64@yahoo.com
Amy Hughes	Cook County	Adm	cookgov@windstream.net
Bob Myers	Sparks PD	Chief	sparkspd@hotmail.com
Sonya Philpot	Sparks	City Clerk	sbphilpot@bellsouth.net
Jess Permenter	Cook County	Buildg + Zoning Admin.	jpermenter@windstream.net
Chris Yawa	City of Lenox	PW Director	lenoxpublicworks@gmail.com
Shane Daughtry	City of Lenox	Chief	lenoxpd@hotmail.com
HENRY BAKER	CITY OF LENOX	MAYOR	hbakerjr@gmail.com
Teresa Barber	" "	City Clerk	cityoflenox@gmail.com
Dwight E. Purvis	CO Co Comm.	Comm.	Hayman4750@yahoo.com
Denny Roberts	city of Adel Gas	Superintendent	d.roberts@adel@comcast.net
Jeff Baker	City of Adel Elec	Forman	JBaker@southlink.us
Rebecca Augood	Cook Co Health Dept	County Nurse Manager	Rebecca.Augood@ph.ga.gov

Southern Georgia Regional Commission
Cook County and the Cities of Adel, Cecil, Lenox, and Sparks
Hazard Mitigation Plan Update – Workshop #1
Date: September 19, 2017

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Email</u>
Teresa Barber	City of Lenox	City Clerk	cityoflenox@gmail.com
Sonya Philpot	City of Sparks	City Clerk	cityofsparks@bellsouth.net
Audie Rowe	City of Adel	Police	rrowe64@yahoo.com
Don Gandy	City of Adel	Animal Control	rrowe64@yahoo.com
Raheem Pezzy	City of Adel	Police	raheamp1995@gmail.com
Bob Myers	Sparks Police Dept	Chief	sparkspd@hotmail.com
Haven Craft	South Health District	EP Director	haven.craft@dph.ga.gov
Marsha DeFelice	South Health District	EP Training Coord.	marsha.defelice@dph.ga.gov
Lamar Ray	Cook Co. 911/EMT	Director	lray.cook911@yahoo.com
Debra Robinson	Cook County Commissioners	Commissioner	ddr065@hotmail.com
FAHLE HUGHES	Cook County Commissioners	COUNTY ADM	cookgov@windstream.net
Rene B. Cowart	City of Adel Elec.	Electrical Supt	rbcowart@southlink.us
Buddy Duke	City of Adel City	Mayor	b.duke@mchs.i.com
Rebecca Allgood	Cook Co. Health Dept.	County Nurse Manager	Rebecca.Allgood@dph.ga.gov

**Southern Georgia Regional Commission
Cook County and the Cities of Adel, Cecil, Lenox, and Sparks
Hazard Mitigation Plan Update – Workshop #2
Date: October 17, 2017**

Name	Organization	Title	Email
Lamar Ray	Cook EMA	Director	lray.cook911@yahoo.com
Rebecca Augood	Cook Co. Health Dept	County Nurse Manager	Rebecca.Augood@danga.gov
Laura Lewis	Cook 911	Dispatcher	lawsfam4@yahoo.com
Bob Myers	Sparks Police Dept	Chief	sparks pd@hotmail.com
Thomas Rice	City of Adel	Supt	trice@southlink.us
Jeff Boker	City of Adel Elec	Supt	
Audie Rowe	Cook Co. Comm	Comm.	rowe64@yahoo.com
Thomas Morris	Adel Police Department	Officer	thomas.morris32@aol.com
Don Gandy	Adel Animal Control	Animal Control	
Karetha Hyatt	SGRC	Planner	

Southern Georgia Regional Commission
Cook County and the Cities of Adel, Cecil, Lenox, and Sparks
Hazard Mitigation Plan Update – Workshop #3
Date: November 14, 2017

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Email</u>
Bob Myers	Sparks Police Dept	Chief	sparks.pd@hotmail.com
Teresa Barber	City of Lenox	City Clerk	cityoflenox@gmail.com
Chris Yawn	City of Lenox	PW Director	lenoxpublicworks@gmail.com
Don Gardy	ADEL Police Dept	officer	
Nathan Barnes	GA DPH	Environmental	nathaniel.barnes@dph.ga.gov
Rebecca Allgood	Cook Co HD	County nurse manager	Rebecca.Allgood@dph.ga.gov
Rhonda Rowe	City of Adel	City Clerk	rrowe@southlink.us
Thomas Rice	CITY OF Adel	Public Works	trice@southlink.us
Jess Permenter	Cook County Comm.	Building + Zoning admin.	jpermenter@windstream.net
Rene Cowart	City of Adel Elec.	Elec. Supt.	rbcowart@southlink.us
Travis Christie	City of Ade Fire	Firefighter	AFD31620@yahoo.com
Audie Rowe	Adel Police Dept	MAjor	rrowe64@yahoo.com
Lamar Ray	Cook EMA	Director	lray.cook@llcyc.com
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us

Southern Georgia Regional Commission
Cook County and the Cities of Adel, Cecil, Lenox, and Sparks
Hazard Mitigation Plan Update – Workshop #4
Date: January 9, 2018

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Email</u>
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Teresa Barber	City of Lenox	City Clerk	cityoflenox@gmail.com
Thomas Rice	CITY OF Adel	Supt	Truce@southlink.us
Rhonda Rowe	City of Adel	City Clerk	rrowe@southlink.us
ADDIE ROWE	City of ADEL	Police Major	rrowe64@yahoo.com
Raheem Perry	City of Adel	Police Officer	raheemp1995@gmail.com
Lamar Ray	Cook Co EMA	Director	lray.cook911@yahoo.com
Rebecca Allgood	Cook Co. Health Dept	County Nurse Manager	Rebecca.Allgood@dph.ga.gov
Naren Craft	South Health District	EP Director	Naren.Craft@dph.ga.gov

**RESOLUTION FOR ADOPTION OF
COOK 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, Cook County and the Cities of Adel, Cecil, Lennox and Sparks adopted the previous Cook 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 February 18, 2019 and the new Hazard Mitigation Plan Update will become effective on February 18, 2019; and

WHEREAS, the Cook County Emergency Management Agency, with the assistance of representatives from various other departments within Cook County and the Cities of Adel, Cecil, Lennox and Sparks, 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 "Cook County and the Cities of Adel, Cecil, Lennox and Sparks 2018-2023 Hazard Mitigation Plan Update" (referred to hereafter as "the Plan"); and

WHEREAS, the Plan applies to unincorporated Cook County and the Cities of Adel, Cecil, Lennox and Sparks; and

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

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

SO RESOLVED this 15th day of October, 2018.



By [Signature]
County Commission Chair

Attest [Signature]

Res. #18-14

**A RESOLUTION OF THE
CITY OF ADEL CITY COUNCIL
PURSUANT TO THE DISASTER MITIGATION ACT OF 2000
AUTHORIZING ADOPTION OF THE
COOK COUNTY PRE-DISASTER HAZARD MITIGATION PLAN**

WHEREAS, Cook 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, Cook 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 ADEL COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 5th DAY OF Nov, 2018


Signed: Buddy Duke, Mayor

(City Seal)


Attest: Rhonda Rowe, City Clerk

**A RESOLUTION OF THE
CITY OF CECIL CITY COUNCIL
PURSUANT TO THE DISASTER MITIGATION ACT OF 2000
AUTHORIZING ADOPTION OF THE
COOK COUNTY PRE-DISASTER HAZARD MITIGATION PLAN**

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

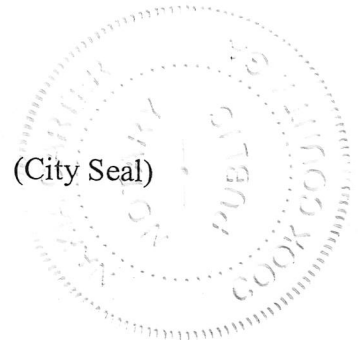
WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Cook 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 CECIL COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 13 DAY OF June, 2019

James M. Spencer Sr.
Signed: James M. Spencer, Mayor



(City Seal)

Nakia Carter
Attest: ~~Stephanie Boyd~~, City Clerk
Nakia Carter

**A RESOLUTION OF THE
CITY OF LENOX CITY COUNCIL
PURSUANT TO THE DISASTER MITIGATION ACT OF 2000
AUTHORIZING ADOPTION OF THE
COOK COUNTY PRE-DISASTER HAZARD MITIGATION PLAN**

WHEREAS, Cook 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, Cook 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 LENOX COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 5th DAY OF Nov, 2018


Signed: Henry Baker, Mayor

(City Seal)


Attest: Teresa Barber, City Clerk

**A RESOLUTION OF THE
CITY OF SPARKS CITY COUNCIL
PURSUANT TO THE DISASTER MITIGATION ACT OF 2000
AUTHORIZING ADOPTION OF THE
COOK COUNTY PRE-DISASTER HAZARD MITIGATION PLAN**

WHEREAS, Cook 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, Cook 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 SPARKS COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 10 DAY OF December, 2018


Signed: Earl Jackson, Mayor

(City Seal)


Attest: Sonya Philpot, City Clerk



Appendix F

Storm Events Database

Search Results for Cook County, Georgia

Event Types: [Hurricane \(Typhoon\)](#), [Tropical Storm](#)

Cook county contains the following zones:

'Cook'

6 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	6
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:	5
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: ▼

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>I.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								0	0	380.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/05/2004	16:00	EST	Tropical Storm		0	0	100.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/26/2004	18:00	EST	Tropical Storm		0	0	50.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	07/09/2005	18:00	EST	Hurricane (typhoon)		0	0	100.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	06/12/2006	12:00	EST	Tropical Storm		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	08/22/2008	12:00	EST-5	Tropical Storm		0	0	30.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/02/2016	00:00	EST-5	Tropical Storm		0	0	100.00K	0.00K
Totals:								0	0	380.00K	0.00K

Storm Events Database

Search Results for Cook County, Georgia

Event Types: **Tornado**

13 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	13
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	2
Number of Days with Event and Property Damage:	12
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:

Sort By:

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								7	46	1.712M	0.00K
COOK CO.	COOK CO.	GA	06/22/1970	01:15	CST	Tornado	F2	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	02/08/1971	05:40	CST	Tornado	F1	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	06/27/1972	14:30	CST	Tornado	F1	0	1	25.00K	0.00K
COOK CO.	COOK CO.	GA	04/25/1973	17:30	CST	Tornado	F1	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	04/05/1977	01:45	CST	Tornado	F1	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	04/18/1978	11:35	CST	Tornado	F1	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	03/30/1989	08:20	EST	Tornado	F1	0	0	25.00K	0.00K
COOK CO.	COOK CO.	GA	04/30/1991	16:15	EST	Tornado	F0	0	0	2.50K	0.00K
LENOX	COOK CO.	GA	02/14/2000	02:30	EST	Tornado	F0	0	0	0.00K	0.00K
STAUNTON	COOK CO.	GA	08/23/2008	15:50	EST-5	Tornado	EF1	0	0	25.00K	0.00K
FLAT FORD	COOK CO.	GA	06/26/2016	12:45	EST-5	Tornado	EF0	0	0	5.00K	0.00K
GREGGS	COOK CO.	GA	01/22/2017	03:35	EST-5	Tornado	EF3	7	45	1.500M	0.00K
MASSEE	COOK CO.	GA	05/24/2017	15:48	EST-5	Tornado	EF0	0	0	5.00K	0.00K
Totals:								7	46	1.712M	0.00K

Storm Events Database

Event Details:

Event	Tornado
-- Scale	EF3
-- Length	10.9 Miles
-- Width	700 Yards
State	GEORGIA
County/Area	COOK
WFO	TAE
Report Source	NWS Storm Survey
NCEI Data Source	CSV
Begin Date	2017-01-22 03:35:00.0 EST-5
Begin Location	2S GREGGS
Begin Lat/Lon	31.0351/-83.4852
End Date	2017-01-22 03:49:00.0 EST-5
End Location	6SSE MASSEE
End Lat/Lon	31.1092/-83.3226
Deaths Direct/Indirect	7/0 (fatality details below, when available...)
Injuries Direct/Indirect	45/0
Property Damage	1.50M
Crop Damage	0.00K
Episode Narrative	<p>A multi-day severe weather event struck the southeast January 21-22, 2017 with three rounds of severe weather moving through the area. The first round of severe weather started during the mid-morning hours on Saturday, January 21, 2017 as a squall line pushed into southeast Alabama and the Florida panhandle. As it pushed eastward nine warnings were issued with a total of 18 damaging wind reports (trees and power lines downed) related to these storms. After a brief lull during Saturday evening as the aforementioned squall line washed out near the Gulf Coast, strong southerly flow returned late Saturday night as a warm front pushed northward across the Florida Big Bend and southern Georgia. Initially with this late Saturday night to early Sunday morning event, a strong supercell moved across southern Georgia producing a tornado that moved across Thomas and northern Brooks Counties. This was the first tornado across the area with this multi- day event. From the same supercell that produced the tornado in Thomas and northern Brooks Counties, another tornado developed that tracked across Brooks, Berrien and Cook Counties and this tornado resulted in 11 fatalities. This overnight into early Sunday morning event produced one more tornado, an EF-1 that struck Lowndes County.</p> <p>A final round of severe weather moved through Sunday afternoon as a warm front continued to push northward into southeast Alabama and southern Georgia while the main low and trailing cold front pushed eastward across the Florida panhandle and offshore regions. This afternoon round of supercells first produced a tornado in Henry County, AL. An hour and a half after the Henry County tornado, two more tornadoes developed, an EF-2 that struck Clay, Randolph and Calhoun Counties (Georgia) and an EF-1 tornado that hit Franklin County, FL. After this, a long tracked tornado (track length of more than 70 miles) moved across Albany (Dougherty County) and into Worth and Turner Counties, causing extensive damage and five fatalities.</p> <p>Overall this multi-day event resulted in seven tornadoes, 16 deaths and numerous injuries. Three days of damage surveys were conducted to rate the tornadoes on the Enhanced Fujita scale.</p>
Event Narrative	<p>This is a continuation of the northeast Brooks county tornado. The tornado then continued into Cook County. Still at EF-3 strength, it swept about 35 manufactured homes into a pile of rubble at the far end of the Sunshine Acres mobile home park. Seven people lost their lives. The tornado then went on to destroy about two thirds of a brick home on Val Del Road, collapsing in two walls and removing most of the second story. Another home built of concrete blocks was</p>

