

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### INSTRUCTIONS FOR USING THE PLAN REVIEW CROSSWALK FOR REVIEW OF LOCAL MITIGATION PLANS

Attached is a Plan Review Crosswalk based on the **Local Multi-Hazard Mitigation Planning Guidance**, published by FEMA in July, 2008. This Plan Review Crosswalk is consistent with the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act), as amended by Section 322 of the *Disaster Mitigation Act of 2000* (P.L. 106-390), the *National Flood Insurance Act of 1968*, as amended by the *National Flood Insurance Reform Act of 2004* (P.L. 108-264) and *44 Code of Federal Regulations (CFR) Part 201 – Mitigation Planning*, inclusive of all amendments through October 31, 2007.

#### SCORING SYSTEM

**N – Needs Improvement:** The plan does not meet the minimum for the requirement. Reviewer’s comments must be provided.

**S – Satisfactory:** The plan meets the minimum for the requirement. Reviewer’s comments are encouraged, but not required.

Each requirement includes separate elements. All elements of a requirement must be rated “Satisfactory” in order for the requirement to be fulfilled and receive a summary score of “Satisfactory.” A “Needs Improvement” score on elements shaded in gray (recommended but not required) will not preclude the plan from passing.

When reviewing single jurisdiction plans, reviewers may want to put an N/A in the boxes for multi-jurisdictional plan requirements. When reviewing multi-jurisdictional plans, however, all elements apply. States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements. Optional matrices for assisting in the review of sections on profiling hazards, assessing vulnerability, and identifying and analyzing mitigation actions are found at the end of the Plan Review Crosswalk.

**The example below illustrates how to fill in the Plan Review Crosswalk.:**

<b>Assessing Vulnerability: Overview</b>				
<i>Requirement §201.6(c)(2)(ii): [The risk assessment shall include a] description of the jurisdiction’s vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.</i>				
Element	Location in the Plan (section or annex and page #)	Reviewer’s Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include an <b>overall summary</b> description of the jurisdiction’s <b>vulnerability</b> to each hazard?	Section II, pp. 4-10	The plan describes the types of assets that are located within geographically defined hazard areas as well as those that would be affected by winter storms.		<input type="checkbox"/>
B. Does the <b>new or updated</b> plan address the <b>impact</b> of each hazard on the jurisdiction?	Section II, pp. 10-20	The plan does not address the impact of two of the five hazards addressed in the plan. <b>Required Revisions:</b> • Include a description of the impact of floods and earthquakes on the assets. <b>Recommended Revisions:</b> This information can be presented in terms of dollar value or percentages of damage.	<input type="checkbox"/>	
<b>SUMMARY SCORE</b>			<input type="checkbox"/>	

# LOCAL MITIGATION PLAN REVIEW CROSSWALK

## LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score.

Prerequisite(s) (Check Applicable Box)	NOT MET	MET
1. Adoption by the Local Governing Body: §201.6(c)(5) OR	X	
2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5) AND	X	
3. Multi-Jurisdictional Planning Participation: §201.6(a)(3)	X	
<b>Planning Process</b>	N	S
4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)	X	
<b>Risk Assessment</b>	N	S
5. Identifying Hazards: §201.6(c)(2)(i)	X	
6. Profiling Hazards: §201.6(c)(2)(i)	X	
7. Assessing Vulnerability: Overview: §201.6(c)(2)(ii)	X	
8. Assessing Vulnerability: Addressing Repetitive Loss Properties. §201.6(c)(2)(ii)	X	
9. Assessing Vulnerability: Identifying Structures, Infrastructure, and Critical Facilities: §201.6(c)(2)(ii)(B)		X
10. Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)		X
11. Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)	X	
12. Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(iii)		X

\*States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

## SCORING SYSTEM

Please check one of the following for each requirement.

**N – Needs Improvement:** The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.

**S – Satisfactory:** The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Mitigation Strategy	N	S
13. Local Hazard Mitigation Goals: §201.6(c)(3)(i)	X	
14. Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)	X	
15. Identification and Analysis of Mitigation Actions: NFIP Compliance. §201.6(c)(3)(ii)	X	
16. Implementation of Mitigation Actions: §201.6(c)(3)(iii)	X	
17. Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)	X	
<b>Plan Maintenance Process</b>	N	S
18. Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(ii)		X
19. Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii)		X
20. Continued Public Involvement: §201.6(c)(4)(iii)		X
<b>Additional State Requirements*</b>	N	S
Insert State Requirement		
Insert State Requirement		
Insert State Requirement		

## LOCAL MITIGATION PLAN APPROVAL STATUS

PLAN NOT APPROVED

See Reviewer's Comments

PLAN APPROVED

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### Local Mitigation Plan Review and Approval Status

<b>Jurisdiction:</b> Lee County	<b>Title of Plan:</b> Lee County Natural Hazards Mitigation Plan	<b>Date of Plan:</b> September 2009
<b>Local Point of Contact:</b> Katherine Russell	<b>Address:</b> 908 Avenue B P. O. Box 2769 Opelika AL 36803-2769	
<b>Title:</b> EMA Director		
<b>Agency:</b> Lee County EMA		
<b>Phone Number:</b> 334-749-8161	<b>E-Mail:</b> krussell@leecoema.com	

<b>State Reviewer:</b> <a href="#">Zakiya Darby</a>	<b>Title:</b> <a href="#">Mitigation Planner</a>	<b>Date:</b> <a href="#">09/28/09</a>
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<b>FEMA Reviewer:</b>	<b>Title:</b>	<b>Date:</b>
<b>Date Received in FEMA Region [Insert #]</b>		
<b>Plan Not Approved</b>		
<b>Plan Approved</b>		
<b>Date Approved</b>		

<b>Jurisdiction:</b>	<b>DFIRM**</b>		<b>NFIP Status*</b>			
	In Plan	NOT in Plan	Y	N	N/A	CRS Class
1. Lee County			X			
2. Auburn			X			
3. Opelika			X			
4. Smiths Station			X			
5. Loachapoka				X		
5. Auburn University					X	

\* Notes: Y = Participating    N = Not Participating    N/A = Not Mapped

# LOCAL MITIGATION PLAN REVIEW CROSSWALK

\*\* FEMA ONLY

## PREREQUISITE(S)

### 1. Adoption by the Local Governing Body

**Requirement §201.6(c)(5):** [The local hazard mitigation plan **shall** include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			NOT MET	MET
A. Has the local governing body adopted <b>new or updated</b> plan?	Resolutions from City of Auburn, City of Opelika, Lee County, and Smith Station approving the plan are included in Section 1.  Loachapoka and Auburn University will be submitted at a later time.	The local governing body will adopt the plan after receiving an approved pending adoption notification from FEMA	X	
B. Is supporting documentation, such as a resolution, included?	Resolutions from City of Auburn, City of Opelika, Lee County, and Smith Station approving the plan are included in Section 1.  Loachapoka and Auburn University will be submitted at a later time.	Documentation will be provided after adoption	X	
SUMMARY SCORE			X	

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### 2. Multi-Jurisdictional Plan Adoption

**Requirement §201.6(c)(5):** For multi-jurisdictional plans, each jurisdiction requesting approval of the plan **must** document that it has been formally adopted.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			NOT MET	MET
A. Does the <b>new or updated</b> plan indicate the specific jurisdictions represented in the plan?	Sect 4 Pg 2	The plan indicates the specific jurisdictions are represented in the plan: Lee County, City of Auburn, City of Opelika, City of Smiths Station, Town of Loachapoka and Auburn University.		X
B. For each jurisdiction, has the local governing body adopted the <b>new or updated</b> plan?	Resolutions from City of Auburn, City of Opelika, Lee County, and Smith Station approving the plan are included in Section 1.  Loachapoka and Auburn University will be submitted at a later time.	The local governing body will adopt the plan after receiving an approved pending adoption notification from FEMA	X	
C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?	Resolutions from City of Auburn, City of Opelika, Lee County, and Smith Station approving the plan are included in Section 1.  Loachapoka and Auburn University will be submitted at a later time.	Documentation will be provided after adoption	X	
<b>SUMMARY SCORE</b>			X	

### 3. Multi-Jurisdictional Planning Participation

**Requirement §201.6(a)(3):** Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process ... Statewide plans will not be accepted as multi-jurisdictional plans.

Location in the	SCORE
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## LOCAL MITIGATION PLAN REVIEW CROSSWALK

Element	Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			NOT MET	MET
A. Does the <b>new or updated</b> plan describe <b>how</b> each jurisdiction participated in the plan's development?	<a href="#">Sect 4 Pg 2</a>	The plan update states that representatives from each jurisdiction will serve on the Russell County Natural Hazards Mitigation Planning Committee.		X
B. Does the updated plan identify all participating jurisdictions, including new, continuing, and the jurisdictions that no longer participate in the plan?	<a href="#">Sect 4 Pg 2</a>  The section was updated to verify if there were any jurisdiction no longer participating on <a href="#">Sect 4 Pg 2-3</a> .	The plan update states that after a planning meeting, it was decided to continue with the following jurisdictions: Lee County, City of Auburn, City of Opelika, City of Smiths Station, Town of Loachapoka and Auburn University.  <b>Required Revisions:</b> The plan update shall state if any jurisdictions are no longer participating from the original plan.  <b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 21</b>	X	
<b>SUMMARY SCORE</b>			X	

**PLANNING PROCESS:** *§201.6(b): An open public involvement process is essential to the development of an effective plan.*

### 4. Documentation of the Planning Process

**Requirement §201.6(b):** *In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:*

- (1) *An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*
- (2) *An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and*
- (3) *Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*

**Requirement §201.6(c)(1):** *[The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the plan provide a narrative description of the process followed to prepare the <b>new or updated</b> plan?	<a href="#">Sect 4 Pgs 2-3</a>	The plan update states that each jurisdiction had representation on the planning committee. Meetings referencing the mitigation plan are held at least once yearly and more often when needed. The goal of the meetings is to inform the key officials of each jurisdiction what the plan will entail.  <b>Recommended Revisions:</b> Provide the dates and locations of the meetings held to update the plan.		X
B. Does the <b>new or updated</b> plan indicate who was involved in the <b>current</b> planning process? (For	<a href="#">Sect 4 Pgs 2-3</a>	The plan update states that representatives from each jurisdiction served on the Russell County Natural Hazards		X

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### 4. Documentation of the Planning Process

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- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

**Requirement §201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

	Location in the		SCORE	
example, who led the development at the staff level and were there any external contributors such as contractors? Who participated on the plan committee, provided information, reviewed drafts, etc.?)		Mitigation Planning Committee. Each jurisdiction had a variety of contributors from the community as representatives.		
C. Does the <b>new or updated</b> plan indicate how the public was involved? (Was the public provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?)	Sect 4 Pg 4  The required revisions were added to pages 1-5.	The plan update states that copies and verbiage are available to all municipalities and public input through the Russell County Emergency Management meetings, talks and activities.  <b>Required Revisions:</b> Provide the dates and locations of the meetings held that provided the public with the opportunity to participate in plan update. The plan update also needs to indicate that another public meeting will be held once the plan has been approved pending adoption. This meeting will give the public the opportunity to comment on the final plan.	X	
D. Does the <b>new or updated plan</b> discuss the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?	Sect 4 Pg 3 Appendix B  Appendix B was revised to include only Lee County contacts.	The plan update provides a list of agencies and individuals that were contacted and interviewed for the planning process.  <b>Required Revisions:</b> Appendix B is a Contact List for Lee and Russell Counties Natural Hazards Mitigation Plan. The list needs to be specific about the contacts made for the Russell County Plan.	X	
E. Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?	Sect 4 Pg 5	The plan update provides a list of documents that were reviewed for incorporation into the plan update.		X
F. Does the <b>updated plan document</b> how the planning team reviewed and analyzed each section of the plan and whether each section was revised as part of the update process?	Not Addressed  Section 4 through 7 on page 1 (Section Overview and Plan Revisions) has information to describe the	The plan update does not document how the planning team reviewed and analyzed each section of the plan. There is no documentation outlining what sections were revised and which were not.  <b>Required Revisions:</b> The updated plan shall describe the process used to review and analyze each section of the plan.  <b>Recommended Revisions:</b> This information can be provided	X	