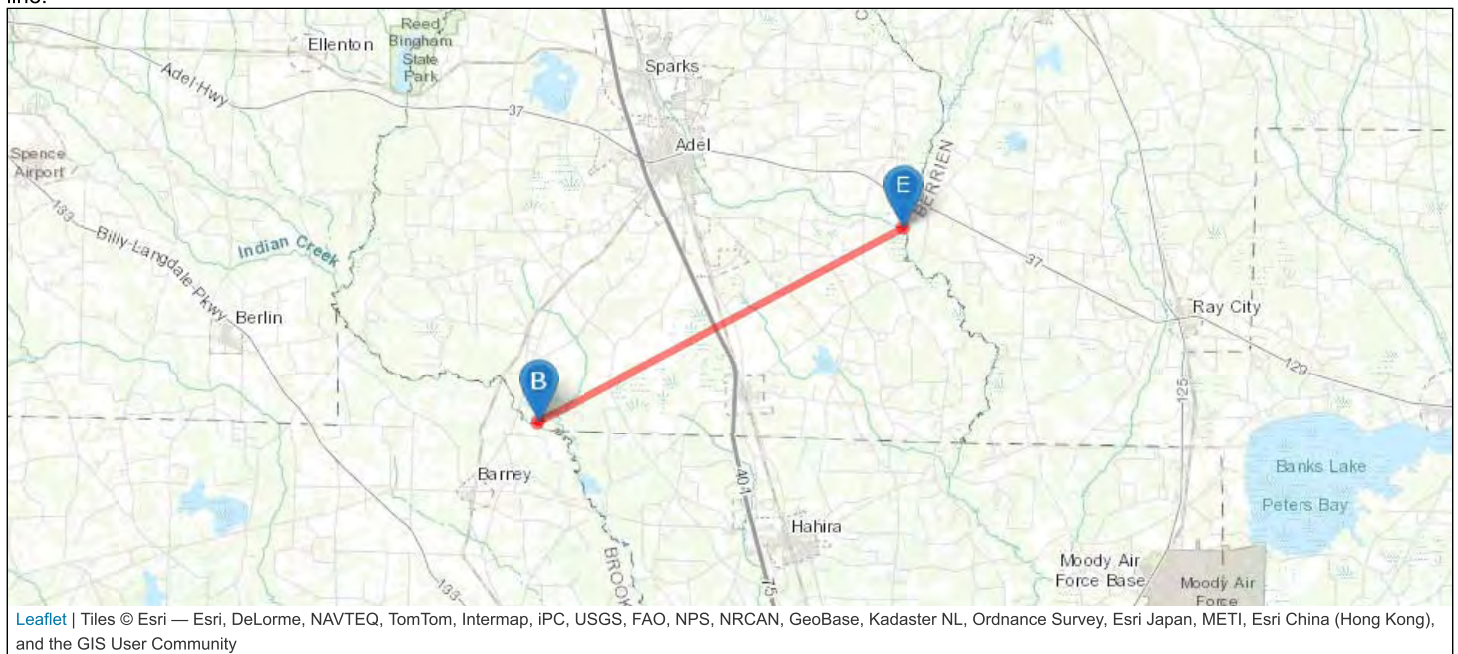
destroyed. A nearby farm had several concrete anchors for a large metal structure pulled from the ground. Max winds were estimated near 140 mph. Damage cost was estimated.

Event Fatality Details:

Type	Age	Gender	Fatality Location
Death (Direct)	18	Female	Mobile/Trailer Home
Death (Direct)	33	Female	Mobile/Trailer Home
Death (Direct)	62	Female	Mobile/Trailer Home
Death (Direct)	38	Female	Mobile/Trailer Home
Death (Direct)	41	Female	Mobile/Trailer Home
Death (Direct)	41	Female	Mobile/Trailer Home
Death (Direct)	36	Male	Mobile/Trailer Home

Event Map:

Note: The tornado track is approximate based on the beginning (B) and ending (E) locations. The actual tornado path may differ from a straight line.



All events for this episode:

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								16	137	314.214M	0.00K
DAWSON	TERRELL CO.	GA	01/21/2017	12:05	EST-5	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
BRONWOOD	TERRELL CO.	GA	01/21/2017	12:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CHICKASAWHATCHEE	TERRELL CO.	GA	01/21/2017	12:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
BYNE CROSSROADS	LEE CO.	GA	01/21/2017	12:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
SCRUTCHINS	LEE CO.	GA	01/21/2017	12:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ACREE	DOUGHERTY CO.	GA	01/21/2017	12:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ALBANY	DOUGHERTY CO.	GA	01/21/2017	12:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DUCKER	DOUGHERTY CO.	GA	01/21/2017	12:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
(ABY)SOUTHWEST GA RGNL ARPT	DOUGHERTY CO.	GA	01/21/2017	12:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	40.00K	0.00K

BACONTON	MITCHELL CO.	GA	01/21/2017	12:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LESTER	MITCHELL CO.	GA	01/21/2017	13:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
RED ROCK	WORTH CO.	GA	01/21/2017	13:00	EST-5	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
DOLES	WORTH CO.	GA	01/21/2017	13:02	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SOUTH ALBANY	DOUGHERTY CO.	GA	01/21/2017	13:02	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ASHBURN	TURNER CO.	GA	01/21/2017	13:08	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FITZGERALD	BEN HILL CO.	GA	01/21/2017	13:30	EST-5	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
ALFORDS	WORTH CO.	GA	01/21/2017	15:30	EST-5	Flood		0	0	20.00K	0.00K
ALFORDS	WORTH CO.	GA	01/21/2017	23:15	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
POULAN	WORTH CO.	GA	01/21/2017	23:31	EST-5	Hail	1.50 in.	0	0	0.00K	0.00K
WATERLOO	IRWIN CO.	GA	01/21/2017	23:55	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
EDISON	CALHOUN CO.	GA	01/22/2017	00:00	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
EDISON	CALHOUN CO.	GA	01/22/2017	00:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEARY	CALHOUN CO.	GA	01/22/2017	00:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ALBANY	DOUGHERTY CO.	GA	01/22/2017	00:45	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
ALBANY	DOUGHERTY CO.	GA	01/22/2017	00:45	EST-5	Flash Flood		0	0	0.00K	0.00K
ASHBURN	TURNER CO.	GA	01/22/2017	01:07	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
ARLINGTON	CALHOUN CO.	GA	01/22/2017	01:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ALBANY	DOUGHERTY CO.	GA	01/22/2017	02:17	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
SYLVESTER	WORTH CO.	GA	01/22/2017	02:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	100.00K	0.00K
PASCO	THOMAS CO.	GA	01/22/2017	02:56	EST-5	Tornado	EF2	0	3	250.00K	0.00K
PAVO	BROOKS CO.	GA	01/22/2017	03:15	EST-5	Tornado	EF1	0	0	20.00K	0.00K
SAND HILL	BROOKS CO.	GA	01/22/2017	03:29	EST-5	Tornado	EF3	2	0	500.00K	0.00K
GREGGS	COOK CO.	GA	01/22/2017	03:35	EST-5	Tornado	EF3	7	45	1.500M	0.00K
NEW LOIS	BERRIEN CO.	GA	01/22/2017	03:49	EST-5	Tornado	EF3	2	0	500.00K	0.00K
SYLVESTER	WORTH CO.	GA	01/22/2017	04:28	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COOLIDGE	THOMAS CO.	GA	01/22/2017	06:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
I-75 AT EXIT 22	LOWNDES CO.	GA	01/22/2017	07:00	EST-5	Tornado	EF1	0	0	250.00K	0.00K
MORVEN	BROOKS CO.	GA	01/22/2017	07:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
VALDOSTA	LOWNDES CO.	GA	01/22/2017	07:20	EST-5	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
I-75 AT EXIT 22	LOWNDES CO.	GA	01/22/2017	07:25	EST-5	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PASCO	THOMAS CO.	GA	01/22/2017	07:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
BOSTON	THOMAS CO.	GA	01/22/2017	07:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LAKELAND	LANIER CO.	GA	01/22/2017	08:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

RENO	GRADY CO.	GA	01/22/2017	09:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
I-75 AT EXIT 5	LOWNDES CO.	GA	01/22/2017	10:00	EST-5	Flood		0	0	0.00K	0.00K
HAHIRA	LOWNDES CO.	GA	01/22/2017	11:35	EST-5	Thunderstorm Wind	65 kts. EG	0	0	50.00K	0.00K
SAND HILL	BROOKS CO.	GA	01/22/2017	12:00	EST-5	Thunderstorm Wind	65 kts. EG	0	0	50.00K	0.00K
FORT GAINES	CLAY CO.	GA	01/22/2017	14:24	EST-5	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
BELLVILLE	CLAY CO.	GA	01/22/2017	14:38	EST-5	Tornado	EF2	0	1	250.00K	0.00K
BLAKELY	EARLY CO.	GA	01/22/2017	14:40	EST-5	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
MOYE	CALHOUN CO.	GA	01/22/2017	14:41	EST-5	Tornado	EF2	0	0	200.00K	0.00K
CARNEGIE	RANDOLPH CO.	GA	01/22/2017	14:45	EST-5	Tornado	EF2	0	0	200.00K	0.00K
PRETORIA	DOUGHERTY CO.	GA	01/22/2017	15:15	EST-5	Tornado	EF3	5	32	300.000M	0.00K
(ABY)SOUTHWEST GA RGNL ARPT	DOUGHERTY CO.	GA	01/22/2017	15:27	EST-5	Thunderstorm Wind	64 kts. MG	0	0	0.00K	0.00K
RED ROCK	WORTH CO.	GA	01/22/2017	15:37	EST-5	Tornado	EF3	0	31	5.000M	0.00K
HOBBY	TURNER CO.	GA	01/22/2017	15:50	EST-5	Tornado	EF3	0	25	5.000M	0.00K
SYLVESTER-WORTH ARPT	WORTH CO.	GA	01/22/2017	16:00	EST-5	Thunderstorm Wind	65 kts. EG	0	0	100.00K	0.00K
BERLIN	COLQUITT CO.	GA	01/22/2017	16:10	EST-5	Thunderstorm Wind	65 kts. EG	0	0	50.00K	0.00K
ADEL	COOK CO.	GA	01/22/2017	16:20	EST-5	Thunderstorm Wind	65 kts. EG	0	0	50.00K	0.00K
REMERTON	LOWNDES CO.	GA	01/22/2017	16:30	EST-5	Thunderstorm Wind	55 kts. EG	0	0	50.00K	0.00K
I-75 AT EXIT 5	LOWNDES CO.	GA	01/22/2017	16:31	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LAKE PARK	LOWNDES CO.	GA	01/22/2017	16:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:								16	137	314.214M	0.00K

Storm Events Database

Search Results for Cook County, Georgia

Event Types: [Flash Flood](#), [Flood](#)

Cook county contains the following zones:

'Cook'

5 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

Summary Info:

Number of County/Zone areas affected:	2
Number of Days with Event:	5
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: ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	305.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	03/08/1998	12:00	EST	Flood		0	0	300.00K	0.00K
ADEL	COOK CO.	GA	05/19/2004	16:30	EST	Flash Flood		0	0	5.00K	0.00K
FLAT FORD	COOK CO.	GA	02/14/2013	10:00	EST-5	Flood		0	0	0.00K	0.00K
FLAT FORD	COOK CO.	GA	12/24/2014	10:30	EST-5	Flash Flood		0	0	0.00K	0.00K
ADEL	COOK CO.	GA	07/14/2015	17:15	EST-5	Flash Flood		0	0	0.00K	0.00K
Totals:								0	0	305.00K	0.00K

Storm Events Database

Search Results for Cook County, Georgia

Event Types: [Hail](#), [High Wind](#), [Lightning](#), [Strong Wind](#), [Thunderstorm Wind](#)

Cook county contains the following zones:

'Cook'

72 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	58
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	2
Number of Days with Event and Property Damage:	33
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	3

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: Sort By:

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	2	1.235M	0.00K
COOK CO.	COOK CO.	GA	06/04/1962	15:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	06/12/1964	09:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	05/29/1973	16:00	CST	Hail	1.00 in.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	05/16/1975	12:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	05/16/1975	12:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	06/23/1977	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	04/13/1979	17:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	05/05/1979	15:15	CST	Hail	1.75 in.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	07/04/1979	18:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	08/22/1980	15:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	12/29/1983	01:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	07/02/1984	09:20	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	08/01/1986	17:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	06/03/1987	16:35	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	06/03/1987	17:28	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	03/03/1991	04:40	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
COOK CO.	COOK CO.	GA	05/19/1991	13:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Adel	COOK CO.	GA	03/23/1993	18:30	EST	Thunderstorm Wind	0 kts.	0	0	500.00K	0.00K
Adel	COOK CO.	GA	06/24/1994	17:50	EST	Thunderstorm Wind	0 kts.	0	0	0.50K	0.00K
Lenox	COOK CO.	GA	09/09/1994	15:45	EST	Thunderstorm Wind	0 kts.	0	0	0.50K	0.00K
Countywide	COOK CO.	GA	11/11/1995	12:20	EST	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
LENOX	COOK CO.	GA	04/21/1997	16:55	EST	Hail	1.50 in.	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	05/03/1997	13:00	EST	Thunderstorm Wind		0	0	30.00K	0.00K
COUNTYWIDE	COOK CO.	GA	05/15/1997	15:50	EST	Thunderstorm Wind		0	0	0.00K	0.00K
ADEL	COOK CO.	GA	05/03/1998	13:45	EST	Hail	2.75 in.	0	0	50.00K	0.00K

COUNTYWIDE	COOK CO.	GA	06/05/1998	19:30	EST	Thunderstorm Wind		0	0	5.00K	0.00K
ADEL	COOK CO.	GA	06/25/1998	15:30	EST	Thunderstorm Wind		0	0	175.00K	0.00K
COUNTYWIDE	COOK CO.	GA	12/24/2002	10:15	EST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
COUNTYWIDE	COOK CO.	GA	03/17/2003	16:40	EST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
COUNTYWIDE	COOK CO.	GA	05/18/2003	15:00	EST	Hail	0.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	COOK CO.	GA	05/18/2003	15:00	EST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
ADEL	COOK CO.	GA	12/10/2004	03:00	EST	Thunderstorm Wind	65 kts. EG	0	0	1.00K	0.00K
LACONTE	COOK CO.	GA	04/08/2006	15:32	EST	Hail	0.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	COOK CO.	GA	05/10/2006	19:30	EST	Thunderstorm Wind	55 kts. EG	0	0	0.50K	0.00K
LENOX	COOK CO.	GA	07/16/2006	18:55	EST	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
ADEL	COOK CO.	GA	06/12/2007	06:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
ADEL	COOK CO.	GA	08/22/2008	14:00	EST-5	Lightning		0	0	15.00K	0.00K
WAGON WHEEL	COOK CO.	GA	01/07/2009	05:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LENOX	COOK CO.	GA	06/18/2009	20:10	EST-5	Thunderstorm Wind	55 kts. EG	0	0	150.00K	0.00K
ADEL	COOK CO.	GA	06/18/2009	20:25	EST-5	Lightning		0	0	50.00K	0.00K
FLAT FORD	COOK CO.	GA	07/27/2009	13:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
ADEL-COOK ARPT	COOK CO.	GA	04/05/2011	02:35	EST-5	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
PINE VALLEY	COOK CO.	GA	04/05/2011	02:44	EST-5	Thunderstorm Wind	60 kts. EG	0	1	20.00K	0.00K
ADEL	COOK CO.	GA	06/06/2011	17:30	EST-5	Thunderstorm Wind	60 kts. EG	0	1	30.00K	0.00K
ADEL	COOK CO.	GA	06/06/2011	17:45	EST-5	Lightning		0	0	10.00K	0.00K
WAGON WHEEL	COOK CO.	GA	02/18/2012	22:18	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
MASSEE	COOK CO.	GA	02/18/2012	22:19	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	02/18/2012	22:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
ADEL-COOK ARPT	COOK CO.	GA	06/11/2012	15:29	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CECIL	COOK CO.	GA	07/01/2012	22:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
LENOX	COOK CO.	GA	07/03/2012	19:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
ADEL-COOK ARPT	COOK CO.	GA	07/03/2012	19:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
ADEL	COOK CO.	GA	07/26/2012	16:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
CECIL	COOK CO.	GA	12/17/2012	14:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SPARKS	COOK CO.	GA	03/23/2013	09:58	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	03/23/2013	10:03	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	03/23/2013	10:05	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
CECIL	COOK CO.	GA	06/21/2014	18:05	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
ADEL	COOK CO.	GA	04/20/2015	10:50	EST-5	Hail	0.88 in.	0	0	0.00K	0.00K
STAUNTON	COOK CO.	GA	04/25/2015	19:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
MASSEE	COOK CO.	GA	05/27/2015	16:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
LENOX	COOK CO.	GA	05/27/2015	16:24	EST-5	Thunderstorm Wind	55 kts. EG	0	0	1.00K	0.00K
PINE VALLEY	COOK CO.	GA	06/12/2015	18:27	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ADEL-COOK ARPT	COOK CO.	GA	06/12/2015	18:33	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FLAT FORD	COOK CO.	GA	07/02/2015	15:10	EST-5	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	07/05/2015	12:08	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ADEL-COOK ARPT	COOK CO.	GA	07/19/2015	19:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
LENOX	COOK CO.	GA	08/11/2015	16:27	EST-5	Lightning		0	0	37.92K	0.00K
ADEL	COOK CO.	GA	01/02/2017	23:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ADEL	COOK CO.	GA	01/22/2017	16:20	EST-5	Thunderstorm Wind	65 kts. EG	0	0	50.00K	0.00K
STAUNTON	COOK CO.	GA	07/13/2017	16:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
PINE VALLEY	COOK CO.	GA	07/13/2017	17:00	EST-5	Lightning		0	0	5.00K	0.00K
Totals:								0	2	1.235M	0.00K

Storm Events Database

Search Results for Cook County, Georgia

Event Types: **Wildfire**

Cook county contains the following zones:

'Cook'

0 events were reported between 01/01/1950 and 12/31/2017 (24837 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: ▼

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

Storm Events Database

Search Results for Cook County, Georgia

Event Types: [Excessive Heat](#), [Heat](#)

Cook county contains the following zones:

'Cook'

0 events were reported between 01/01/1950 and 12/31/2017 (24837 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: ▼

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

Storm Events Database

Search Results for Cook County, Georgia

Event Types: **Drought**

Cook county contains the following zones:

'Cook'

25 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	25
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.

Sort By: ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/01/1997	00:00	EST	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	11/01/2010	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	12/01/2010	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	01/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	02/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	05/10/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	06/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	07/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	08/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	10/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	11/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	12/01/2011	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	01/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	02/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	03/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	04/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	05/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	06/01/2012	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	01/01/2013	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	02/01/2013	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	08/26/2014	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	09/01/2014	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	11/22/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
COOK (ZONE)	COOK (ZONE)	GA	12/01/2016	00:00	EST-5	Drought		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Report Number	Date of Incident	Incident City	Incident State	Mode of Transportation	Carrier/Reporter Name	Shipper Name	HMIS Serious Incident Ind	Total Hazmat Fatalities	Total Hazmat Injuries	Total Amount of Damages	Packaging Type	Identification Number	Commodity Long Name	Quantity Released	Unit of Measure	Undeclared Shipment
I-2001091827	07/10/2001	ADEL	GA	Highway	SUTTLES TRUCK LEASING, L.L.C.	ALUMINUM FINISHING OF GEORGIA INC	No	0	0	\$475	Portable Tank	UN3284	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	25	LGA	No

Report Number	Date of Incident	Incident City	Incident State	Mode of Transportation	Carrier/Reporter Name	Shipper Name	HMIS Serious Incident Ind	Total Hazmat Fatalities	Total Hazmat Injuries	Total Amount of Damages	Packaging Type	Identification Number	Commodity Long Name	Quantity Released	Unit of Measure	Undeclared Shipment
E-2016060087	05/30/2016	LENOX	GA	Highway	RDX, LLC	BRENTAG MID-SOUTH, INC.	No	0	0	\$5,000	Non-Bulk	UN1090	ACETONE	20	LGA	No

Report Number	Date of Incident	Incident City	Incident State	Mode of Transportation	Carrier/Reporter Name	Shipper Name	HMIS Serious Incident Ind	Total Hazmat Fatalities	Total Hazmat Injuries	Total Amount of Damages	Packaging Type	Identification Number	Commodity Long Name	Quantity Released	Unit of Measure	Undeclared Shipment
I-1999091301	08/09/1999	SPARKS	GA	Highway	BURLINGTON MOTOR CARRIERS INC	RHONE POULENC AG CO	No	0	0	\$900	Non-Bulk	UN3265	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.	40	LGA	No

COOK COUNTY CRITICAL FACILITIES

Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value
3393	Adel City Hall	Adel city	112 N Parrish Ave	31620	Government, Private	Essential, Important, Economic Assets	Government - General Services	1305300.00
3286	Adel Fire Department Station 01	Adel city	213 E Third St	31620	Emergency Services, Fire Fighters	Essential, Important	Government - Emergency Response	1033200.00
28620	Adel Fire Dept. Staion #2	Adel city	700 S Elm St	31620	Emergency Services, Fire Fighters	Lifeline	Government - Emergency Response	300000.00
3541	Adel Police Department	Adel city	1512 North Elm Street	31620	Law Enforcement, Police	Essential, Important, Vulnerable Population	Government - Emergency Response	1994700.00
28622	Adel Water Well	Adel city	W 1st Street	31620	Government, Water/Sewer	Essential	Government - General Services	500000.00
3464	City of Adel Well	Adel city	Third St	31620	Government, Water/Sewer	Essential, Lifeline, Important, Economic Assets	Government - General Services	75000.00
11101	Cook County 911 Building	Adel city	3295 County Farm Rd	31620	Law Enforcement, Sheriff	Essential, Important	Government - General Services	1350000.00
3510	Cook County Airport	Adel city	170 Airport Rd	31620	NGO, Transportation	Important, Lifeline, Transportation	Government - General Services	360000.00
3381	Cook County Courthouse	Adel city	212 N Hutchinson Ave	31620	Law Enforcement, Court House	Important, Historic Consideration	Government - General Services	2913600.00
28619	Cook County Health Dept	Adel city	204 N Parrish Ave	31620	Government, Government Offices	Lifeline	Government - General Services	1000000.00
3364	Cook County Jail and Sherriff's Office	Adel city	3335 County Farm Rd	31620	Law Enforcement, Jails	Essential, High Potential Loss, Important, Vulnerable Population	Government - Emergency Response	7603800.00
107	Cook Elementary School	Adel city	1512 North Elm Street	31620	Education, K - 12	Essential, High Potential Loss, Important, Special Consideration, Vulnerable Population	Grade Schools and Admin. Offices	41400000.00

COOK COUNTY CRITICAL FACILITIES

Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value
28623	Cook Primary School	Adel city	1531 Patterson Street	31620	Education, K - 12	Economic Assets, Vulnerable Population	Grade Schools and Admin. Offices	6826280.00
11099	Delle Beamguard Community Center	Adel city	210 East 8th Street	31620	Government, Government Offices	Essential	Government - General Services	16230000.00
3496	Memorial Hospital of Adel	Adel city	706 N. Parrish Avenue	31620	Medical, EMS	Essential, High Potential Loss, Important, Vulnerable Population, Economic Assets, Special Consideration	Hospital	10172100.00
3414	Cecil City Hall	Cecil town	134 Roundtree St	31627	Government, Government Offices	Economic Assets, Essential, Important, Lifeline	Government - General Services	426600.00
3336	Cecil Volunteer Fire Department	Cecil town	2005 Highway 41	31627	Emergency Services, Fire Fighters	Essential, Important	Government - Emergency Response	1224000.00
3427	Adel WPCP	Cook County	1325 Honeymoon Ln	31620	Government, Water/Sewer	Economic Assets, Essential, Important, Lifeline	Government - General Services	43200.00
3334	Chaserville-Massee Volunteer Fire Department	Cook County	10454 Barneyville Rd	31620	Emergency Services, Fire Fighters	Essential, Important	Government - Emergency Response	806700.00
2023	COOK CO-TAYLOR RD ADEL (L)	Cook County	Taylor Rd, 1.5 Mi S	31620	NGO, Water/Sewer	Essential, Important	Government - General Services	43200.00
3524	Cook High	Cook County	9900 Highway 37	31620	Education, K - 12	Essential, High Potential Loss, Important, Special Consideration, Vulnerable Population	Grade Schools and Admin. Offices	45000000.00
3350	Pine Valley Fire Department	Cook County	3576 Highway 76 Station #1	31620	Emergency Services, Fire Fighters	Essential, Important	Government - Emergency Response	975000.00