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### 4. Documentation of the Planning Process

**Requirement §201.6(b):** In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process **shall** include:

- (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
- (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
- (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

**Requirement §201.6(c)(1):** [The plan **shall** document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Location in the		SCORE		
	process used to review the section as well as what was changed from the original plan.	at the beginning of each section. It can be included in the overview.  <b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pgs 26-27</b>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**RISK ASSESSMENT:** §201.6(c)(2): The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

### 5. Identifying Hazards

**Requirement §201.6(c)(2)(i):** [The risk assessment **shall** include a] description of the type ... of all natural hazards that can affect the jurisdiction.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include a <b>description</b> of the types of <b>all natural hazards</b> that affect the jurisdiction?	Sect 5 Pg 3-72  Required revisions were corrected.	The updated plan provides a description of all natural hazards that affect the jurisdiction.  <b>Required Revisions:</b> The following discrepancies must be corrected in order for this element to be satisfied. <ul style="list-style-type: none"> <li>• The overview for each of the hazards is the same verbiage from the original plan. If no update to this information was warranted, the plan update needs to state why the information remained the same.</li> <li>• According to page 5-3, severe storms encompasses lightning, wind and hail, but on page 5-16 it includes the three previous elements and thunderstorms, severe</li> </ul>	<b>X</b>	



**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		<p>rain, flooding and tornados. Since tornados and flooding will each be profiled as separate stand alone hazards, they should not be a part of the severe storms profile.</p> <ul style="list-style-type: none"> <li>• Lightning has been profiled on page 5-24 – 5-28 as a standalone hazard, but on page 5-3 it is included as a part of severe storms. The plan needs to add it as a profiled hazard or include the description as part of severe storms and remove the lettering B) from the title.</li> <li>• Due to adding lightning as letter B, the lettering for each profiled hazard is inconsistent with the lettering on page 5-3. The lettering on page 5-3 needs to be adjusted by adding lightening or remove lightening as a separate hazard.</li> <li>• The list of profiled hazards on page 5-3 only lists earthquakes as the identified hazard. On page 5-79, the profiled hazards are landslides and earthquakes and the lettering of K) is inconsistent with page 5-3.</li> </ul> <p><i>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 30-31</i></p>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**6. Profiling Hazards**

**Requirement §201.6(c)(2)(i):** *[The risk assessment shall include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the risk assessment identify the <b>location</b> (i.e., geographic area affected) of each natural hazard addressed in the <b>new or updated</b> plan?	Sect 5 Pg 6-8  <b>Corrected Revisions:</b> Element 5A has been corrected.	The plan update provides a chart that identifies the location of each hazard.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.	<b>X</b>	
B. Does the risk assessment identify the <b>extent</b> (i.e., magnitude or severity) of each hazard addressed in the <b>new or updated</b> plan?	Sect 5 Pg 6-8  <b>Corrected Revisions:</b> Element 5A has	The plan update provides a chart that identifies the extent of each hazard.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the	<b>X</b>	

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

	been corrected.	document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.		
C. Does the plan provide information on <b>previous occurrences</b> of each hazard addressed in the <b>new or updated</b> plan?	<p>Sect 5 Pg 16-72</p> <p>Statistics for tornadoes and floods has been corrected to reflect Lee County.</p> <p>Element 5A has been corrected.</p>	<p>The plan update provides information on previous occurrences of each hazard.</p> <p><b>Required Revisions:</b> The below information needs to be verified for accuracy. The statistics are the same as the Russell County plan update.</p> <ul style="list-style-type: none"> <li>The statistics for tornadoes in the first paragraph on page 5-30 is the same information as that in the Russell County plan update. Both plans have the same number of tornadoes, injuries and deaths. The statistics need to be updated and corrected to reflect Lee County.</li> <li>The statistics for floods on page 5-60 is the same information as that in the Russell County plan update. Both plans have the same years for federal declarations for floods and the same dollar amount of damage. They also have the same number of flood claims.</li> </ul> <p><b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.</p>	X	
D. Does the plan include the <b>probability of future events</b> ( <i>i.e.</i> , chance of occurrence) for each hazard addressed in the <b>new or updated</b> plan?	<p>Sect 5 Pg 6-8, 16-72</p> <p>Statistics for dams/levees has been corrected to reflect Lee County.</p> <p>Element 5A has been corrected.</p>	<p>The plan update includes a chart that details the frequency of each hazard. The frequency has 4 categories. The plan update also provides a narrative description of the future probability of each hazard.</p> <p><b>Required Revisions:</b> The below information needs to be verified for accuracy. The statistics are the same as the Russell County plan update.</p> <ul style="list-style-type: none"> <li>The statistics for future probability of a dam/levee failure on page 5-51 is the same information as that in the Russell County plan update. Both plans have the same number of documented dam/levees and the same number of high-hazard dams. The statistics need to be updated and corrected to reflect Lee County.</li> </ul> <p><b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed;</p>	X	

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		therefore, this requirement cannot be met.		
<b>SUMMARY SCORE</b>			<b>X</b>	

**7. Assessing Vulnerability: Overview**

**Requirement §201.6(c)(2)(ii):** [The risk assessment **shall** include a] description of the jurisdiction’s vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.

Element	Location in the Plan (section or annex and page #)	Reviewer’s Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include an <b>overall summary</b> description of the jurisdiction’s <b>vulnerability</b> to each hazard?	Sect 5 Pg 73-89  <b>Corrected Revisions:</b> Element 5A has been corrected.	The plan update provides a chart (Table 5.19) for each jurisdiction that shows the overall vulnerability to each hazard.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.	<b>X</b>	
B. Does the <b>new or updated</b> plan address the <b>impact</b> of each hazard on the jurisdiction?	Sect 5  <b>Corrected Revisions:</b> Element 5A has been corrected.	The plan update provides the impact each hazard has on the jurisdiction in various tables in section 5. The narrative description of each hazard also addresses the impact of each hazard on the jurisdiction.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.	<b>X</b>	
<b>SUMMARY SCORE</b>			<b>X</b>	

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### 8. Assessing Vulnerability: Addressing Repetitive Loss Properties

**Requirement §201.6(c)(2)(ii):** [The risk assessment] **must** also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of <i>repetitive loss properties</i> located in the identified hazard areas?	<p>Not addressed</p> <p>The number and type of repetitive loss structures were identified in Section 5, page 39.</p>	<p>The plan update does not address the types and numbers of repetitive loss properties.</p> <p><b>Required Revisions:</b> After October 1, 2008, all Local Mitigation Plans approved by FEMA must address repetitive loss structures in the risk assessment by describing the types and estimate the numbers of repetitive loss properties located in identified flood hazard areas.</p> <p><b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 39</b></p> <p><b>Note: This requirement becomes effective for all local plans approved after October 1, 2008.</b></p>	X	
<b>SUMMARY SCORE</b>			X	

### 9. Assessing Vulnerability: Identifying Structures

**Requirement §201.6(c)(2)(ii)(A):** The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area ... .

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe vulnerability in terms of the <b>types and numbers</b> of <b>existing</b> buildings, infrastructure, and critical facilities located in the identified hazard areas?	Sect 5 Pgs 82-89	<p>The plan update provides a chart (Table 5.13) for each jurisdiction that shows the types and numbers of existing buildings, infrastructure and critical facilities located in the hazard areas.</p> <p><b>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</b></p>		X
B. Does the <b>new or updated</b> plan describe vulnerability in terms of the <b>types and numbers</b> of <b>future</b> buildings, infrastructure, and critical facilities located in the identified hazard areas?	Sect 5 Pg 80	<p>The plan update states that none of the municipalities submitted information for future buildings and infrastructure.</p> <p><b>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</b></p>		X

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

SUMMARY SCORE

X

**10. Assessing Vulnerability: Estimating Potential Losses**

**Requirement §201.6(c)(2)(ii)(B):** [The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate ... .

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan estimate <b>potential dollar losses</b> to vulnerable structures?	Sect 5 Pgs 82-89	The plan update provides a chart (Table 5.13) that shows the potential dollar losses to vulnerable structures.  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
B. Does the <b>new or updated</b> plan describe the <b>methodology</b> used to prepare the estimate?	Sect 5 Pgs 78-81	The plan update states that the estimates for the dollar losses were obtained from various departments and agencies through tax and insurance records.  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
<b>SUMMARY SCORE</b>				X

**11. Assessing Vulnerability: Analyzing Development Trends**

**Requirement §201.6(c)(2)(ii)(C):** [The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe land uses and development trends?	Sect 5 Pg 90  An update on the land uses and development trends for Lee County.	The plan update provides information concerning current zoning ordinances from each jurisdiction.  <b>Recommended Revisions:</b> The plan update should provide a general overview of land uses and types of development occurring within each community participating in the plan.  <b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 47-48</b>  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>	X	
<b>SUMMARY SCORE</b>			X	

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### 12. Multi-Jurisdictional Risk Assessment

**Requirement §201.6(c)(2)(iii):** For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?	Sect 5 Pgs 6-8  <b>Element 5a has been revised.</b>	The plan update includes a risk assessment in the form of a table (Table 5.1). The table includes the affected jurisdiction which shows areas of uniqueness.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.		X
<b>SUMMARY SCORE</b>				X

**MITIGATION STRATEGY:** §201.6(c)(3): The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

### 13. Local Hazard Mitigation Goals

**Requirement §201.6(c)(3)(i):** [The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include a description of mitigation <b>goals</b> to reduce or avoid long-term vulnerabilities to the identified hazards?	Sect 6 Pg 3  <b>Required revision concerning goals can be found on page 1 and 3.</b>  <b>Element 5a has been revised.</b>	The plan update provides a range of mitigation goals.  <b>Required Revisions:</b> The plan update has the same goals as the original plan, with an addition of one new goal. It is not necessary to change goals from the previous plan if they remain valid; however, the plan must document that goals were re-evaluated and that they were determined to remain valid and effective.  <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed;	X	

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		<p>therefore, this requirement cannot be met.</p> <p><b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 53</b></p> <p><b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.</p>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**14. Identification and Analysis of Mitigation Actions**

**Requirement §201.6(c)(3)(ii):** [The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan identify and analyze a <b>comprehensive range</b> of specific mitigation actions and projects for each hazard?	<p>Sect 6 Pgs 4-13</p> <p><b>Hazards have been defined in 5A and Section 5.</b></p> <p><b>The actions and projects were updated from the original plan. These can be found in Section 6, pages 4-18 in the table. The new goals are listed in blue. See appendix D for new project listing.</b></p>	<p>The plan update provides a comprehensive range of mitigation actions and projects for each hazard. The plan update has added some new actions and projects in addition to the actions from the original plan.</p> <p><b>Required Revisions:</b> The plan update has the same actions and projects as the original plan. If the mitigation actions or activities remain unchanged from the previously approved plan the updated plan should indicate why changes are not necessary.</p> <p><b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.</p>	<b>X</b>	
B. Do the identified actions and projects address reducing the effects of hazards on <b>new</b> buildings and infrastructure?	<p>Sect 6 Pgs 4-13</p> <p><b>Hazards have been defined in 5A and Section 5.</b></p>	<p>The plan update identifies actions/projects to address the effects on new buildings. An example is:</p> <ul style="list-style-type: none"> <li>Develop and coordinate a list of independent homeowners and/or agencies who wish to have safe room shelters as part of their residence and/or agency.</li> </ul>	<b>X</b>	

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		<b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.		
C. Do the identified actions and projects address reducing the effects of hazards on <b>existing</b> buildings and infrastructure?	Sect 6 Pgs 4-13  <b>Hazards have been defined in 5A and Section 5.</b>	The plan update identifies actions/projects to address the effects on existing buildings. Some examples are: <ul style="list-style-type: none"> <li>• Purchase generators and trailers for lift stations</li> <li>• Identify and implement wind retrofit options/procedures for homes</li> </ul> <b>Required Revision:</b> Since the hazards are not clearly identified in Element 5A, and are inconsistent throughout the document, these disasters cannot be properly assessed; therefore, this requirement cannot be met.	X	
<b>SUMMARY SCORE</b>			X	

**15. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance**

**Requirement: §201.6(c)(3)(ii):** [The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe the jurisdiction (s) participation in the NFIP?	Not addressed  <b>Required revisions were included section 6, Objective 12, Page 16-17.</b>	The plan update does not address the jurisdictions participation in the NFIP.  <b>Required Revisions:</b> The plan update must describe each jurisdiction's participation in the NFIP. The plan update should identify the status of each participating jurisdiction's status in the NFIP.  <i>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 61-62</i>  <i>Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.</i>	X	
B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?	Sect 6 Pgs 4-13	The plan includes actions related to compliance with the NFIP. Some examples are: <ul style="list-style-type: none"> <li>• Develop up-to-date Floodplain Maps for Russell County in digital format by participating in FEMA's</li> </ul>		X



**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		<p>Floodplain Map Modernization Program.</p> <ul style="list-style-type: none"> <li>Continue to acquire and preserve land that is subject to repetitive flooding from landowners who are willing to participate in the program.</li> </ul> <p><i>Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.</i></p>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**16. Implementation of Mitigation Actions**

**Requirement: §201.6(c)(3)(iii):** [The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> mitigation strategy include how the actions are <b>prioritized</b> ? (For example, is there a discussion of the process and criteria used?)	<p>Sect 6 Pgs 4-8</p> <p><b>The required revision were added in Section 6, page 2.</b></p>	<p>The plan update prioritizes each action by low, medium or high.</p> <p><b>Required Revisions:</b> The plan update shall describe the method for prioritizing (low, medium or high) the order in which actions will be implemented.</p> <p><b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 63-64</b></p>	<b>X</b>	
B. Does the <b>new or updated</b> mitigation strategy address how the actions will be implemented and administered, including the responsible department, existing and potential resources and the timeframe to complete each action?	Sect 6 Pgs 4-8	The plan update provides the responsible department, funding sources and timeline to complete the project for each action.		<b>X</b>
C. Does the <b>new or updated</b> prioritization process include an emphasis on the use of a <b>cost-benefit review</b> to maximize benefits?	Sect 6 Pg 14	The plan update states that the mitigation actions with the highest priority were considered the cost effective and achievable. These actions were considered the most cost effective based on various factors.		<b>X</b>
D. Does the <b>updated</b> plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged ( <i>i.e.</i> , deferred), does the updated plan describe why no changes occurred?	<p>Not Addressed</p> <p><b>The required revisions were added in Section 6, pages 4-18. See the table</b></p>	<p>The plan update does not identify which actions from the original plan have been completed, deleted or deferred.</p> <p><b>Required Revisions:</b> The updated plan must identify the completed, deleted or deferred actions from the previously approved plan as a benchmark for progress. If the actions remain unchanged, the updated plan must indicate why</p>	<b>X</b>	

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

	<p><b>heading called progress. The actions were identified as completed, ongoing, deferred, deleted or new goal.</b></p>	<p>changes are not necessary.  <i>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 63-64</i></p>		
<p><b>SUMMARY SCORE</b></p>			<p>X</p>	

## LOCAL MITIGATION PLAN REVIEW CROSSWALK

### 17. Multi-Jurisdictional Mitigation Actions

**Requirement §201.6(c)(3)(iv):** For multi-jurisdictional plans, there **must** be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include identifiable <b>action items</b> for each jurisdiction requesting FEMA approval of the plan?	Sect 6 Pgs 4-13	The plan update states that the identified actions are for all jurisdictions.		X
B. Does the <b>updated</b> plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged ( <i>i.e.</i> , deferred), does the updated plan describe why no changes occurred?	Not Addressed	The plan update does not identify which actions from the original plan have been completed, deleted or deferred.  <b>Required Revisions:</b> The updated plan must identify the completed, deleted or deferred actions from the previously approved plan as a benchmark for progress. If the actions remain unchanged, the updated plan must indicate why changes are not necessary.  <b>Reference: Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008: pg 63-64</b>	X	
<b>SUMMARY SCORE</b>			X	

### PLAN MAINTENANCE PROCESS

### 18. Monitoring, Evaluating, and Updating the Plan

**Requirement §201.6(c)(4)(i):** [The plan maintenance process **shall** include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe the method and schedule for <b>monitoring</b> the plan, including the responsible department?	Sect 7 Pg 2	The plan update states that the Russell County Natural Hazards Mitigation Plan Advisory Committee will be responsible for monitoring the plan.		X
B. Does the <b>new or updated</b> plan describe the method and schedule for <b>evaluating</b> the plan, including how, when and by whom ( <i>i.e.</i> the responsible department)?	Sect 7 Pg 2	The plan update states that the Russell County Natural Hazards Mitigation Plan Advisory Committee will be responsible for evaluating the plan.		X
C. Does the <b>new or updated</b> plan describe the method and schedule for <b>updating</b> the plan within the five-year cycle?	Sect 7 Pg 2	The plan update states that the Russell County Natural Hazards Mitigation Plan Advisory Committee will be		X

**LOCAL MITIGATION PLAN REVIEW CROSSWALK**

		responsible for updating the plan.		
<b>SUMMARY SCORE</b>				<b>X</b>

**19. Incorporation into Existing Planning Mechanisms**

**Requirement §201.6(c)(4)(ii):** [The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan identify other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan?	Sect 7 Pg 4	The plan update identifies other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan		<b>X</b>
B. Does the <b>new or updated</b> plan include a process by which the local government will incorporate the mitigation strategy and other information contained in the plan (e.g., risk assessment) into other planning mechanisms, when appropriate?	Sect 7 Pg 4	The plan update includes a process for incorporating the mitigation strategy into other planning mechanisms.		<b>X</b>
C. Does the <b>updated</b> plan explain how the local government incorporated the mitigation strategy and other information contained in the plan (e.g., risk assessment) into other planning mechanisms, when appropriate?	Sect 7 Pg 4	The plan update explains how the local government incorporated the mitigation strategy into other planning mechanisms.		<b>X</b>
<b>SUMMARY SCORE</b>				<b>X</b>

**Continued Public Involvement**

**Requirement §201.6(c)(4)(iii):** [The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan explain how <b>continued public participation</b> will be obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)	Sect 7 Pg 5	The plan update states how continued public participation will be obtained.		<b>X</b>
<b>SUMMARY SCORE</b>				<b>X</b>

# LOCAL MITIGATION PLAN REVIEW CROSSWALK

## MATRIX A: PROFILING HAZARDS

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the jurisdiction. **Completing the matrix is not required.**

**Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each applicable hazard. An “N” for any element of any identified hazard will result in a “Needs Improvement” score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.**

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Location		B. Extent		C. Previous Occurrences		D. Probability of Future Events	
	Yes	N	S	N	S	N	S	N	S
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To check boxes, double click on the box and change the default value to “checked”

Legend:

§201.6(c)(2)(i) Profiling Hazards

- A. Does the risk assessment identify the location (*i.e.*, geographic area affected) of each hazard addressed in the **new or updated** plan?
- B. Does the risk assessment identify the extent (*i.e.*, magnitude or severity) of each hazard addressed in the **new or updated** plan?
- C. Does the plan provide information on previous occurrences of each natural hazard addressed in the **new or updated** plan?
- D. Does the plan include the probability of future events (*i.e.*, chance of occurrence) for each hazard addressed in the plan?

# LOCAL MITIGATION PLAN REVIEW CROSSWALK

## MATRIX B: ASSESSING VULNERABILITY

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that the new or updated plan addresses each requirement. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each applicable hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk. Note: Receiving an N in the shaded columns will not preclude the plan from passing.*

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Overall Summary Description of Vulnerability				B. Hazard Impact				A. Types and Number of Existing Structures in Hazard Area (Estimate)				B. Types and Number of Future Structures in Hazard Area (Estimate)				A. Loss Estimate				B. Methodology			
	Yes	N		S		N		S		N		S		N		S		N		S		N		S	
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To check boxes, double click on the box and change the default value to "checked"

**Legend:**

§201.6(c)(2)(ii) Assessing Vulnerability: Overview

- A. Does the **new or updated** plan include an overall summary description of the jurisdiction's vulnerability to each hazard?
- B. Does the **new or updated** plan address the impact of each hazard on the jurisdiction?

- B. Does the **new or updated** plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(A) Assessing Vulnerability: Identifying Structures

- A. Does the **new or updated** plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(B) Assessing Vulnerability: Estimating Potential Losses

- A. Does the **new or updated** plan estimate potential dollar losses to vulnerable structures?
- B. Does the **new or updated** plan describe the methodology used to prepare the estimate?

# LOCAL MITIGATION PLAN REVIEW CROSSWALK

## MATRIX C: IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure consideration of a range of actions for each hazard. **Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each **applicable** hazard. An “N” for any identified hazard will result in a “Needs Improvement” score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Comprehensive Range of Actions and Projects	
	Yes	N	S
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tornado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*To check boxes, double click on the box and change the default value to “checked”*

**Legend:**

§201.6(c)(3)(ii) Identification and Analysis of Mitigation Actions

A. Does the **new or updated** plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?

**LEE COUNTY, ALABAMA  
NATURAL HAZARDS MITIGATION PLAN**



Snow at Auburn University Campus – Spring 2009

**Summer 2009**

**SPONSORING AGENCY  
LEE COUNTY EMERGENCY MANAGEMENT AGENCY**

**PREPARED BY  
LEE-RUSSELL COUNCIL OF GOVERNMENTS  
2207 GATEWAY DRIVE  
OPELIKA, AL 36801  
334.749.5264  
[www.lrcog.com](http://www.lrcog.com)**



**LEE COUNTY, ALABAMA  
NATURAL HAZARDS MITIGATION PLAN**



Snow at Auburn University Campus – Spring 2009

**FEBRUARY 2010**

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# TABLE OF CONTENTS

## Acknowledgements

### Section 1: Lee County Natural Hazards Mitigation Plan

#### Adoption Resolutions

1.1	Sample Resolution	1
1.2	Lee County	2
1.3	City of Auburn	3
1.4	City of Opelika	4
1.5	City of Smiths Station	5
1.6	Town of Loachapoka	6
1.7	Auburn University	7

### Section 2: Purpose of the Lee County Natural Hazards Mitigation Plan

2.1	Overview	1
2.2	Hazard Mitigation Defined	1
2.3	Purpose of Hazard Mitigation Planning	1
2.4	Requirement of the Disaster Mitigation Act of 2000 (DMA 200)	2
2.5	Phases of the Lee County Natural Hazards Mitigation Plan	2

### Section 3: Community Profile

3.1	Physical Environment	1
3.2	Population Characteristics	2
3.3	Income and Poverty	6
3.4	Economy	6
3.5	Infrastructure	7

### Section 4: Planning Process

4.1	Section Overview and Plan Revisions	1
4.2	Agency Coordination in the Planning Process	1
4.3	Public Participation into the Planning Process	5
4.4	Integration with other Planning Efforts	5

### Section 5: Risk Assessment

5.1	Section Overview and Plan Revisions	1
5.2	Identifying Hazards	3
5.2	Profiling Hazard Events	9
5.4	Assessing Vulnerability: Overview	49
5.5	Assessing Vulnerability: Identifying Assets and Estimating Potential Dollar Losses	49
5.6	Assessing Vulnerability: Analyzing Development Trends	65