COOK COUNTY CRITICAL FACILITIES

Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value
28624	Pine Valley Fire Dept #2	Cook County	488 Register Rd	31620	Emergency Services, Fire Fighters	Lifeline	Government - Emergency Response	200000.00
28708	BASF Lift Station	Lenox town	14284 Highway 41 North	31637	Government, Water/Sewer	Essential	> 50 units	146100.00
28704	Brad St. Pump Station	Lenox town	Brad Street	31637	Government, Water/Sewer	Essential	> 50 units	356600.00
28706	Brad Street Lift Station	Lenox town	Brad Street	31637	Government, Water/Sewer	Essential	> 50 units	132000.00
28705	Brad Street Water Tower	Lenox town	Brad Street	31637	Government, Water/Sewer	Essential	> 50 units	654200.00
28697	Broad Street Lift Station	Lenox town	Broad St	31637	Government, Water/Sewer	Essential	> 50 units	158900.00
28692	Broad Street Pump Station	Lenox town	Broad St	31637	Government, Water/Sewer	Essential	> 50 units	300400.00
28700	City Hall and Police Station	Lenox town	113 S Railroad St	31637	Government, Government Offices	Essential, Lifeline	> 50 units	679700.00
28695	East Gray Pump Station	Lenox town	East Gray Ave	31637	Government, Water/Sewer	Essential	> 50 units	296800.00
28696	East Gray Water Tower	Lenox town	402 W Gray Ave	31637	Government, Water/Sewer	Essential	> 50 units	592900.00
28693	EMS Building Lenox	Lenox town	15 South Railroad St	31637	Emergency Services, EMS	Lifeline	> 50 units	348200.00
28699	Grit Collector	Lenox town	Union Rd	31637	Government, Water/Sewer	Essential	> 50 units	14000.00
28701	Highway 41 Pump Station	Lenox town	Highway 41	31637	Government, Water/Sewer	Essential	> 50 units	361000.00
28702	Highway 41 Water Tower	Lenox town	Highway 41	31637	Government, Water/Sewer	Essential	> 50 units	1490000.00
28703	Hwy 41 Pump Sta Fire Protection Bldg	Lenox town	Highway 41	31637	Government, Water/Sewer	Essential	> 50 units	202400.00
28710	Industrial Drive Lift Station	Lenox town	Industrial Dr	31637	Government, Water/Sewer	Essential	> 50 units	139700.00
11100	Lenox Christian Fellowship	Lenox town	35 E Central Ave	31637	NGO, Private	Essential	Churches and Non- Profit Organizations	1044600.00
28698	Oxidation Pond	Lenox town	Union Rd	31637	Government, Water/Sewer	Essential, Hazardous Materials	> 50 units	1742200.00

COOK COUNTY CRITICAL FACILITIES

Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value
28711	Public Works Garage	Lenox town	Brad St	31637	Government, Government Offices	Important	> 50 units	205000.00
28709	Ross Road Lift Station	Lenox town	Ross Rd	31637	Government, Water/Sewer	Essential	> 50 units	130800.00
28694	Volunteer Fire Station 1	Lenox town	42 E Central Ave	31637	Emergency Services, Fire Fighters	Lifeline	> 50 units	196400.00
28707	Volunteer Fire Station 2	Lenox town	65 Brad St	31637	Emergency Services, Fire Fighters	Lifeline	> 50 units	72200.00
1349	Cook County Middle School	Sparks town	1000 Elm Street	31647	Education, K - 12	Essential, High Potential Loss, Important, Special Consideration, Vulnerable Population	Grade Schools and Admin. Offices	42750000.00
3394	Sparks City Hall and Police Department	Sparks town	115 E Colquitt Street	31647	Government, Government Offices	Essential, Important	Government - General Services	1200000.00
28712	Sparks city water well	Sparks town	5th St	31647	Government, Water/Sewer	Essential, Lifeline	> 50 units	100000.00
28713	Sparks city water well	Sparks town	Cleveland St	31647	Government, Water/Sewer	Essential, Lifeline	> 50 units	150372.00
28625	Sparks City Water Wells	Sparks town	College St.	31647	Government, Water/Sewer	Essential	Government - General Services	500000.00
28626	Sparks Sewer Lift Station	Sparks town	Coldwell St.	31647	Government, Water/Sewer	Essential	Government - General Services	100000.00
28628	Sparks Sewer Lift Station	Sparks town	Martin Luther King Jr. Drive	31647	Government, Water/Sewer	Essential	Government - General Services	100000.00
28629	Sparks Sewer Lift Station	Sparks town	N Elm St.	31647	Government, Water/Sewer	Essential	Government - General Services	100000.00
28714	Sparks Sewer Lift Station	Sparks town	Ravenwood Dr	31647	Government, Water/Sewer	Essential	> 50 units	100000.00
28715	Sparks sewer lift station	Sparks town	E Lovett St	31647	Government, Water/Sewer	Essential	> 50 units	100000.00
28716	Sparks Sewer Lift Station	Sparks town	Brushy Creek Rd	31647	Government, Water/Sewer	Essential	> 50 units	100000.00
3287	Sparks Volunteer Fire Department	Sparks town	113 E Colquit Ave	31647	Emergency Services, Fire Fighters	Essential, Important	Government - Emergency Response	1440000.00

COOK COUNTY CRITICAL FACILITIES

Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value
3426	Sparks WPCP	Sparks town	South Railroad Street	31647	Government, Water/Sewer	Essential, Lifeline, Important, Economic Assets	Government - General Services	168000.00
3468	Town of Sparks	Sparks town	Gordon St	31647	Government, Water/Sewer	Essential, Lifeline, Important, Economic Assets	Government - General Services	96000.00

Critical Facilities in Flood Hazard Areas
Updated 2017

Jurisdiction	Name	Hazard Score	Value	Building size	Content value	Facility type	Risk
Lenox town	Grit Collector	3	14000			Government, Water/Sewer	Essential
Lenox town	Industrial Drive Lift Station	3	139700			Government, Water/Sewer	Essential
Lenox town	Oxidation Pond	3	1742200			Government, Water/Sewer	Essential, Hazardous Materials
Sparks town	Sparks Sewer Lift Station	3	100000			Government, Water/Sewer	Essential
Sparks town	Sparks Sewer Lift Station	4	100000			Government, Water/Sewer	Essential
Sparks town	Sparks Sewer Lift Station	3	100000			Government, Water/Sewer	Essential
Sparks town	Sparks WPCP	3	168000	560	150000	Government, Water/Sewer	Essential, Lifeline, Important, Economic Assets

Appendix G



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



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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 2018, 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 Cook County.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Cook 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. Cook 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 Cook County were replaced with data derived from parcel and property assessment data obtained from Cook County. The county provided property assessment data was current as of June 2018 and the parcel data current as of June 2018. 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 Cook 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	17	0	\$ 8,417,000	\$ -
Commercial	318	639	\$ 165,803,000	\$ 428,312,000
Education	10	32	\$ 12,760,000	\$ 73,700,000
Government	12	37	\$ 5,378,000	\$ 21,129,000
Industrial	96	4	\$ 130,981,000	\$ 2,045,000
Religious	42	65	\$ 29,178,000	\$ 49,097,000
Residential	7052	7456	\$ 1,039,461,000	\$ 873,679,000
Total	7547	8233	\$ 1,391,978,000	\$ 1,447,962,000

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

For Cook 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.

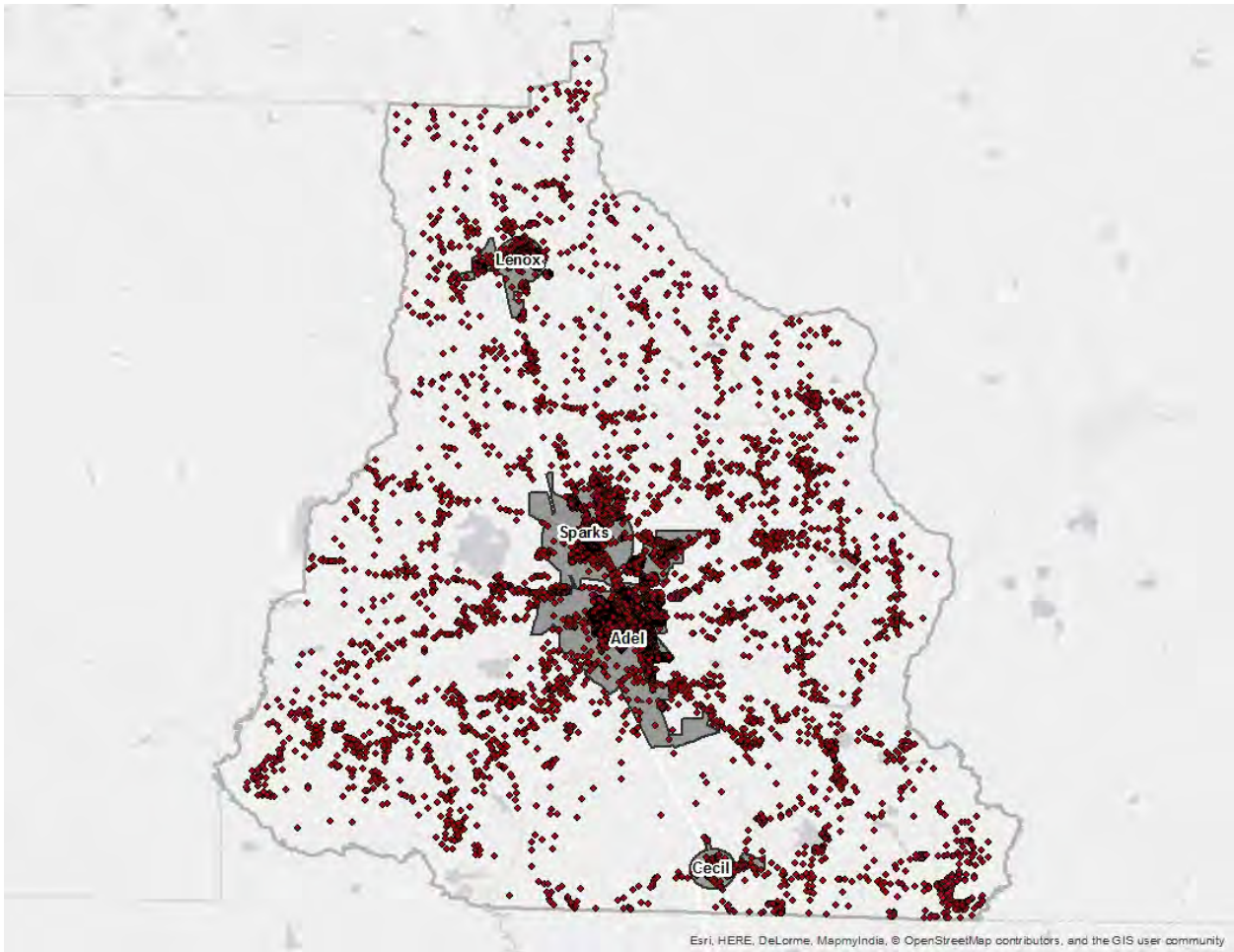


Figure 1: Cook County Overview

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
Cook County		
EOC	1	\$ 880,000
Care	1	\$ 10,172,000
Fire	9	\$ 12,872,000
Police	3	\$ 10,024,000
School	4	\$ 135,976,000
Total	18	\$ 169,924,000

Classification	Updated Count	Updated Exposure
Adel		
EOC	1	\$ 880,000
Care	1	\$ 10,172,000
Fire	2	\$ 1,333,000
Police	2	\$ 9,597,000
School	1	\$ 6,826,000
Total	7	\$ 28,808,000

Classification	Updated Count	Updated Exposure
Cecil		
EOC	0	\$ -
Care	0	\$ -
Fire	1	\$ 1,224,000
Police	0	\$ -
School	0	\$ -
Total	1	\$ 1,224,000

Classification	Updated Count	Updated Exposure
Lenox		
EOC	0	\$ -
Care	0	\$ -
Fire	2	\$ 268,000
Police	1	\$ 427,000
School	0	\$ -
Total	3	\$ 695,000

Classification	Updated Count	Updated Exposure
Sparks		
EOC	0	\$ -
Care	0	\$ -
Fire	1	\$ 1,440,000
Police	0	\$ -
School	2	\$ 84,150,000
Total	3	\$ 85,590,000

Assumptions and Exceptions

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

- The Cook 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 Cook 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.