<b>Section 6:</b>	<b>Mitigation Strategy</b>	
6.1	Section Overview and Plan Revisions	1
6.2	Overview of the Mitigation Strategy Methodology	2
6.3	Natural Hazards Mitigation Plan Mission Statement	3
6.4	Natural Hazards Mitigation Plan Goals	3
6.5	Natural Hazards Mitigation Plan Objectives and Actions	4
<b>Section 7:</b>	<b>Plan Maintenance Procedure</b>	
7.1	Section Overview and Plan Revisions	1
7.2	Monitoring, Evaluating, and Updating the Plan	3
7.3	Implementation through Existing Programs	4
7.4	Continued Public Participation	4
<b>Appendix A:</b>	<b>Lee County Natural Hazards Mitigation Planning and Working Committees Membership List</b>	<b>A-1</b>
<b>Appendix B:</b>	<b>Contact List for the Lee County Natural Hazards Mitigation Plan</b>	<b>B-1</b>
<b>Appendix C:</b>	<b>Critical Facilities List &amp; Additional Information</b>	<b>C-1</b>
<b>Appendix D:</b>	<b>Project Listings</b>	<b>D-1</b>
<b>Appendix E:</b>	<b>CEDS</b>	<b>E-1</b>
<b>Appendix F:</b>	<b>Lee County Weather History</b>	<b>F-1</b>

## ACKNOWLEDGEMENTS

### LEE COUNTY NATURAL HAZARDS MITIGATION PLAN COMMITTEES LIST (2007-2009)



#### Lee County Natural Hazards Mitigation Planning Committee

Note: Committee at Large to receive notices for all general meetings

- Alabama, State of - Area Coordinator Alabama Emergency Management Agency and/or delegate
- Alabama, State of - State Troopers Lee County Post Delegate
- Alabama, State of - Warning Coordinator for the National Weather Service and/or delegate
- Alagasco - Delegate
- Auburn, City of - Auburn City Council Representative
- Auburn, City of - City Manager, Assistant City Manager(s) and/or delegate
- Auburn, City of - Deputy Public Safety Director for Fire Protection (a.k.a. Fire Chief), Auburn Fire Department and/or delegate
- Auburn, City of - Director of Auburn Water Works and/or delegate
- Auburn, City of - Director of Public Works and/or delegate
- Auburn, City of - Director of Planning and Community Development and/or delegate
- Auburn, City of - Mayor and/or delegate
- Auburn, City of - Superintendent, Auburn City Schools and/or delegate
- Auburn University - Associate Provost for Facilities and/or delegate
- Auburn University - Chancellor / President and/or delegate
- Auburn University - Delegate from Risk Management
- Auburn University - Department of Public Safety & Security / Emergency Management and/or delegate
- Auburn University - Department of Public Safety and Security and/or delegate
- Auburn University - Director of Fire Management and/or delegate
- Beauregard Water Authority - Director and/or delegate
- Dixie Electric Cooperative - Delegate
- East Alabama Medical Center - Delegate from Risk Management and/or delegate
- Lee-Chambers Utilities District - Delegate
- Lee County - County Administrator / Deputy Administrator and/or delegate
- Lee County - County Building Inspector and/or delegate
- Lee County - County Extension Coordinator, Lee County Extension Service
- Lee County - County Forestry Supervisor, Alabama Forestry Commission and/or delegate
- Lee County - Deputy Director of Lee County Emergency Management Agency
- Lee County - Director of Lee County Emergency Management Agency
- Lee County - E911 Representative and/or delegate
- Lee County - Engineer, Lee County Highway Department
- Lee County - Environmental Services Department Delegate
- Lee County - Lee County Commission Chair and/or delegate

- Lee County - Lee County Commission Representative
- Lee County - Lee County Jones Detention Center Delegate
- Lee County - Planner(s) at Lee County Emergency Management Agency
- Lee County - Revenue Commissioner and/or delegate from Tax Assessor's Office
- Lee County - Sheriff and/or delegate
- Lee County - Superintendant Lee County Schools and/or delegate
- Lee County - T.K. Davis Justice Center Delegate
- Lee County Volunteer Firefighter's Association m – Delegate
- Lee-Russell Council of Governments - Director of Planning and Economic Development
- Lee-Russell Council of Governments - Planning and Economic Development Specialist
- Loachapoka, Town of - Mayor and/or delegate
- Loachapoka Water Authority - Delegate
- Opelika, City of - Assistant Director of Opelika Water Works and/or delegate
- Opelika, City of - Chief, Opelika Fire Department and/or delegate
- Opelika, City of - Chief, Opelika Police Department and/or delegate
- Opelika, City of - City Manager and/or delegate
- Opelika, City of - Director of Engineering and/or delegate
- Opelika, City of - Director, Opelika Water Works and/or delegate
- Opelika, City of - Director, Planning Department and/or delegate
- Opelika, City of – Director, Public Works and/or delegate
- Opelika, City of - Mayor and/or delegate
- Opelika, City of - Solid Waste Division Delegate
- Opelika, City of - Superintendant of Opelika City Schools and/or delegate
- Smiths Station, City of - City Clerk
- Smiths Station, City of - Mayor and/or delegate
- Smiths Station Water - Director and/or delegate
- Southern Union State Community College - Delegate
- Tallapoosa River Electric Cooperative - Delegate

## **Lee County Natural Hazards Mitigation Working Committee**

- Alabama, State of - Warning Coordinator for the National Weather Service and/or delegate
- Auburn, City of - City Manager, Assistant City Manager(s) and/or delegate
- Auburn, City of - Deputy Public Safety Director for Fire Protection (a.k.a. Fire Chief), Auburn Fire Department and/or delegate
- Auburn, City of - Director of Public Works and/or delegate
- Auburn, City of - Director of Planning and Community Development and/or delegate
- Auburn University - Department of Public Safety & Security / Emergency Management and/or delegate
- Auburn University - Department of Public Safety and Security and/or delegate
- East Alabama Medical Center - Delegate from Risk Management and/or delegate
- Lee County - County Administrator / Deputy Administrator and/or delegate
- Lee County - County Building Inspector and/or delegate
- Lee County - County Extension Coordinator, Lee County Extension Service
- Lee County - County Forestry Supervisor, Alabama Forestry Commission and/or delegate
- Lee County - Deputy Director of Lee County Emergency Management Agency
- Lee County - Director of Lee County Emergency Management Agency
- Lee County - Engineer, Lee County Highway Department
- Lee County - Planner(s) at Lee County Emergency Management Agency
- Lee County - Sheriff and/or delegate

- Lee County Volunteer Firefighter's Association - Delegate
- Lee-Russell Council of Governments - Planning and Economic Development Specialist
- Loachapoka, Town of - Mayor and/or delegate
- Opelika, City of - Chief, Opelika Fire Department and/or delegate
- Opelika, City of - Chief, Opelika Police Department and/or delegate
- Opelika, City of - City Manager and/or delegate
- Opelika, City of – Director, Public Works and/or delegate
- Smiths Station, City of - City Clerk

### **Project Sponsor**

Lee County Emergency Management Agency

### **Plan Preparation**

Lee-Russell Council of Governments

### **Represented Jurisdictions**

**Auburn, City of**

**Auburn University**

**Lee, County of**

**Loachapoka, Town of**

**Opelika, City of**

**Smiths Station, Town of**

Note: Positions may be represented by designated job title or by delegate. Also, according to jurisdiction, one position may represent one or more departments.

**SECTION 1:  
LEE COUNTY NATURAL HAZARDS MITIGATION PLAN  
ADOPTION RESOLUTIONS**

**Sample**

Whereas (insert community name), Alabama has experienced repetitive disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges dividing the community both physically and emotionally, and presented general public health and safety concerns; and

Whereas the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

Whereas the *Lee County Natural Hazards Mitigation Plan* has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

Now, therefore, be it resolved that:

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of the (insert community name).
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Emergency Management Agency shall designate its members, subject to the approval of (insert community governing body). They shall serve two-year terms. The group's duties shall be as designated in the *Lee County Natural Hazards Mitigation Plan*.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the (insert community governing body) or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*.
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly as needed. The advisory committee shall monitor implementation of the plan and shall submit a yearly written progress report to (insert community governing body) in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects or revised action items. Such recommendations shall be subject to approval by this (insert community governing body).

**Passed this \_\_\_\_\_ day of (date).**

RECEIVED OCT 07 2009

RESOLUTION NO. 09-193

WHEREAS, the City of Auburn, Alabama, along with the cities of Opelika and Loachapoka and Auburn University approved and adopted the *Lee County Natural Hazards Mitigation Plan* on August 16, 2005; and

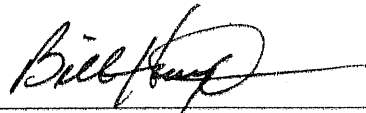
WHEREAS, the *Plan* has recently been revised to develop new or improved mitigating strategies and maintenance procedures that will help the community prepare for potential natural hazards and reduce the risks to life and property; and

WHEREAS, the City of Auburn has added the following projects to its list of mitigation projects: Safe Room/Community Shelter at 171 North Ross Street Project, Gay Street at Railroad Crossing Drainage Project, Cured in Place Pipe Project to Improve Drainage off Wright Street, Additional Warning Sirens Project at specific locations in Auburn, and Infrastructure Mapping Project.

WHEREAS, it is necessary for the community to approve and adopt the revised *Lee County Natural Hazards Mitigation Plan*.

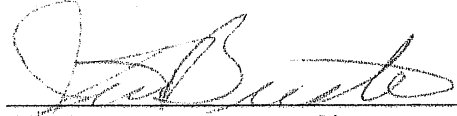
NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Auburn, Alabama, hereby approves and adopts the revised *Lee County Natural Hazards Mitigation Plan* as the official plan of the City of Auburn.

ADOPTED AND APPROVED by the City Council of the City of Auburn, Alabama, this the 15<sup>th</sup> day of September 2009.

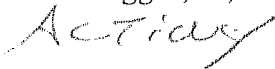


Bill Ham, Jr., Mayor

ATTEST:



Charles M. Duggan, Jr., City Manager





**WHEREAS**, Lee County, Alabama has experienced repetitive disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges dividing the community both physically and emotionally, and presented general public health and safety concerns; and

**WHEREAS**, the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

**WHEREAS**, the *Lee County Natural Hazards Mitigation Plan* has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

**NOW, THEREFORE, BE IT RESOLVED THAT:**

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of Lee County.
2. The Lee County National Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Emergency Management Agency shall designate its members, subject to the approval of Lee County Commission. They shall serve two-year terms. The group's duties shall be as designated in the *Lee County Natural Hazards Mitigation Plan*.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the Lee County Commission or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*.
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly or as needed. The advisory committee shall monitor implementation of the plan and shall submit a yearly written progress report to the Lee County Commission in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendation for new projects or revised action items. Such recommendations shall be subject to approval by the Lee County Commission.

**ADOPTED AND APPROVED** by the Lee County Commission, this 14<sup>th</sup> day of September 2009.

*Alice M. Hodges*  
Attest:

*Bill English*  
\_\_\_\_\_  
Bill English, Chairman



**A RESOLUTION FOR THE CITY OF SMITHS STATION, ALABAMA  
TO ADOPT THE LEE COUNTY NATURAL HAZARDS MITIGATION  
PLAN.**

Whereas the City of Smiths Station, Alabama has experienced repetitive disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges dividing the community both physically and emotionally, and presented general public health and safety concerns; and

Whereas the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

Whereas the *Lee County Natural Hazards Mitigation Plan* has been put out for review by community stakeholders, first responders, elected officials and citizens and has been revised to reflect their concerns;

**Now, therefore, be it resolved that:**

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of the City of Smiths Station, Alabama.
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Emergency Management Agency shall designate its members, subject to the approval of the Smiths Station City Council.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the City of Smith Stations or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*:
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly or as needed. The advisory committee shall monitor implementation of the plan and shall submit a updates as warranted to the City of Smiths Station in accordance with the following format:

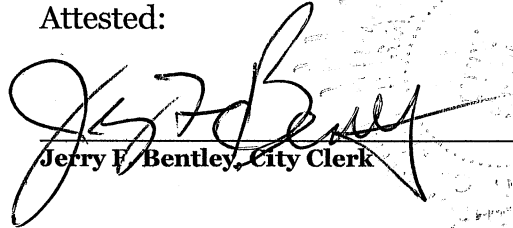
## RESOLUTION 2009-160

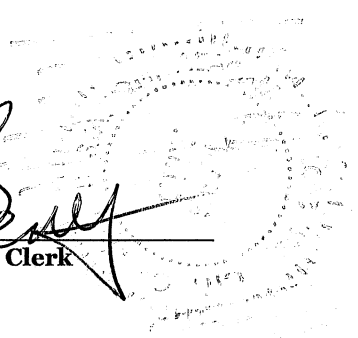
- a. A review of the original plan.
- b. A review of any disasters or emergencies that occurred during the previous calendar year.
- c. A review of the actions taken, including what was accomplished during the previous year.
- d. A discussion of any implementation problems.
- e. Recommendations for new projects or revised action items. Such recommendations shall be subject to approval by the City of Smiths Station

**PASSED, ADOPTED, AND APPROVED this 25<sup>th</sup> day of August, 2009.**

  
Mayor LaFaye Dellinger

Attested:

  
Jerry F. Bentley, City Clerk



# CITY OF SMITHS STATION

P. O. BOX 250

Smiths Station, Alabama 36877

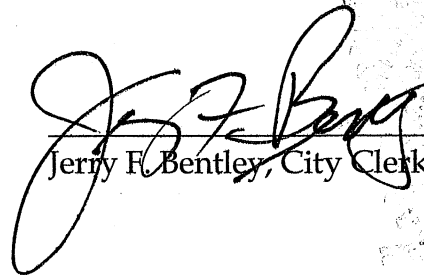
## Resolution 2009-160

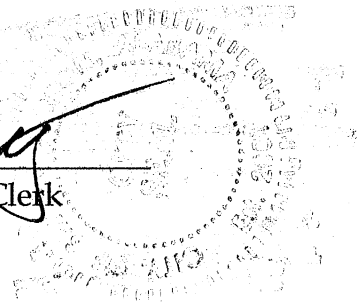
### CERTIFICATION

I, Jerry F. Bentley, City Clerk of the City of Smiths Station, Alabama hereby certify the attached to be a true and correct copy of the resolution adopted by the City Council of Smiths Station, Alabama at the regular meeting held **August 25, 2009** as same appears in minutes of record of said meeting, and published by posting copies thereof on **August 28, 2009** at the public places listed below, which copies remained posted for five business days (through **September 04, 2009**).

City Hall                    2336 Lee Road 430  
Piggly Wiggly            2461 Lee Road 430  
Terry's Grocery,        9309 Lee Road 246,  
U.S. Post Office,        2720 Lee Road 430,

Smiths Station, AL 36877  
Smiths Station, AL 36877  
Smiths Station, AL 36877  
Smiths Station, AL 36877

  
Jerry F. Bentley, City Clerk



**LEE COUNTY NATURAL HAZARDS MITIGATION PLAN  
ADOPTION UPDATES - CITY OF OPELIKA**

WHEREAS, the City of Opelika, Alabama has experienced repetitive disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges dividing the community both physically and emotionally, and presented general public health and safety concerns; and

WHEREAS, the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

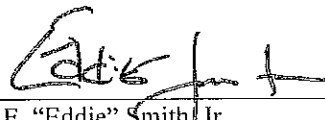
WHEREAS, the *Lee County Natural Hazards Mitigation Plan* has been put out for review by community stakeholders, first responders, elected officials and citizens and has been revised to reflect their concerns;

WHEREAS, the Lee County Natural Hazards Mitigation Plan was first adopted by the City of Opelika in 2004 and has now been updated.

Now, therefore, be it resolved that:

1. The *Lee County Natural Hazards Mitigation Plan* as updated is hereby adopted as an official plan of the City of Opelika, Alabama.
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Emergency Management Agency shall designate its members, subject to the approval of the Opelika City Council.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the Lee County Commission or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*:
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly or as needed. The advisory committee shall monitor implementation of the plan and shall submit updates as warranted to the City of Opelika in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects or revised action items. Such recommendations shall be subject to approval by the Opelika City Council.

ADOPTED, AND APPROVED this 6<sup>th</sup> day of October 2009.

  
 \_\_\_\_\_  
 C. E. "Eddie" Smith Jr.  
 President of the City Council  
 Opelika, Alabama

ATTEST:

  
 \_\_\_\_\_  
 City Clerk - Treasurer

## **SECTION 2: PURPOSE OF THE LEE COUNTY NATURAL HAZARDS MITIGATION PLAN**

### **2.1 Section Overview**

Natural hazards impact the lives, property, environment, and economy of the residents who live and work in the City of Auburn, City of Opelika, Lee County, Town of Loachapoka, City of Smiths Station and Auburn University. When a natural hazard such as a wildfire, tornado, hail, flood, sinkhole or severe storm affects an area, it can leave behind devastation that negatively impacts the emotional and financial welfare of the community. It is inevitable that natural hazards will occur. However, we are left with the unanswered question of when it will occur and to what degree. In order to be proactive, communities must develop strategies to mitigate these hazards and the potential damage that they bring. A hazard mitigation strategy provides communities with a blueprint of how they can reduce risk and prevent losses from a natural hazard. Hazard mitigation is an effective tool for protecting the lives and property of residents and communities.

### **2.2 Hazard Mitigation Defined**

Hazard Mitigation is defined as any sustained effort that is implemented to reduce or eliminate long-term risk to life and property that results from a hazard event. Hazard mitigation, also known as prevention, promotes the reduction of hazard vulnerability. The goal of mitigation is to save lives and reduce property damage. Well planned hazard mitigation can reduce the enormous cost of disasters to property owners and the community. Additionally, hazard mitigation can protect critical community facilities, decrease exposure to liability, and minimize community disruption. Examples of mitigation strategies that reduce or prevent loss include land use planning, educational programs, acquisition and relocation of homes away from floodplains.

### **2.3 Purpose of Hazard Mitigation Planning**

The primary goal of hazard mitigation planning is to identify community goals, actions, and strategies for implementation that result in decreasing the risk and the potential for future losses in the community. This planning is accomplished by using a systematic process of identifying the hazards that can affect each jurisdiction, developing clear goals, identifying appropriate actions, implementing an effective mitigation strategy, and maintaining and updating the plan. Mitigation planning can produce an environment that results in the coordination of activities and partnerships with agencies that will not only reduce a jurisdiction's hazard vulnerability, but will allow the community to meet other planning needs as well.

## **2.4 Requirements of the Disaster Mitigation Act of 2000 (DMA 2000)**

The Lee County Natural Hazards Mitigation Plan was developed as a result of the Disaster Mitigation Act of 2000 (DMA 2000). In the past, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The DMA 2000 is the latest legislation to improve this planning process and was put into effect on October 10, 2000, when the President signed the Act (Public Law 106-390). The new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. As such, this Act establishes a pre-disaster hazard mitigation program and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP).

Section 322 of the Act specifically addresses mitigation planning at the state and local levels. It identifies new requirements that allow HMGP funds to be used for planning activities, and increases the amount of HMGP funds available to states that have developed a comprehensive, enhanced mitigation plan prior to a disaster. States and communities must have an approved mitigation plan by November 2004 in order to receiving post-disaster HMGP funds. Local plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.

The Disaster Mitigation Act of 2000 is intended to facilitate cooperation between state and local authorities, promoting collaboration among them. It encourages and rewards local and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network will better enable local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

## **2.5 Phases of the Lee County Natural Hazards Mitigation Plan**

Based on the minimum standards required by Federal Emergency Management Agency, the following phases will be followed in developing the Lee County Natural Hazards Mitigation Plan:

### **Phase 1: Planning Process**

The plan must document open public involvement in the planning process. This includes opportunities for the public to comment on the plan at all stages of its formation, and the involvement of any neighboring communities, interested agencies, or private and non-profit organizations. The planning process should also include a review of any existing plans or studies and incorporation of these if appropriate. This phase will document the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved.

### **Phase 2: Risk Assessment**

Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. This includes a detailed description of all the natural hazards that could affect the jurisdictions of City of Auburn, City of Opelika, Lee County, Town of Loachapoka, City of Smiths Station, and

Auburn University along with an analysis of the jurisdictions' vulnerability to those hazards. Specific information about numbers and type of structures, potential dollar losses, and overall description of land use trends in the jurisdictions are also included in this section. For multi-jurisdictional plans, any risk that affects only certain sections of the planning areas must be addressed separately in the context of the affected area.

### **Phase 3: Mitigation Strategy**

The plan must include a natural hazards mitigation strategy that provides the jurisdiction's outline for reducing potential losses identified in the risk assessment based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools. This entails the development of goals from which specific actions are derived.

### **Phase 4: Plan Maintenance Procedures**

This phase must document the formal maintenance process to take place to ensure that the natural hazards mitigation plan remains an active and pertinent document. The plan maintenance process includes a schedule for monitoring and evaluating the plan at least every five years and continued public participation throughout the plan maintenance process. This phase should also include an explanation of how local governments intend to incorporate their mitigation strategies into any existing planning mechanisms they have, such as comprehensive or capital improvement plans, or zoning and building codes. Plan maintenance shall also allow for addition or subtraction of projects as municipalities find need. Additionally it has been determined that projects shall property and jurisdictions, thus eliminating the need to move projects from one jurisdiction to another and annexing happens or boundaries change.



## SECTION 3: COMMUNITY PROFILE

### 3.1 Physical Environment

Lee County is located in East Central Alabama along the Chattahoochee River, which is also the western boundary of the State of Georgia. Lee County occupies 608 of the 50,744 square miles in Alabama. Of the 608 square miles in Lee County, 39 are within the city limits of Auburn, 52 are in the City of Opelika, and the remaining 516 are in the unincorporated areas of the county to include the Town of Loachapoka and the City of Smiths Station.

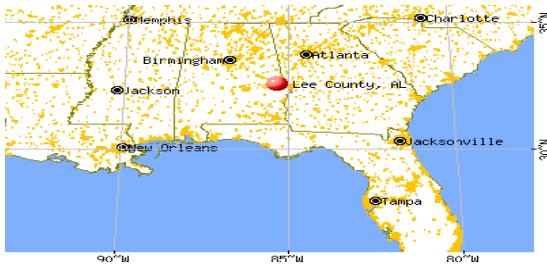
The County is bordered by Chambers, Tallapoosa, Macon, and Russell counties in Alabama and Harris and Muscogee counties in Georgia. The County is located along Interstate I-85 between Atlanta and Montgomery, only thirty minutes from Columbus, GA, two hours from the Atlanta International Airport, two hours from Birmingham, and four hours from Mobile and the Gulf Coast.

The terrain in the northern portion of the region is Piedmont Plateau characterized by hilly topography with gentle to steep slopes. The terrain for the southern portion is Coastal Plain which is level to gently rolling. Types of soil follow the same line across the region as does terrain with rocky, clay soil to the north and sandy soil to the south.

Many large creek systems form watersheds in the region. The western areas are drained by the Saugahatchee and Chewacla creeks as they flow to the Tallapoosa River. The creeks in the eastern areas, Little Uchee, Halawakee, and Wacoochee, flow to the Chattahoochee River.

The climate is characterized by short, mild winters and long, moderately warm summers. The growing season is 230 to 240 days long. The annual mean temperature is near 65 degrees. The region rises from 250 feet above sea level in Russell County to approximately 700 feet above sea level in Lee County. The average annual precipitation is about 55 inches.

The natural resources of the region include water, forestry, clays, and sand and gravel. The network of creeks, the many lakes, and the Chattahoochee River make the area desirable for both industry and tourism.



### 3.2 Population Characteristics

According to the Alabama State Data Center, in 2007 the population of Lee County was estimated to be 130,516. Lee County ranks as the 8<sup>th</sup> most populous county in Alabama. Between 1990 and 2000, the population of Lee County increased by 32.1%. Over the next 10 years the rate of growth is projected to be 19%. By 2010, the population in Lee County is projected to reach 141,303. By 2015, the population is projected at 154,474. By 2025 the population should be nearly 180,000. Migration data from 2000-2006 shows a gain in Lee County of 10,689 due to in-migration and natural increases.