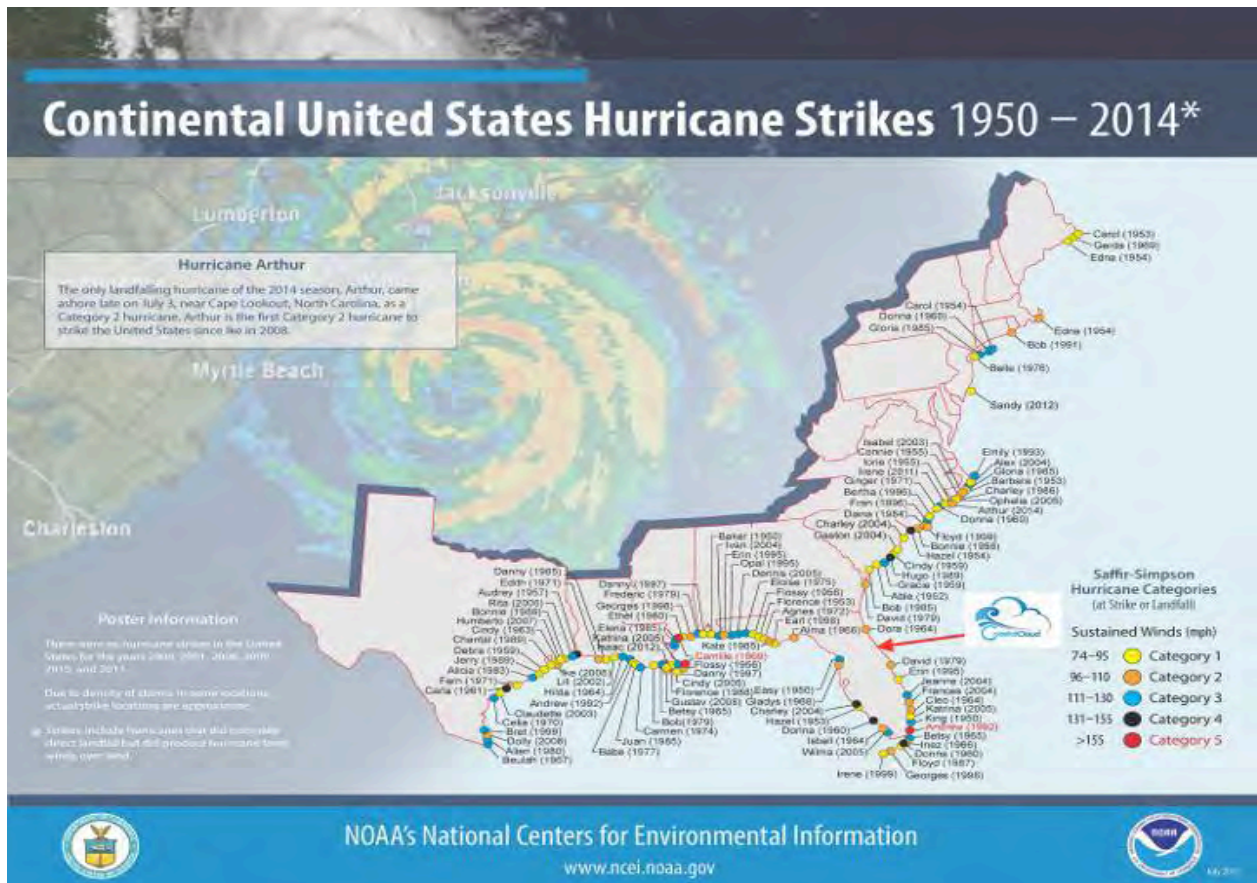


Figure 2: Continental United States Hurricane Strikes: 1950 to 2014³

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 Cook County by creating a 20-mile buffer around the county to include storms that didn’t make direct landfall in Cook County but impacted the county. Since 1851, Cook County has had 62 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Cook County

Year	Month	Day	Name	Wind (Knots)	Category	Year	Month	Day	Name	Wind (Knots)	Category
1852	October	10	NOTNAMED	80	H1	1926	July	29	NOTNAMED	50	TS
1871	August	23	NOTNAMED	50	TS	1926	July	29	NOTNAMED	40	TS
1871	August	23	NOTNAMED	40	TS	1933	September	5	NOTNAMED	40	TS
1873	June	2	NOTNAMED	40	TS	1933	September	6	NOTNAMED	40	TS
1873	September	19	NOTNAMED	60	TS	1933	September	6	NOTNAMED	35	TS
1877	September	20	NOTNAMED	50	TS	1935	September	5	NOTNAMED	60	TS
1877	September	20	NOTNAMED	40	TS	1947	October	7	NOTNAMED	35	TS
1877	October	3	NOTNAMED	70	H1	1947	October	7	NOTNAMED	30	TD
1878	October	11	NOTNAMED	40	TS	1950	September	7	EASY	35	TS
1885	August	31	NOTNAMED	50	TS	1950	October	19	KING	35	TS
1885	August	31	NOTNAMED	40	TS	1950	October	19	KING	25	TD
1886	June	21	NOTNAMED	80	H1	1953	September	27	FLORENCE	60	E
1886	June	21	NOTNAMED	65	H1	1953	September	27	FLORENCE	50	E
1886	July	1	NOTNAMED	70	H1	1957	June	9	NOTNAMED	35	TS
1894	October	9	NOTNAMED	85	H2	1964	October	5	HILDA	35	E
1902	June	15	NOTNAMED	45	TS	1966	June	10	ALMA	60	TS
1902	June	15	NOTNAMED	40	TS	1966	June	10	ALMA	55	TS
1907	June	29	NOTNAMED	50	TS	1985	November	22	KATE	80	H1
1907	June	29	NOTNAMED	45	TS	1985	November	22	KATE	65	H1
1907	September	29	NOTNAMED	40	TS	1986	August	13	CHARLEY	10	SD
1911	August	4	NOTNAMED	20	TD	1986	August	14	CHARLEY	10	SD
1911	August	5	NOTNAMED	20	TD	1987	August	16	NOTNAMED	15	TD
1912	July	15	NOTNAMED	40	TS	1987	August	16	NOTNAMED	10	TD
1912	July	16	NOTNAMED	40	TS	1990	October	12	MARCO	20	TD
1912	September	6	NOTNAMED	25	TD	1995	June	5	ALLISON	45	TS
1914	September	17	NOTNAMED	40	TS	1995	August	26	JERRY	25	TD
1919	October	1	NOTNAMED	35	TS	1995	August	26	JERRY	20	TD
1919	October	1	NOTNAMED	30	TD	1998	September	3	EARL	45	TS
1924	September	16	NOTNAMED	45	TS	2004	September	27	JEANNE	40	TS
1924	September	29	NOTNAMED	55	TS	2005	October	6	TAMMY	35	TS
1924	September	30	NOTNAMED	55	E	2006	June	13	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 80 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.

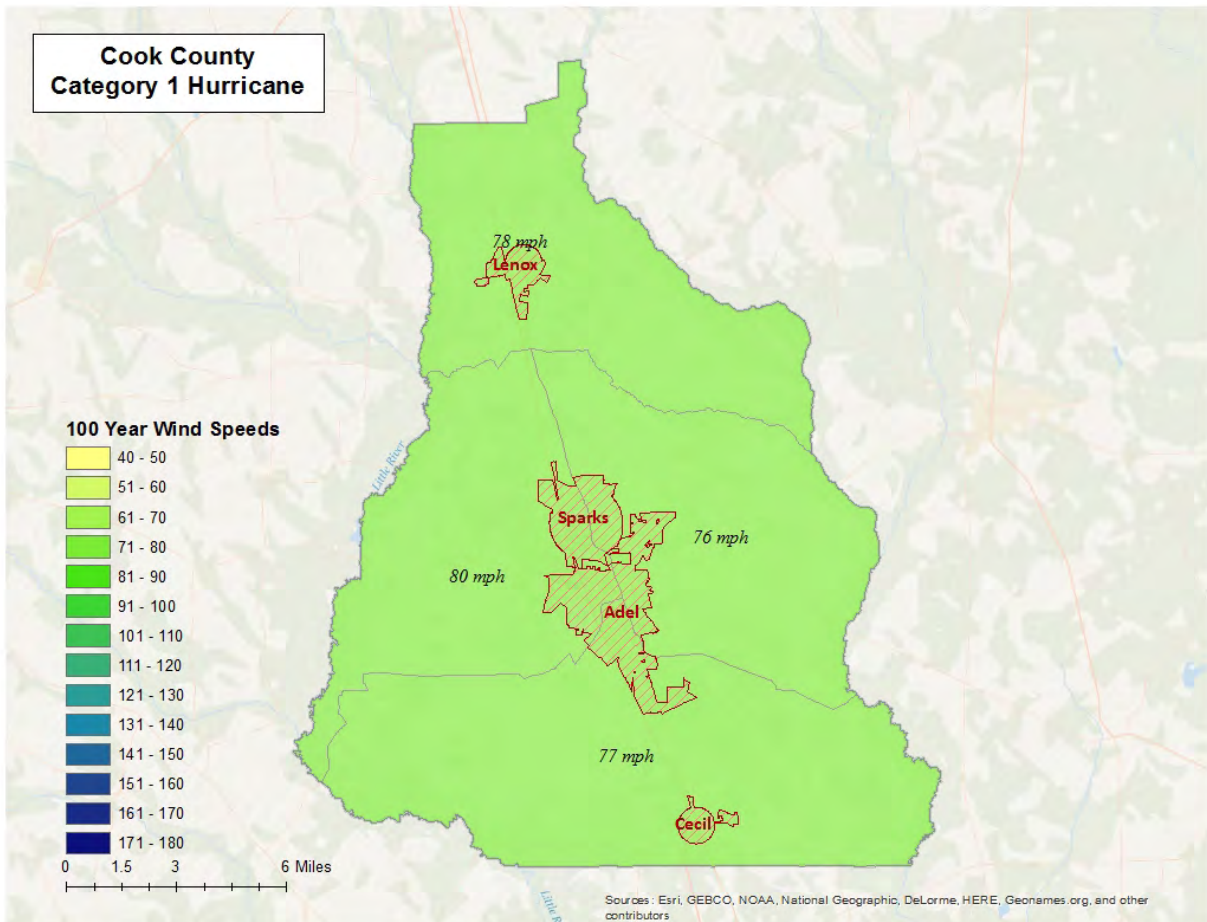


Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Cook 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 Cook 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.

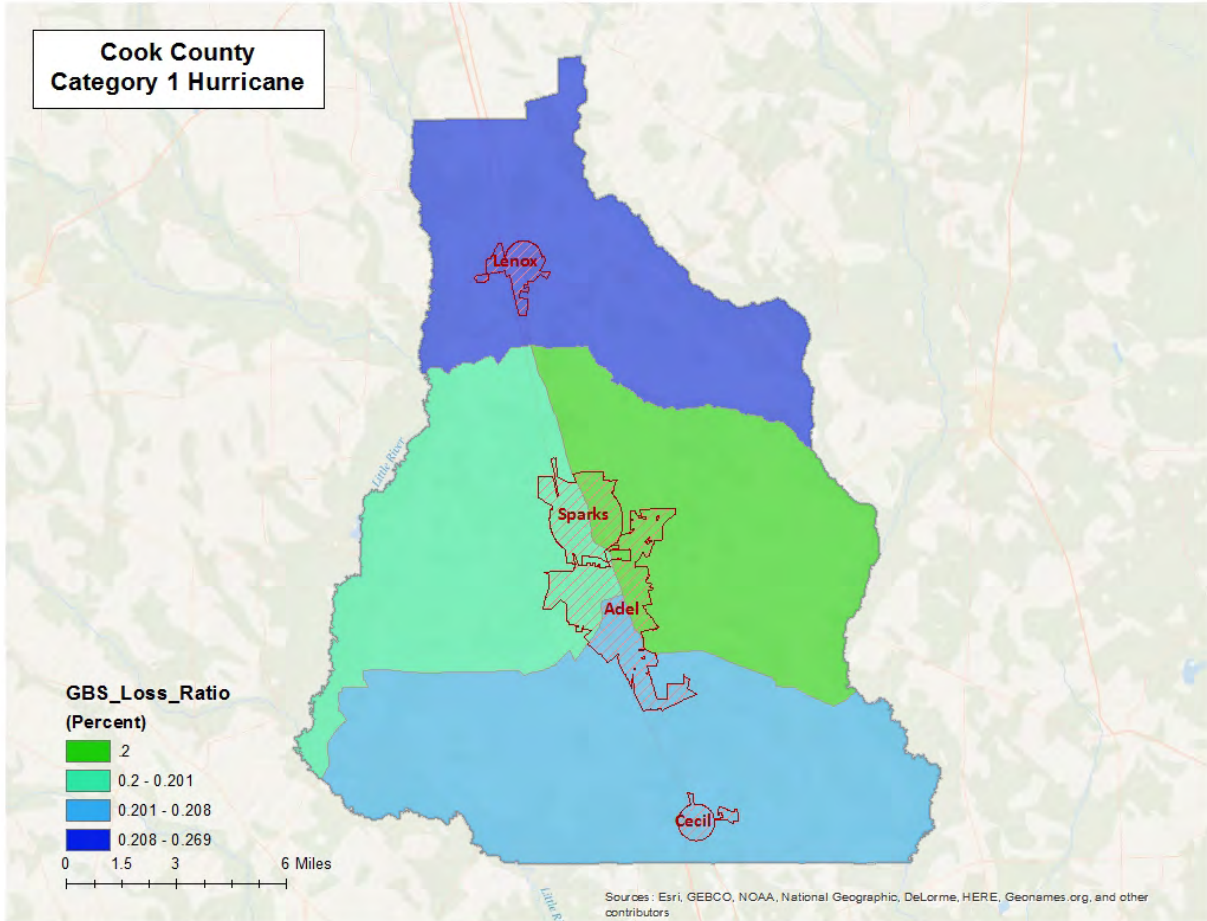


Figure 4: Hurricane Wind GBS Loss Ratios

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	91	\$ 3,038,780	\$ 4,122,020	0.21

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 18 essential facilities in Cook County.