The major population areas of Lee County are in the cities of Auburn, Opelika and Smith's Station. Sixty-seven percent of the counties' population resides in these 3 cities. Thirty-three percent reside in the rural and/or unincorporated areas of the county. The population change between 2000 and 2007 for the City of Auburn ranked third among places in Alabama. Auburn gained 9,577 citizens. The County Seat, Opelika, gained 1,442 citizens and ranked thirtieth among Alabama places.

**Table 3.1: Total Population of Lee County, 1970-2010**

	1970	1980	1990	2000	2010*
<b>Lee</b>	61,268	76,283	87,146	115,092	141,303

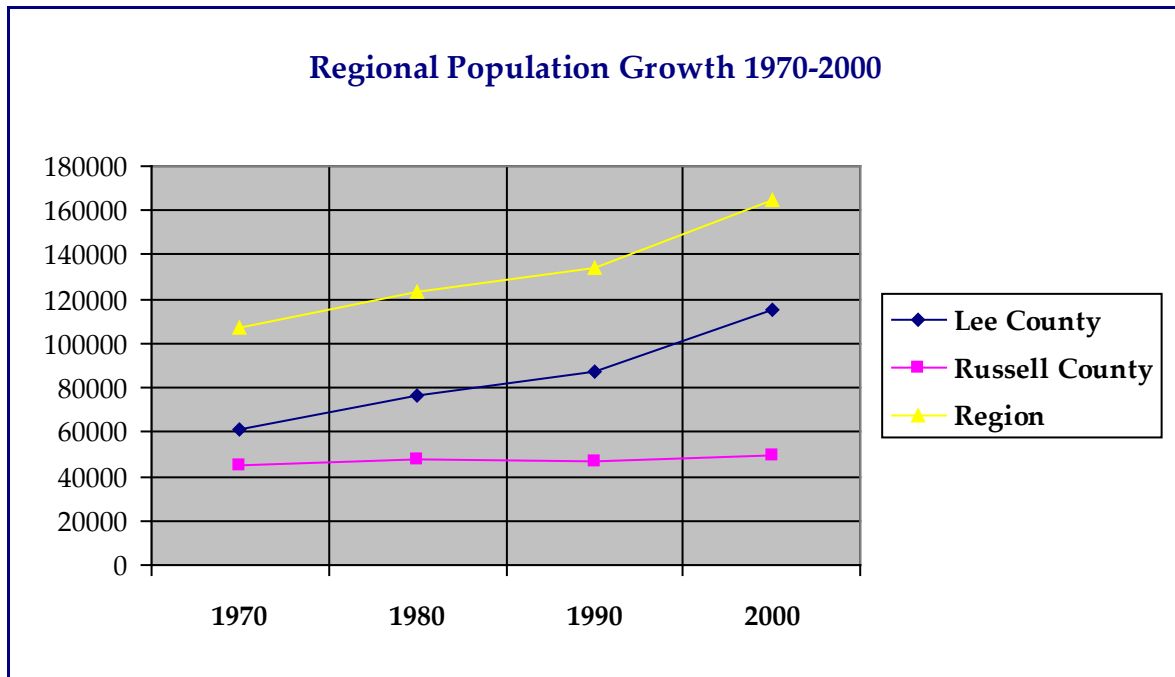
**Table 3.2: Population Growth – Lee County 2000-2006**

Annual Estimates of the Population for Places of Alabama									
	As of April 1, 2000:		Estimates for July 1:						
	Census 2000	Estimates Base 2000*	2000	2001	2002	2003	2004	2005	2006
<b>Alabama</b>	4,447,100	4,447,351	4,452,375	4,466,618	4,477,571	4,495,089	4,517,442	4,548,327	4,599,030
<b>Lee County</b>	115,092	115,092	115,426	116,419	117,500	118,873	120,326	123,122	125,781
Auburn city	42,987	43,736	43,938	44,596	45,900	47,299	48,725	50,277	51,906
Loachapoka town	165	165	165	165	165	163	162	162	162
Notasulga town (pt.)	27	27	27	27	27	27	27	27	27
Opelika city	23,498	24,288	24,310	24,308	24,235	24,207	24,062	24,413	24,563
Phenix City city (pt.)	1,980	1,974	1,993	2,057	2,102	2,126	2,180	2,282	2,357
Smiths Station city	X	4,508	4,513	4,517	4,497	4,446	4,430	4,471	4,504
Waverly town (pt.)	47	47	47	47	47	46	46	46	46
Balance of Lee County	46,388	40,347	40,433	40,702	40,527	40,559	40,694	41,444	42,216

**Table 3.3: Lee County Population Growth, 1990-2000**

2000 Population	1990 Population	Percent Change
48,607	31,194	56%

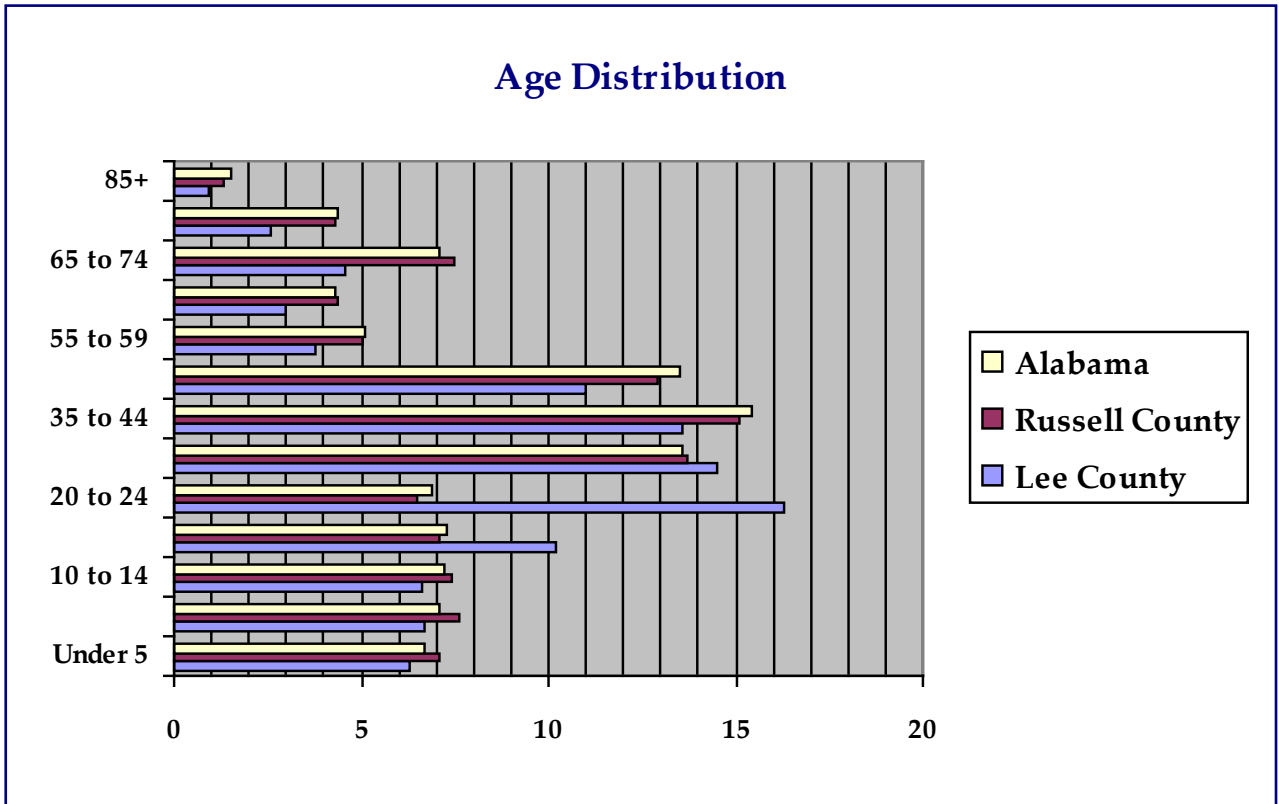
**Chart 3.1: Regional Growth 1970-2000**



Lee County's location along the I-85 corridor, proximity to Atlanta, the role of Auburn University, the quality of life, and good public schools all point to continued growth in the next decade, with a 23% increase in population projected by 2010 (Center for Business and Economic Research, University of Alabama, 2001). The projection would result in an increase in total population from 115,092 in 2000 to 141,303 in 2010. Planning for the expected growth has become an important concern for elected officials, community leaders, and residents.

Chart 3.2 shows the distribution of the population by age. Age distribution can be an indicator of a county with an increasing or declining population. In 2006, the median age in Lee County is estimated at 29.2. In Russell County the median age is significantly higher at 37.4. Age distribution within the region shows the highest percentage of the population (29%) falls into the 25-44 age range. Twenty-one percent of the population is between the ages of 45 and 64. The large student population of Auburn University has a significant effect on the 21% of the region's population between the ages of 15 and 24.

**Chart 3.2: Ages of Population, 2005**



**Senior Citizens as a Percentage of the Population**

In 2006, the US Census Bureau estimated there were 10,746 individuals over the age of 65 in Lee County and 6,541 individuals over the age of 65 in Russell County. Portions of the region, especially the cities of Auburn and Opelika, are increasingly seen as desirable locations for retirement. Projections from the Alabama State Data center show the elderly population of Lee County growing to 22,418 by 2025. The elderly population in Russell County is expected to increase to 9,135.

**Expected Impacts of Growth at Fort Benning and Expansion of Automotive Industry**

Population growth estimates and projections from the Census Bureau and Alabama State Data Center are based on past growth. Since the 2000 Census, two important economic development situations have arisen in the region that could potentially affect population growth.

The I-85 corridor has become a hot spot for the location of automobile manufacturers and tier one automotive suppliers. Hyundai is located in Montgomery, Alabama, 50 miles west of the region. KIA is constructing a massive automotive plant in West Point, GA, 25

miles northeast of the region. KIA is expected to bring 2,500 new jobs to Georgia and Alabama. The automotive suppliers are expected to bring in an additional 3,000 jobs.

Fort Benning, located in west Georgia and east Alabama, will be profoundly impacted by BRAC realignment. The projected population growth, of military personnel, DoD civilian and contract company personnel and their families assigned to Fort Benning will total nearly 30,000 when BRAC implementation is complete. Seventy-five percent of the population growth associated with BRAC is expected to occur in Muscogee County, Georgia. The other 25% will be spread across adjacent counties in Georgia and Alabama.

Lee and Russell Counties in East Central Alabama are adjacent to Muscogee County Georgia and Fort Benning. Statistics from Fort Benning tell us that historically 8% of military personnel live off post in Alabama and 19% of the civilian workers at Fort Benning reside in Alabama. Applying historical data to the projected BRAC growth statistics reveals that Lee and Russell Counties could reasonably expect growth of 1,030 family units between 2009 and 2011.

## **Transportation**

The region is bisected by Interstate 85 and lies midway between the capital cities of both Alabama and Georgia. Atlanta, Georgia is one hour northeast. Montgomery, Alabama is 45 minutes to the west. The region is also convenient to Birmingham, the largest metropolitan area in Alabama, which is located 90 minutes northwest via state Hwy 280. There are 984 miles of paved roads and 424 miles of unpaved roads in the region. Maintenance of unpaved roads is a concern for both county commissions.

The Robert J. Pitts airport in Auburn provides services to private planes and corporate jets. A new terminal is planned for Robert J. Pitts. The Columbus Metropolitan Airport has daily connector flights to Atlanta's Hartsfield-Jackson Airport. Rail freight service is provided by the Norfolk Southern and Seaboard Railroads.

Public transportation is seen as an area of weakness for the region. Public transportation is provided by a public transit system, Lee-Russell Public Transit (LRPT) and Auburn University operates Tiger Transit. There are taxi services and a variety of not-for-profit agencies that shuttle their clients to and from their homes to appointments. Transportation is difficult or impossible to access in the highly populated urban areas of the region at night or on the week-ends. In rural areas of the region, demand-response services are available only on certain days of the week and require riders to wait as long as 2 hours for return trips.



## Housing

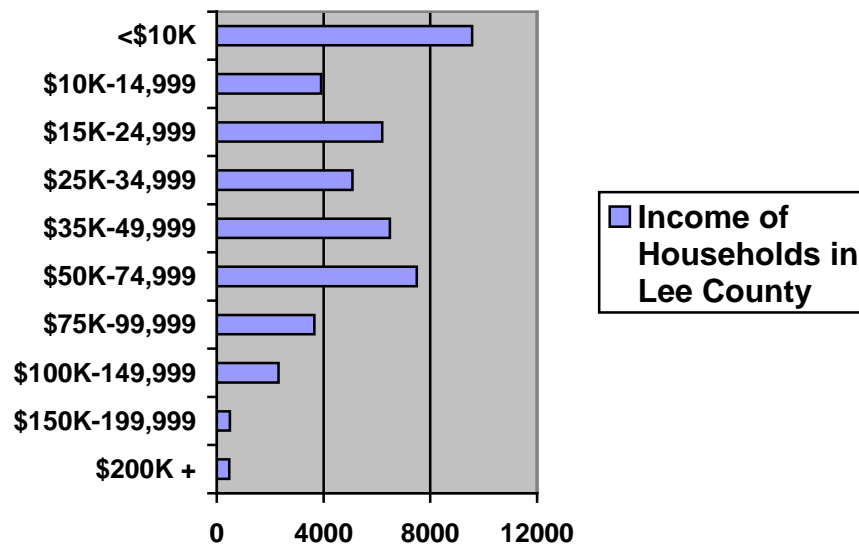
Housing is a basic necessity of life. An adequate supply of affordable housing available for rent or purchase is necessary to attract and retain business.

The age of the housing stock in the region compares favorably to the age of housing stock across the country. Both Lee and Russell counties have a lower percentage of houses built prior to 1970 than the national percentage of 48.7%. Additionally, 20.2% of the housing in Russell County and 34.5% of the housing in Lee County has been built since 1990.

### 3.3 Income and Poverty

The median income in Lee County is \$30,952, slightly less than the state average of \$34,125. Chart 3.4 shows the distribution of the county's income by the number of households. Twenty-two percent of the population is below poverty level, according to Census 2000 data.

**Chart 3.3: Distribution of Incomes in Lee County by Number of Households**



### 3.4 Economy

The largest employer in Lee County is Auburn University, which employs about 5,000 people. Other large employers include Uniroyal Goodrich-Tire Manufacturing, 1,700 employees; the East Alabama Medical Center (EAMC), 1,600 employees; and a textile producer, West Point Stevens, 1,500. The County has strong leadership in economic development by elected officials, economic development departments, and other leaders who support industrial growth in the region. The City of Opelika has four industrial parks. Orr and W.C. Davis are privately owned parks. The future growth of the area will

take place in the other two parks: Fox Run Industrial Park and the Northeast Opelika Industrial Park. While, the City of Auburn currently has three industrial parks: Auburn Industrial Parks I and II, Auburn Technology Park South and Auburn Technology Park North.

### **3.5 Infrastructure**

#### **Water**

Water service in Lee County is presently provided by two municipal public water systems and four (4) rural public water authorities. The two city systems, Auburn City Water Works and the Opelika Water Board, serve approximately 57% of the county's total population.

The remaining water systems of Lee County include the Beauregard Water System, Lee-Chambers Utilities District, Loachapoka Water Authority, and Smiths Station Water System. The water systems collectively serve approximately 107,035 persons, leaving 8,056 persons or 7% in Lee County unserved by a public organized system.

These water boards have been meeting as a group for the past two years to plan for future water needs in Lee County. A recent study by the group shows that the total costs involved in bringing water to 100% of residents in Lee County would be \$4.5 million dollars.

The households with no access to potable water are in the outer edges of the Auburn and Opelika city limits, some in Smiths Station, and in other parts of the unincorporated areas of the county. The rural water authorities communicate regularly with the residents of these unserved areas and monitor their needs. The rural water authorities are expanding their systems when feasible and are effectively meeting the needs of the residents in rural Lee County.

In Lee County, the principal source of water for the Opelika system is Saugahatchee Lake, while Auburn's primary source is Lake Ogletree. About 10% of Auburn's water comes from Lake Harding. According to Tony Segrest, with Auburn Water Works the most critical water issue for Lee County is simply the availability of water in the coming years. Segrest says that watershed protection efforts will be vital to protect the available water sources. Informing the public about prevention of non-point source pollution is also needed to protect the existing water supply.

One stream in Lee County is currently listed on the Alabama Department of Environmental Management's 303D impaired waters list. Moores Mill Creek is listed as impaired due to eroded sediment from rainwater runoff and land development. As sediment builds up and covers the bottom layer of the streams, aquatic plants and animals are smothered, and the water becomes unpleasant for drinking, swimming, or other activities. Local officials agree that it is important to clean up the streams and to implement best management practices which will prevent further harm to the waters.

## Sewer

Public sewer service is available to 60%, or 27,621, of the households in Lee County. Public sewer service is available only to households in the Auburn and Opelika incorporated areas. Public sewer service is not available to the 18,081 households in the unincorporated areas of Lee County. Therefore, forty percent of the households in Lee County do not have access to public sewer service. These residents live in Smiths Station, Beauregard, Beulah, Loachapoka, and surrounding unincorporated areas.

The **H.C. Morgan Wastewater Treatment Plant** in Auburn is currently being expanded to increase the capacity from **5.4 million-gallons per day to 9 million-gallons per day**. The expansion should give the city adequate sanitary sewer capacity through 2020. The Northside Treatment Plant will be converted to a multiuse facility after the expansion is completed in 2005 and will serve as a secondary treatment facility as well as a pumping station. This will reduce annual operating and maintenance fees, because of the savings in electricity, chemicals, and personnel costs. It will also reduce the effluents in Saughatchee Creek, and allow all waste to be treated at one central facility, making wastewater reuse more feasible.

The City of Opelika has two wastewater treatment facilities. The **Westside Treatment Facility** has a capacity of 5.1 million gallons per day. The **Eastside Treatment Facility** is currently being expanded from 1.1 million gallons per day to 5.0 million gallons per day. This project is being funded through the Economic Development Administration.

Those who do not have access to public sewer use on-site waste disposal systems. Approximately 30%, or 5,424, of these households experience waste disposal problems often associated with the absence of a sanitary public sewer service in populated areas. According to the Lee County Health Department, the Smiths Station area is in the most critical need of sanitary sewage collection and treatment facilities. As a result of sandy top soils with stiff subsoil, waste does not adequately percolate into the ground. Consequently, during rainy weather, raw sewage is forced above ground, which can contaminate water wells and cause health problems. Other areas of the county have soils, which allow sewage to percolate too quickly, possibly contaminating water wells with partially treated waste.

Although the county is in need of sanitary sewer service, low population densities in most rural communities make such facilities cost prohibitive at this time.

## Utilities

- Natural Gas Service  
Alabama Gas Corporation serves approximately 19,000 customers in Lee County.
- Electrical Service  
The table below shows the availability of electrical service in the County.



**Table 3.4: Electrical Services in Lee County**

<b>Name of Supplier</b>	<b>Location</b>	<b>Number of Customers Served</b>
Alabama Power Company	Auburn (Lee County)	41,800
Opelika Light and Power	Opelika	14,512
Dixie Electric Cooperative	(Lee County & Auburn)	1,198
Tallapoosa River Electric Cooperative	(Lee County & Auburn)	6,984

### **Telecommunications**

AT&T provides adequate telephone service to Lee County. There are also at any one time over a dozen cellular phone companies operating and offering services in Lee County.

### **Solid Waste**

At this time, jurisdictions in Lee County are disposing their solid waste at two locations. The first location is the Salem Waste Disposal Center, which is a regional landfill permitted to receive 1,500 tons per day. The facility consists of 220 acres of lined landfill cell with an estimated remaining life of 62 years.

The second location is a transfer station operated by Sunflower Waste located in the City of Opelika. The solid waste is transported to the Tallassee Waste Disposal Center, a regional landfill in Tallassee, AL, about 40 miles from Lee County. This landfill is also permitted to receive 1,500 tons per day and consists of 12.8 acres of lined landfill cell with an estimated life of 10 years at the permitted rate.

The following summary explains where each of the jurisdictions in Lee County is disposing of their solid waste:

- Lee County is disposing of their solid waste at the Salem Waste Disposal Center which is operated by Waste Management.
- The City of Auburn is disposing of their solid waste at both Waste Management and Sunflower Waste until they can bid out this service.
- The City of Opelika is disposing of their solid waste at both the Salem Waste Disposal Center, operated by Waste Management, and Sunflower Waste Transfer Station, operated by Sunflower Waste.

(Source: U.S Census Bureau, 1970, 1980, 1990, 2000 Census Data and Source and Lee-Russell Council of Governments, 1998 Rural Development Strategy)

**Table 3.5: Lee County Full and Part Time Employment by Industry**

ITEM	2001	2002	2003	2004	2005
Total Employment	54,545	56,530	57,648	60,653	63,249
Wage and Salary Employment	46,047	47,830	48,575	51,210	53,060
Proprietors Employment (2)	8,498	8,700	9,073	9,443	10,189
Farm	374	372	363	355	353
Non Farm	8,124	8,328	8,710	9,088	9,836
Farm Employment	551	566	541	556	514
Non Farm Employment	53,994	55,964	57,107	60,097	62,735
Private Employment	40,570	41,784	42,267	44,473	46,818
Forestry, fishing	153	183	165	D	172
Mining	71	58	64	D	75
Utilities	172	186	190	182	160
Construction	3,482	3,401	3,311	3,575	3,775
Manufacturing	6,147	6,224	6,665	6,879	7,112
Wholesale trade	1,006	1,117	1,010	1,114	1,213
Retail trade	6,966	7,054	6,497	6,818	7,137
Transportation, warehousing	953	979	1,547	1,633	1,816
Information	621	627	631	632	663
Finance, insurance	1,272	1,282	1,251	1,240	1,273
Real estate, rental, leasing	1,803	1,725	1,782	1,898	2,088
Professional/technical services	D	D	D	2,223	2,471
Management	D	D	D	199	236
Administrative, waste services	3,247	3,849	3,704	4,025	4,235
Educational services	567	625	656	711	808
Health care, social assistance	3,328	3,393	3,398	3,296	3,420
Arts, entertainment, recreation	849	878	822	835	890
Accommodation, food service	4,790	4,883	5,180	5,586	5,693
Other services	3,170	3,300	3,290	3,411	3,581
Government and government enterprises	13,424	14,180	14,840	15,624	15,917
Federal, civilian	339	337	337	343	350
Military	750	728	726	827	797
State, local	12,335	13,115	13,777	14,454	14,770
State government	6,254	6,748	7,080	7,372	7,493
Local government	6,081	6,367	6,697	7,082	7,277

## **SECTION 4: PLANNING PROCESS**

### **4.1 Section Overview and Plan Revisions**

This section documents the planning process which details the opportunities for the public to comment on the plan at all stages of its formation, and the involvement of any neighboring communities, interested agencies, and private and non-profit organizations. The planning process also included a review of any existing plans or studies and incorporation of these if appropriate. This phase will document the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved.

The following subsections were **revised** to reflect the activities of the planning process for this particular update of the Lee County Hazard Mitigation Plan:

- **Agency Coordination in the Planning Process** – The coordination of agencies on the Planning and Working Committees is detailed in this subsection. It also describes the process utilized to collect information related to the plan.  
**Plan Revisions:** The documentation of agency coordination in the planning process was updated to include an overview of the meetings of the Lee County Natural Hazards Mitigation Planning and Working Committees
  
- **Public Participation in the Planning Process** – The opportunities for public comment on the development of the plan is described in this subsection.  
**Plan Revisions:** The documentation of public participation in the planning process was updated to include invitation of the public to the planning and working committee meetings as well as the public meeting to present the final draft at the Lee County Commission Meeting and City of Auburn, City of Opelika, Town of Smith Station Council meetings.
  