Classification	Number
EOC	1
Care	1
Fire	9
Police	3
School	4
Total	18

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	18

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	0	0

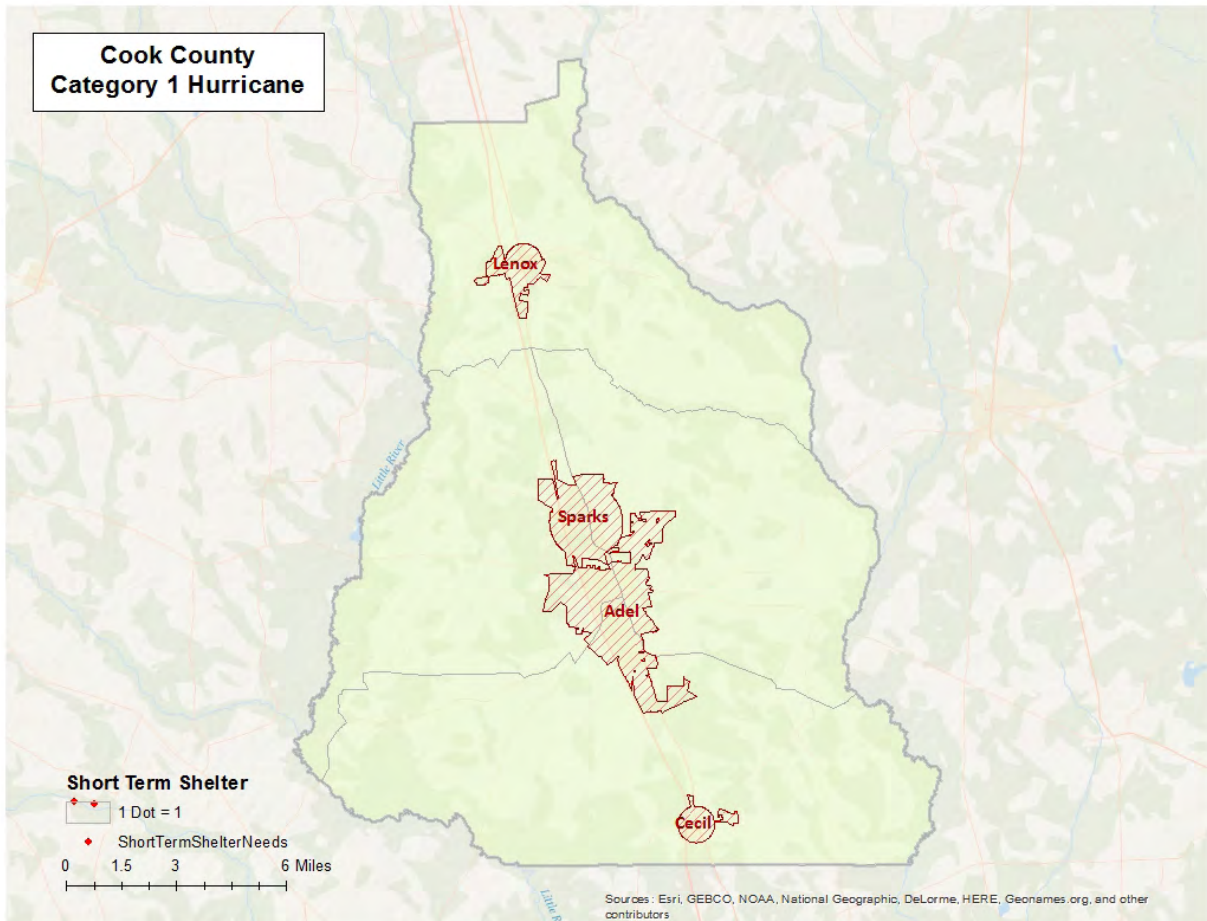


Figure 5: Hurricane Wind Shelter Requirements

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	350	-	2,059	30,940	33,349

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.

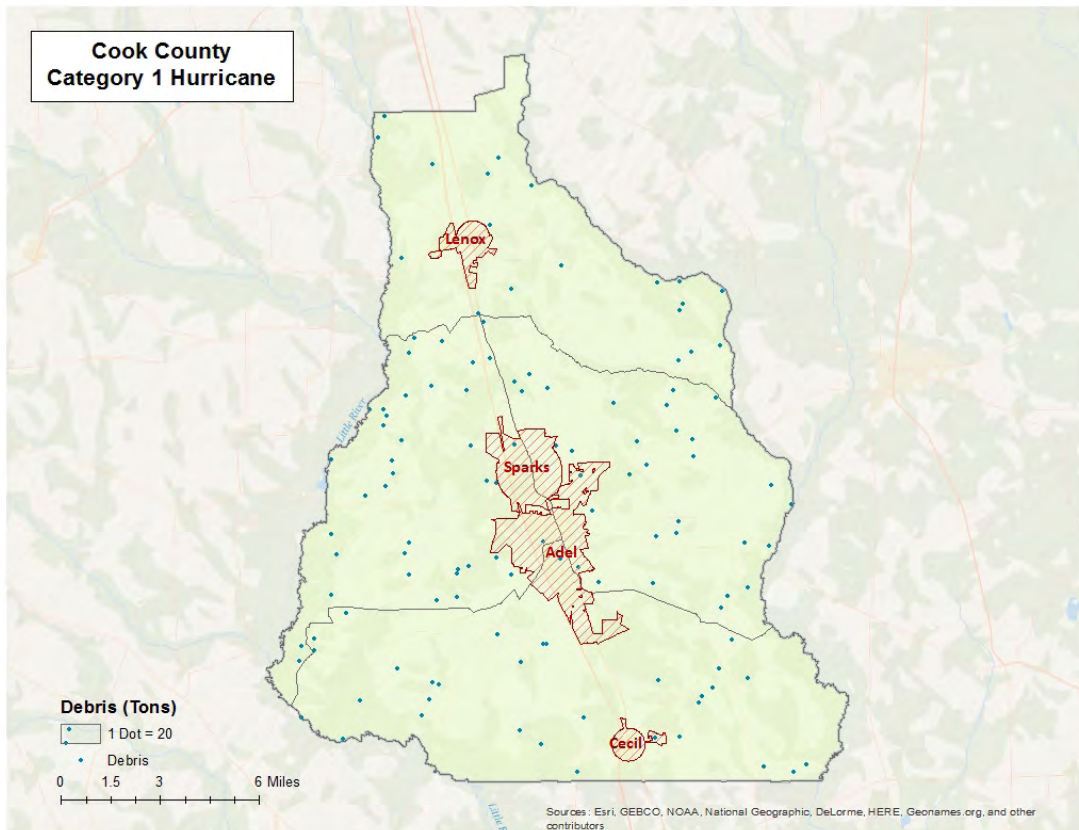


Figure 6: Wind-Related Debris Weight (Tons)

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 Cook 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 June 2018. 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.

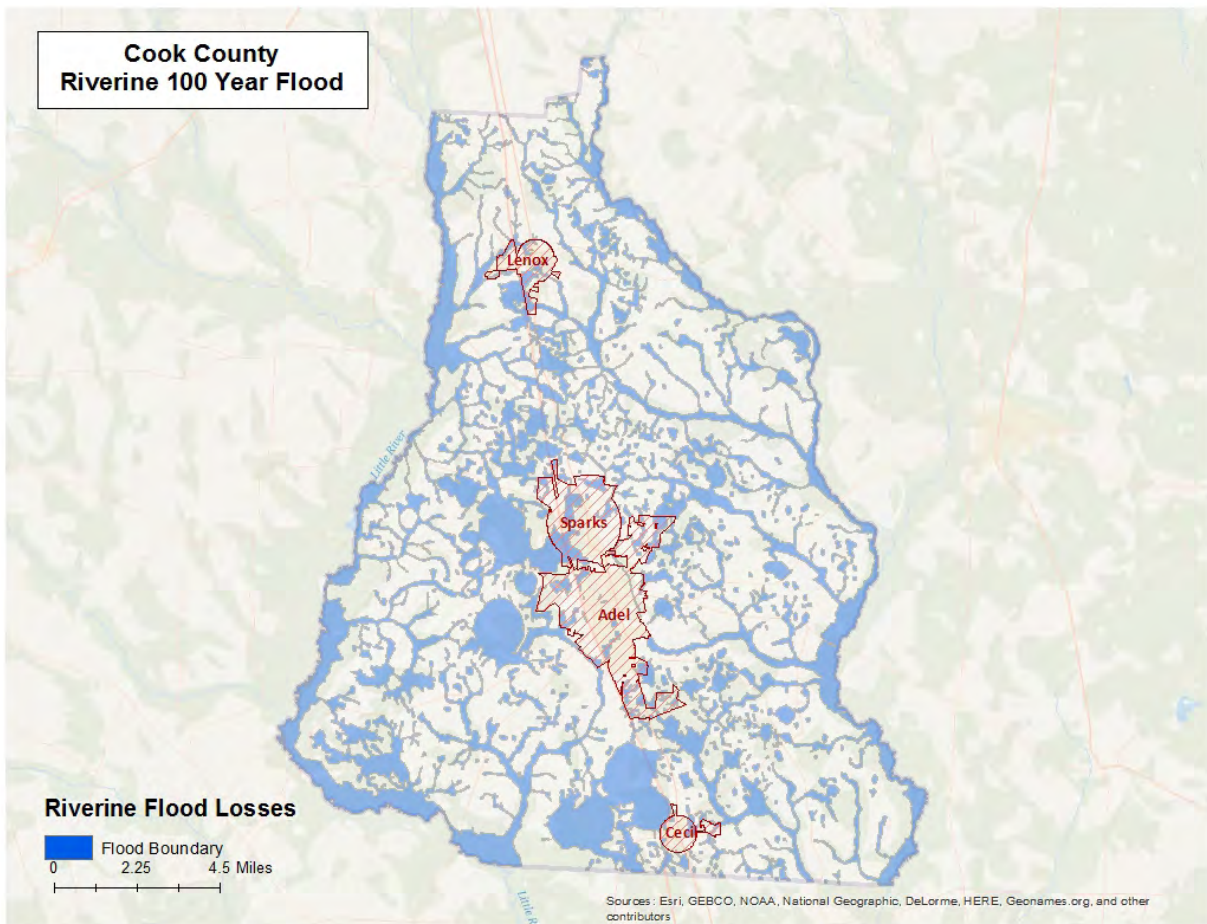


Figure 7: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Cook 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 Cook 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: Cook 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
Adel					
Commercial	409	6	\$ 305,765,092	\$ 89,410	0.03%
Residential	2,189	35	\$ 327,944,227	\$ 733,873	0.22%
Cecil					
Commercial	11	1	\$ 7,982,159	\$ 22,034	0.28%
Residential	160	17	\$ 17,570,979	\$ 380,425	2.17%
Lenox					
Commercial	49	3	\$ 27,320,687	\$ 89,853	0.33%
Residential	412	13	\$ 37,018,595	\$ 350,210	0.95%
Sparks					
Residential	793	71	\$ 69,960,595	\$ 1,209,079	1.73%
Unincorporated					
Commercial	104	20	\$ 68,639,595	\$ 393,489	0.57%
Government	4	1	\$ 1,625,747	\$ 36,701	2.26%
Religious	21	1	\$ 20,389,957	\$ 61,435	0.30%
Residential	3,902	351	\$ 421,194,129	\$ 4,204,793	1.00%
County Total					
Total	8,054	519	\$ 1,305,411,762	\$ 7,571,302	

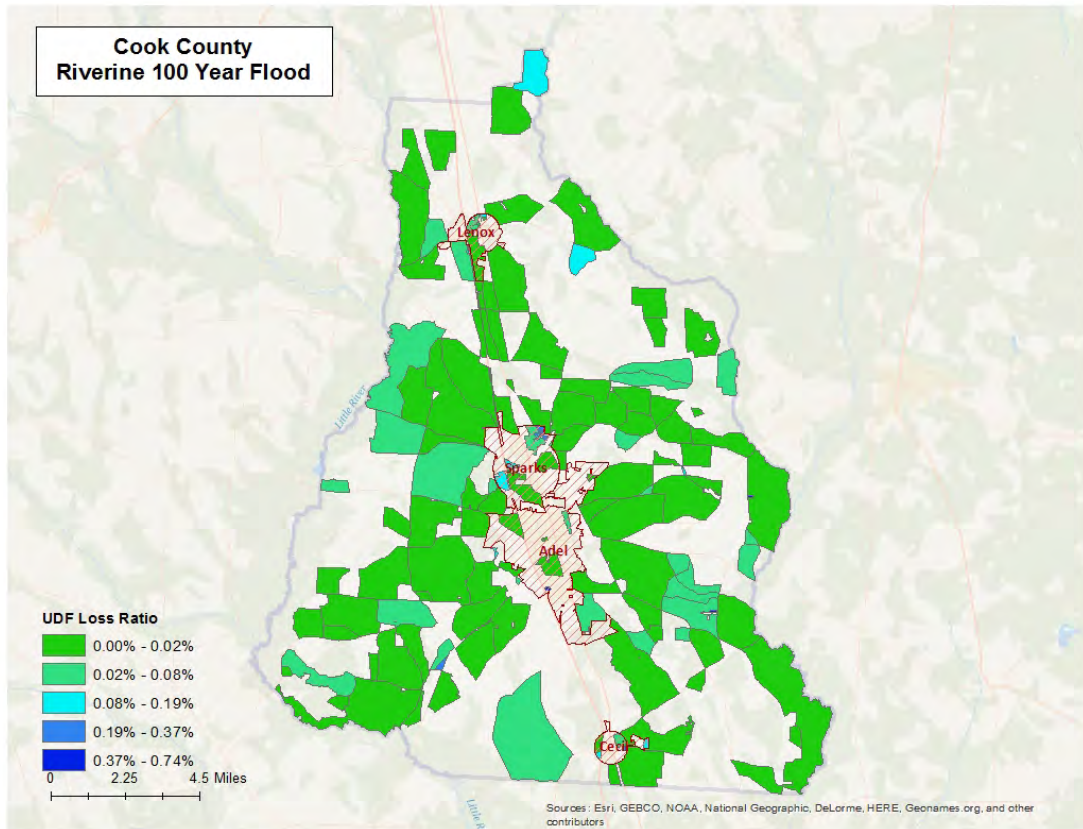


Figure 8: Potential UDF Loss Ratios from the 1% Riverine Flood

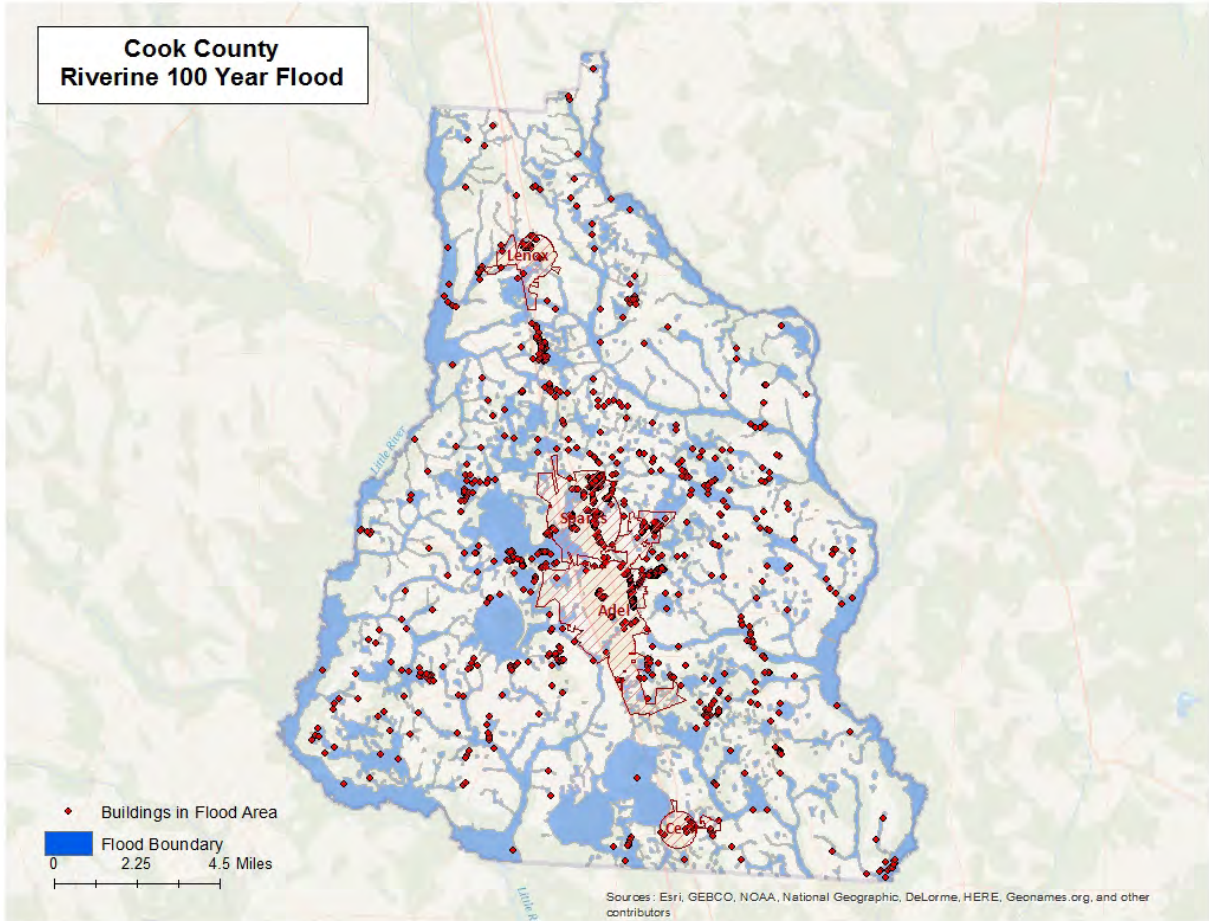


Figure 9: Damaged Buildings in 1% Riverine Flood

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 Cook 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	9	0	0	0
Hospitals	1	0	0	0
Police Stations	3	0	0	0
Schools	4	0	0	0
EOCs	1	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 1,105 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 3,316 individuals, of which 1,689 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).

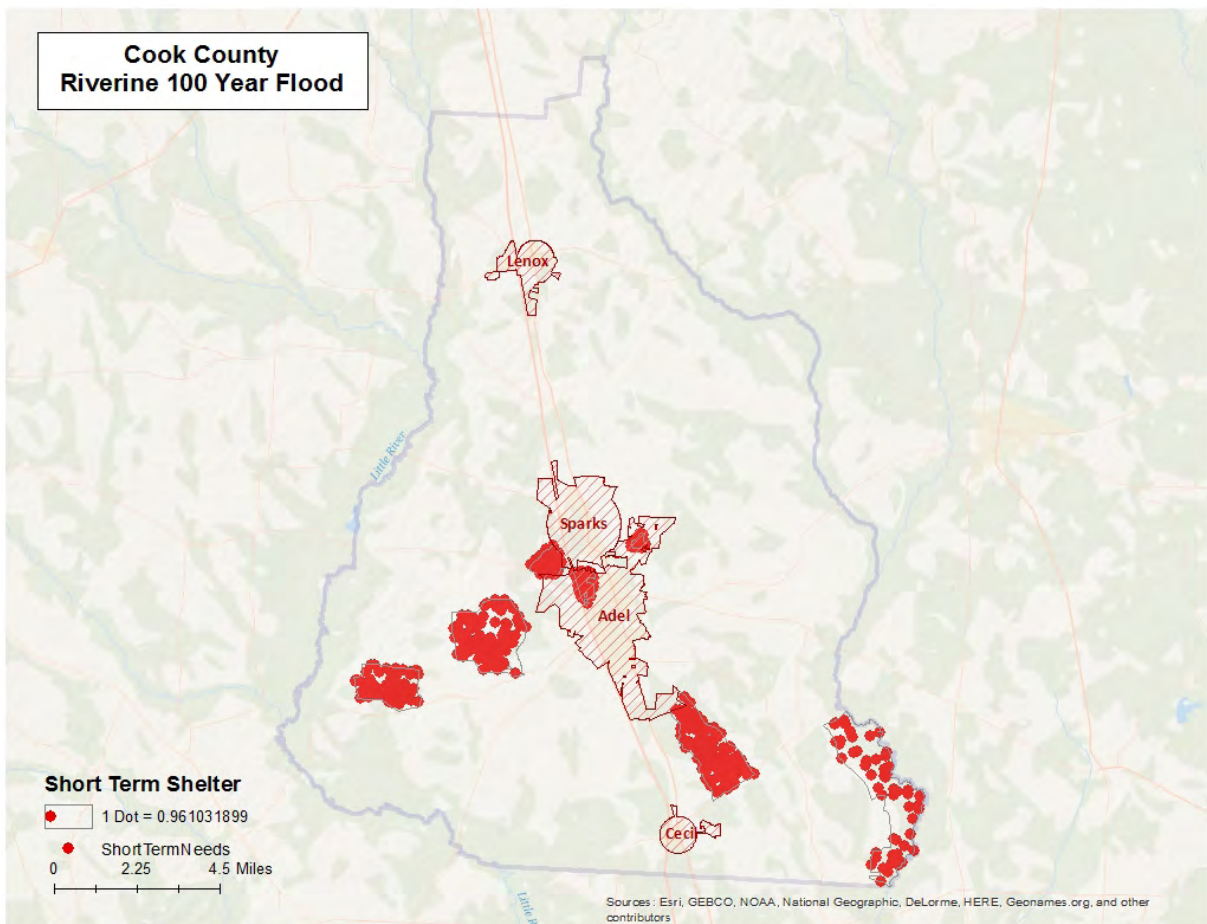


Figure 10: Estimated Flood Shelter Requirements in 1% Riverine Flood

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 6,270 tons of debris might be generated: 1) Finishes – 2,483 tons; 2) Structural – 1,243 tons; and 3) Foundations – 2,544 tons. The results are mapped in Figure 11.

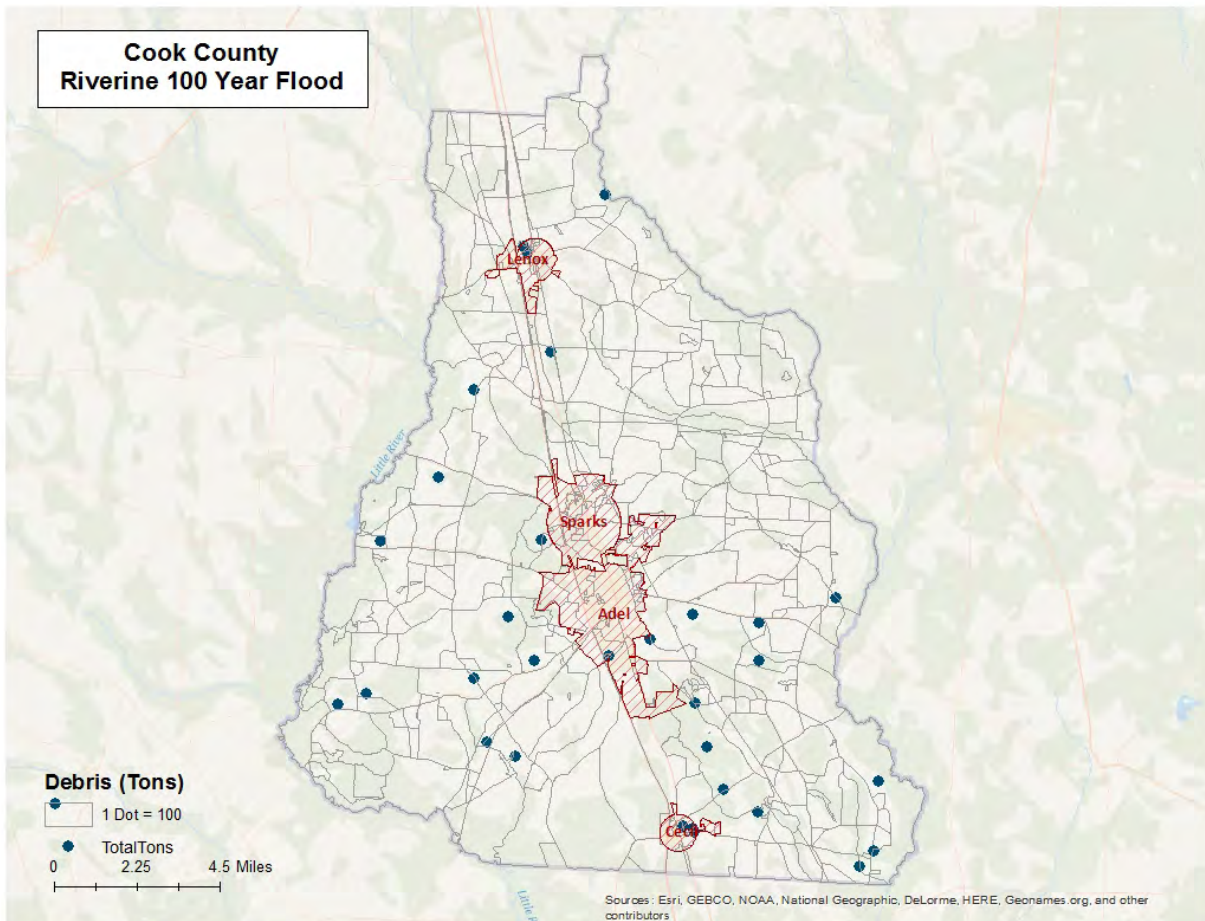


Figure 11: Flood Debris Weight (Tons) in 1% Riverine Flood

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 <i>Gale</i>	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 <i>Moderate</i>	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 <i>Significant</i>	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 <i>Severe</i>	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 <i>Devastating</i>	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 <i>Uncredible</i>	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 Adel. 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.

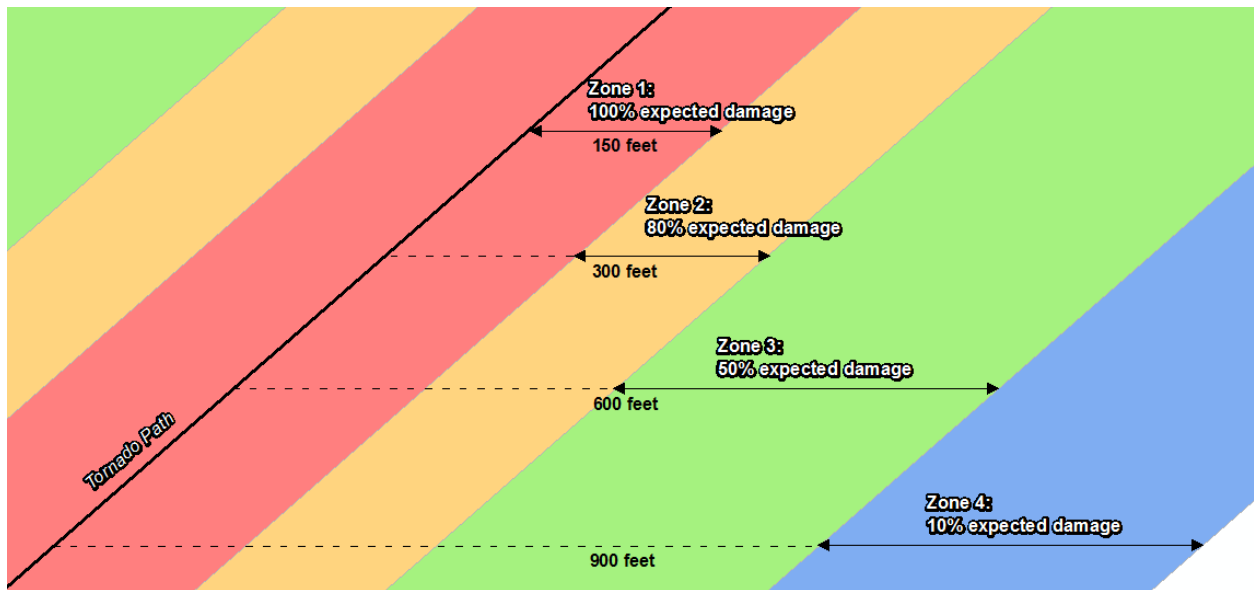


Figure 12: EF Scale Tornado Zones

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%

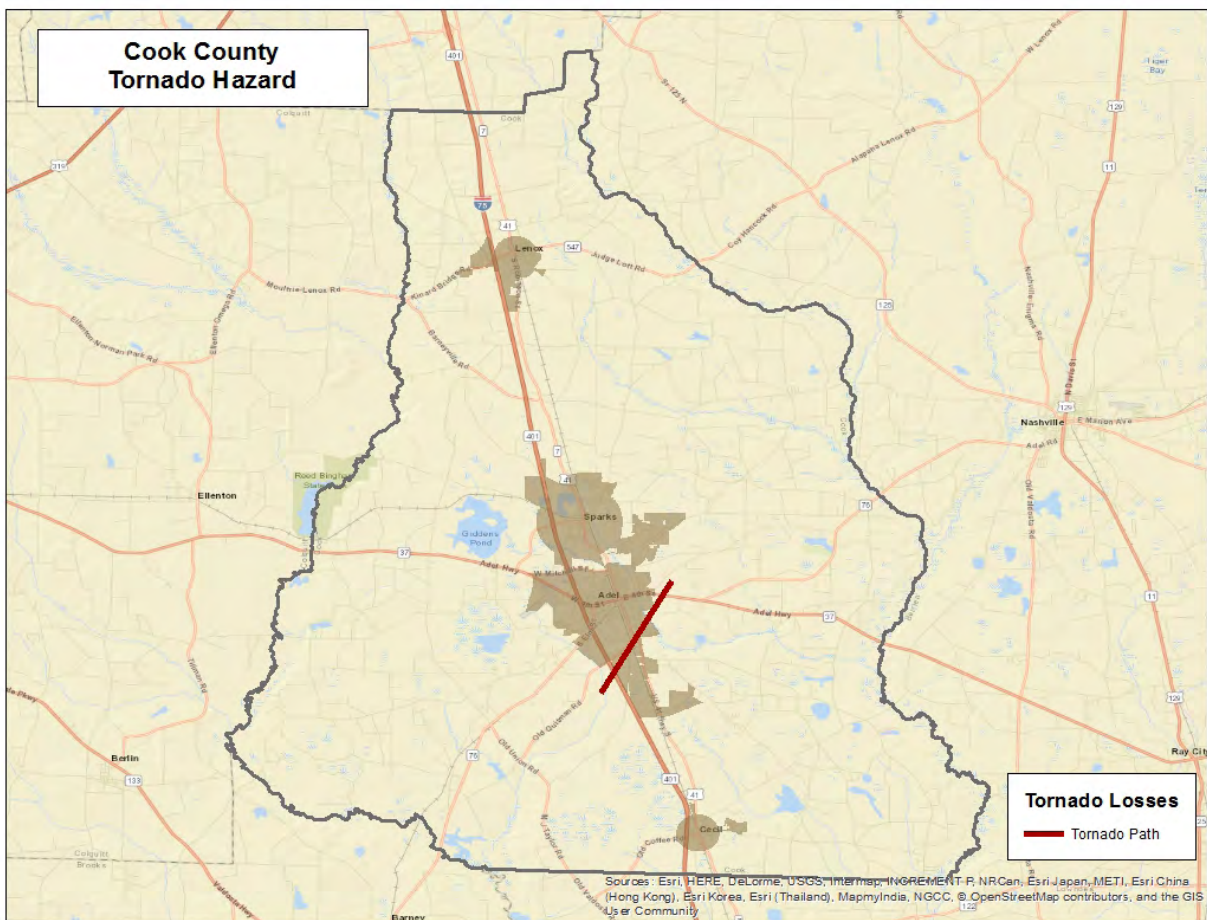


Figure 13: Hypothetical EF3 Tornado Path

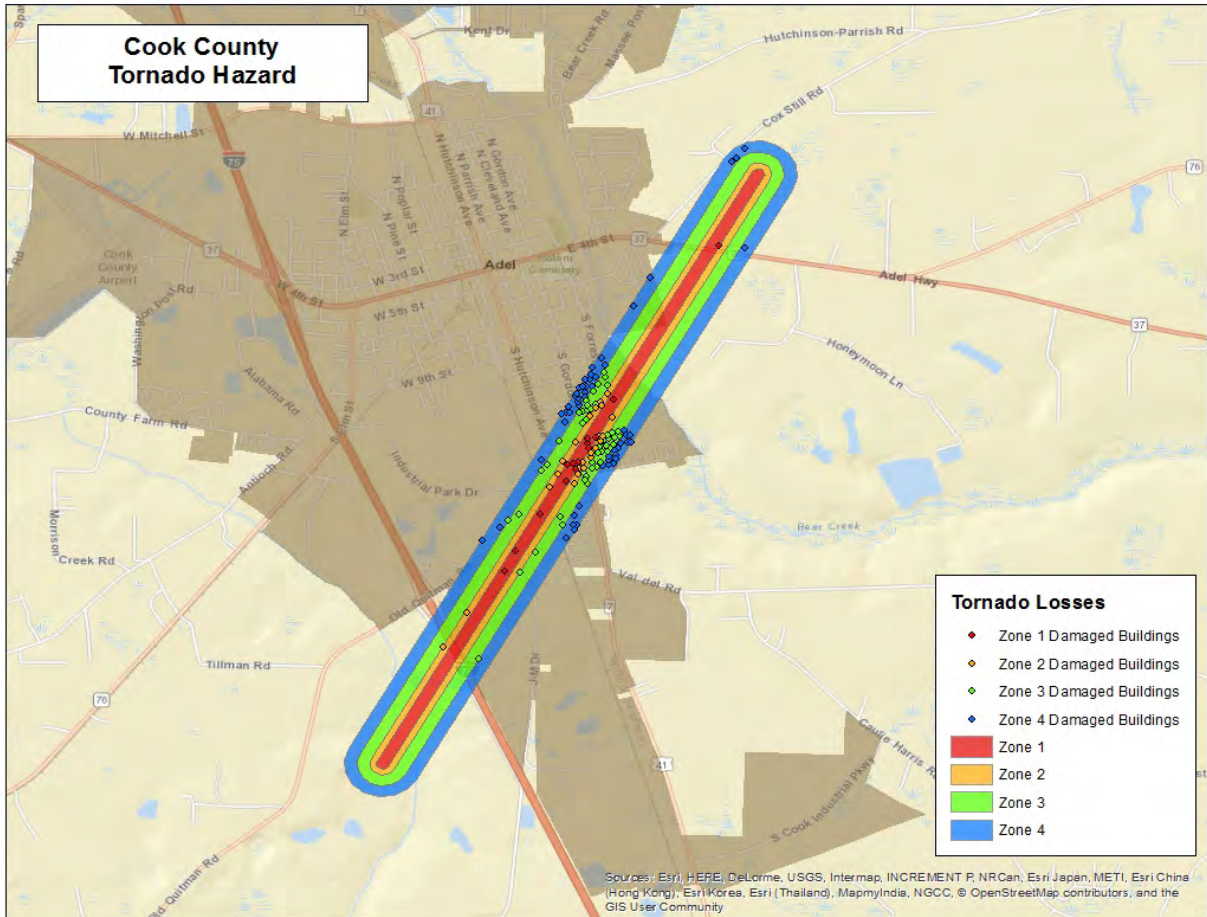


Figure 14: Modeled EF3 Tornado Damage Buffers

EF3 Tornado Building Damages

The analysis estimated that approximately 161 buildings could be damaged, with estimated building losses of approximately \$20.6 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 Cook 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	33	\$ 13,107,041
Governmental	3	\$ 809,951
Residential	125	\$ 6,723,665
Total	161	\$ 20,640,657

EF3 Tornado Essential Facility Damage

There was 1 essential facility located in the tornado path according to the modeling, this facility would suffer moderate to major damage should such a tornado strike occur.

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

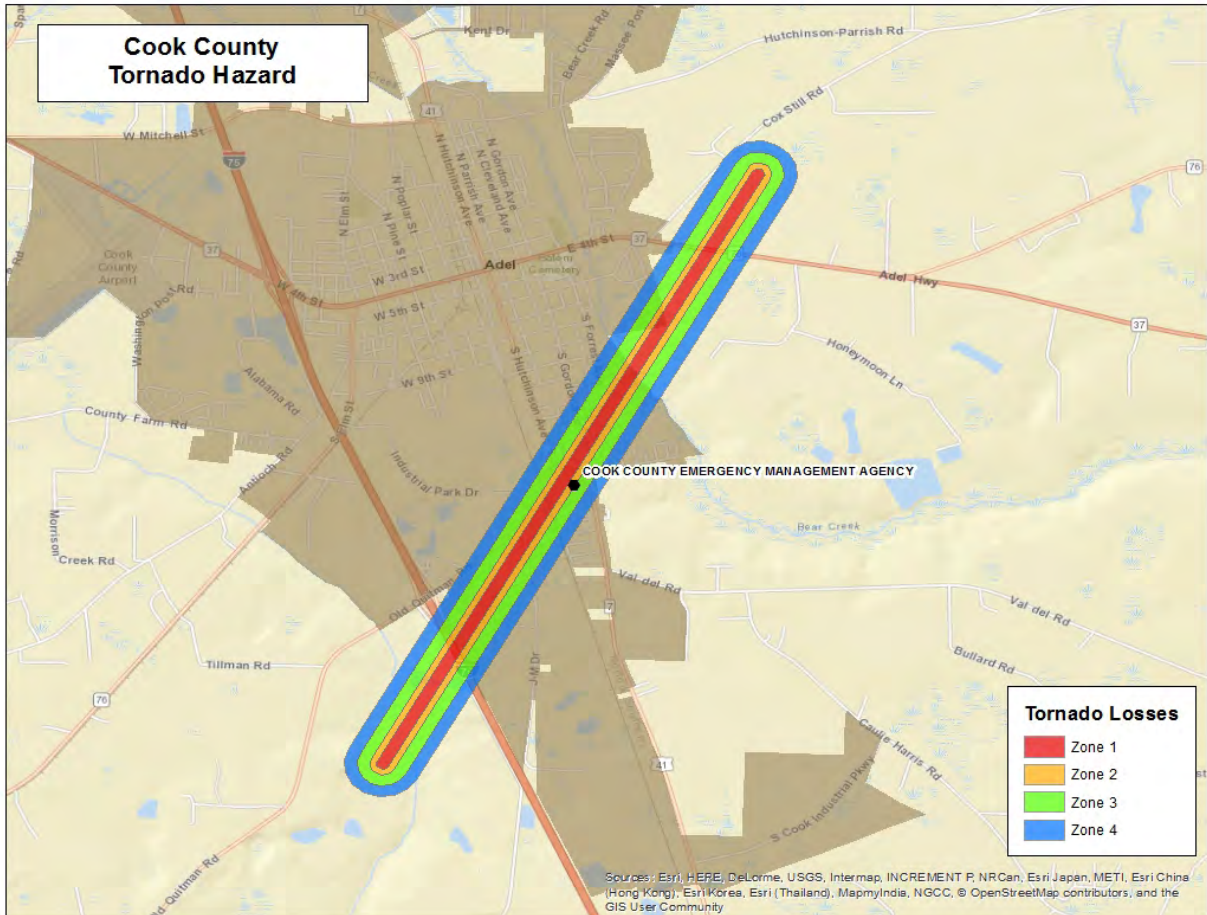


Figure 15: Modeled Essential Facility Damage in Cook County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Cook 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 Cook County.

Statewide facility data were supplied by GEMA through the GMIS in June 2015. The Regional Commission updated the essential facilities in 2018. 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 Cook County.

Table 15: Essential Facility Updates

Occupancy Classification	Default		Updated	
	Replacement Cost	Default Count	Replacement Cost	Updated Count
Care	\$ 10,172,000	1	\$ 10,172,000	1
EOC	\$ 880,000	1	\$ 880,000	1
Fire	\$ 5,043,000	5	\$ 12,872,000	9
Police	\$ 10,024,000	3	\$ 10,024,000	3
School	\$ 137,265,000	5	\$ 135,976,000	4

County Inventory Changes

The GBS records for Cook County were replaced with data derived from parcel and property assessment data obtained from Cook County. The county provided property assessment data was current as of June 2018 and the parcel data current as of June 2018.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Cook 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 Cook 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 Cook County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	415	5%
Construction Unknown	2723	33%
Condition Unknown	92	1%
Foundation Unknown	1533	19%
Year Built Unknown	1276	15%

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 Cook 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	8,233	\$1,447,994,147
Total buildings inside the 1% Annual Chance Riverine Flood Area	1,125	\$149,534,328

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