- **Integration with other Planning Efforts** – Describes, where appropriate, how existing plans, studies, reports, and technical information were reviewed and incorporated into the plan.  
**Plan Revisions:** The existing plans, studies, reports and technical information were reviewed for integration into the updated plan.

### **4.2 Agency Coordination in the Planning Process**

The planning process for the Lee County Natural Hazards Mitigation Plan began by the Lee County Emergency Management Agency contracting with the Lee-Russell Council of Governments to organize meetings, collect needed information, and update the plan.

After a planning meeting between the two agencies, it was decided to continue with the following jurisdictions in the plan: City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University. Auburn University is considered its own jurisdiction because of the large land mass and population. The same

jurisdictions are in the update as in the original plan. None of the jurisdictions chose not to participate in the update.

The LRCOG contacted key officials and agency personnel from each jurisdiction that were covered by the plan to serve on the Lee County Natural Hazards Mitigation Planning Committee. Each jurisdiction had representation from chief elected officials, junior college representatives, public safety and emergency service representatives, city and county engineers, public works officials, building inspectors, state agency personnel and other key personnel. These individuals were all invited to attend the Lee County Natural Hazards Mitigation Advisory Committee Meeting. A complete list of the agencies and departments that served on the planning committee members is located in Appendix A. Rosters, minutes, and worksheets of the planning committee meeting are kept in the Lee County Natural Hazards Mitigation Plan files.

The first meetings of the Lee County Hazard Mitigation Advisory Committee were held on March 15, 2007 and March 29, 2007 at the Lee County Emergency Management Agency. Twenty-eight individuals attended both of these meetings to include the Lee County Emergency Management Agency, Lee-Russell Council of Governments, Lee County Sheriff's Office, City of Auburn Police, City of Opelika Utilities, East Alabama Medical Center, United Way, VOAD, Lee County Highway Department, City of Auburn Fire Department, City of Auburn Public Works, City of Opelika Engineering Department, City of Auburn Public Safety, Auburn University Risk Management, Lee County Revenue Commissioner, Opelika Police Department, Emergency Management Services, Lee County Department of Human Resources, City of Smith Station Mayor and City Clerk. These meetings were open to the public. All meetings were posted on the [www.lrcog.com](http://www.lrcog.com) website and are made readily open to the public. Flyers were also posted at the Lee County Courthouse and Lee County Emergency Management Agency.

The overall goal of this advisory committee meeting was to inform the key officials of each jurisdiction what the update of the plan would entail, make them aware that the plan would have to be approved by each jurisdiction and determine the strategies for collecting the needed information for the update of the plan. The advisory meeting included discussion on the following: the role of the Advisory Committee, timeline to update the plan, review and discussion of the current risk assessment, mitigation strategies, plan maintenance sections, and the public input process. The final item on the agenda was to appoint a working committee to provide the information to complete the plan. It was decided that if additional information was needed from the members of the planning committee they would be contacted by phone or email during the stakeholder interviews. A copy of the final approved plan will be provided to each jurisdiction's chief elected official and the jurisdiction's planning, engineering and/or public works department.

The Lee County Natural Hazards Mitigation Plan Working Committee met two times during the most recent planning process. The working committee consists of approximately seventeen key individuals in order to ensure that each jurisdiction was represented. These meetings were open to the public and each jurisdiction was

encouraged to send additional representation to these meetings who had technical knowledge of natural hazards and possible mitigation strategies. Flyers of each meeting were posted at the Lee County Emergency Management Agency and Lee County Courthouse. A complete list of the agencies and departments serving on the working committee are located in Appendix A. Rosters, minutes, and worksheets of the working subcommittee meetings are kept in the Lee County Natural Hazards Mitigation Plan files.

The first meeting of the Lee County Hazard Mitigation Working Committee was held on November 30, 2007 at the Lee County Emergency Management Agency. Twenty-nine individuals attended the meeting to include the Lee County Emergency Management Agency, Lee-Russell Council of Governments, Lee County Sheriff's Office, City of Auburn Police, City of Opelika Utilities, East Alabama Medical Center, United Way, VOAD, Lee County Commission, City of Auburn Fire Department, City of Auburn Public Works, City of Opelika Engineering Department, City of Auburn Public Safety, Auburn University Risk Management, Opelika Police Department, Emergency Management Services, Lee County Department of Human Resources, City of Smith Station Mayor and City Clerk, East Alabama Mental Health, City of Opelika City Manager, City of Opelika Public Works, Opelika Fire Department, City of Auburn Planning Department, City of Auburn Schools, City of Opelika Schools, Red Cross, and Smith Station Water and Sewer Authority.

At this meeting, the working committee discussed what natural hazards were impacting the county from a historical perspective. Based on a review of the past hazard occurrences in Lee County, the committee members discussed and reviewed the current Hazard Profile Worksheet and Risk Index Worksheet (a completed worksheet can be found in Section 5) and Key Asset and Critical Facilities Worksheet. A complete list of critical facilities was developed by the committee which can be found under Appendix C. The committee also reviewed the vulnerability analysis and asset inventory for each jurisdiction that had been compiled from the previous plan. Additionally, a list of agency contacts were developed for stakeholder and jurisdiction representative interviews outside of the working committee meetings. These individuals had the technical knowledge of natural hazards and possible mitigation strategies needed to update the plan. Before the committee meeting adjourned, the group was asked to complete the worksheets and fax them back to Lee-Russell Council of Governments by the assigned deadlines.

After the first working committee, these stakeholders and jurisdiction representatives were contacted by LRCOG staff to assist in the research and collection of information on natural hazards, population, structural inventories and jurisdiction holdings. The interviews took place by phone, personal interviews or email to gather the remaining information for inclusion in the draft updated plan. Based on the data collected from each of the stakeholders, revisions were made to the current hazard mitigation plan. The complete contact list can be found in Appendix B. Agencies and individuals contacted and interviewed were, but not limited to, the following:

- School Boards
- City/County Governments

- Planning Departments
- Highway Department
- Water Works Boards
- Electric Companies
- Gas Company
- Forestry Commission
- Volunteer Fire Fighter's Association
- Fire Departments
- Police Departments
- Institutions of Higher Learning
- Social Service Agencies
- Extension Office
- Alabama Department of Environmental Management
- Law Enforcement
- Chamber of Commerce
- Alabama Power Company
- Alagasco
- County Administrator
- County Revenue Commissioner

The second meeting of the Lee County Hazard Mitigation Working Committee was held on October 23, 2008 at the Lee County Emergency Management Agency. Twenty-nine individuals attended the meeting to include the Lee County Emergency Management Agency, Lee-Russell Council of Governments, Lee County Highway Department, East Alabama Medical Center, United Way, VOAD, Lee County Commission, City of Opelika Engineering Department, City of Auburn Assistant City Manager, City of Smith Station City Clerk, East Alabama Mental Health, City of Opelika City Manager, Opelika Fire Department, City of Auburn Schools, and City of Opelika Schools.

The stakeholders were asked to review the updates of the Risk Assessment and Mitigation Strategies to determine the following: a) Has the nature, magnitude, and/or type of risks changed; b) Do the goals and objectives address current and expected conditions; c) Are the current resources appropriate for implementing the plan; d) What is the status of implementing the mitigation strategies; e) Are there implementation problems associated with the mitigation strategies; f) Have the outcomes occurred as expected; and g) how are coordination efforts with the public and other community agencies proceeding? Additionally, the committee provided final input on the plan maintenance procedures for the Lee County Natural Hazards Mitigation Plan.

Once the collected data was updated in the Lee County Natural Hazards Mitigation Plan, the Planning and Working Committee were emailed the draft plan for final comments and approval of the components to be included in the revised plan. The plans were approved by the following jurisdictions:

- City of Smith Station on August 25, 2009
- Lee County Commission on September 14, 2009

- City of Auburn on September 15, 2009
- City of Opelika on October 6, 2009

The Town of Loachapoka and Auburn University have not approved the plan but will do so in March/April 2010. A copy of the resolution will be provided once the plan is approved by these jurisdictions.

### **4.3 Public Participation in the Planning Process**

Public participation is generally sought through different strategies. One general way is to make copies and verbiage available to all municipalities during the planning process. Invitation for public comments is also sought through the [www.lrcog.com](http://www.lrcog.com).

The second strategy was solicitation of public input through the Lee County Emergency Management meetings, talks, and activities.

The third strategy to involve the public in the development of the plan was to inform the public of the Advisory Committee meetings on March 15 and 29, 2007 and the Working Committee meetings November 30, 2007 and October 23, 2008 at the Lee County Emergency Management Agency. It was posted on the [www.lrcog.com](http://www.lrcog.com) website and flyers were placed at key locations to encourage attendance by the public.

The fourth strategy is that LRCOG and mitigation planning staff also serves on other committees where mitigation can be an issue such as the Lee County Volunteer Organizations Active in Disaster (Lee County VOAD) the Mass Care Committee and the East Alabama Coalition for the Homeless.

A final opportunity for the public to provide input was made available during the presentation of the Lee County Natural Hazards Mitigation Plan at the City of Smith Station on (8/25/09); Lee County Commission (9/14/09); City of Auburn (9/15/09); and City of Opelika (10/6 /09). The final draft of the Lee County Hazard Mitigation Plan was presented and was made available for review and comment by the public during this time. A final opportunity for the public to comment on the plan is when the Town of Loachapoka and Auburn University approve the plan in March/April 2010.

A copy of the final plan will be placed at the office of the Auburn University, Lee County Emergency Management Agency, Lee County Commission and at the offices of the Mayor of Auburn, Loachapoka, Opelika, and Smiths Station for further examination by interested citizens once it is approved by the Federal Emergency Management Agency.

### **4.4 Integration with other Planning Efforts**

At this time, the planning documents that apply and will be integrated into the Lee County Natural Hazards Mitigation Plan were the following: A) Auburn University Storm Water Drainage Plan; B) City of Auburn Building Codes, Zoning Ordinances,

Subdivision Regulations, Draft Land Use Plan, Growth Boundary Plan, Greenway Master Plan, Village Centers Strategic Development Concept, Auburn 2020 Strategic Plan, Traffic Calming Policy, Fire Codes, Storm Water Drainage Plan, Sewer Master Plan, and Water System Plan; C) City of Opelika Building Codes, Zoning Ordinances, Subdivision Regulations, Land Development Regulations, Fire Codes, Storm Water Drainage Plans, Public Works Manual, and Comprehensive Plan; D) the Lee County Emergency Operations Plan including Standard Operating Procedures, annexes and checklists; and E) City of Smiths Station Comprehensive Plan and Draft Zoning Ordinances. At this time, The Town of Loachapoka did not provide any documentation on the plans that they currently have. They are currently covered under Lee County's planning documents. As other plans are identified or developed by each jurisdiction, it will be reviewed and applicable plans will be integrated into the Lee County Natural Hazards Mitigation Plan.



## **SECTION 5: RISK ASSESSMENT**

### **5.1 Section Overview and Plan Revisions**

The Risk Assessment Section provides a detailed description of all the natural hazards that could affect the jurisdictions of Lee County along with an analysis of the jurisdictions' vulnerability to those hazards. These jurisdictions include City of Auburn, City of Opelika, Lee County (Unincorporated areas), City of Smiths Station, Town of Loachapoka and Auburn University. Specific information about numbers and type of structures, potential dollar losses and overall description of land use trends in the jurisdictions are also included in this section. Any risk that affects only certain sections of the planning areas are addressed separately in the context of the affected area.

The following subsections and revisions are included in Section 5:

- **Identifying Hazards** – The planning committee, working committee and stakeholders described all the natural hazards that can affect the jurisdictions. The committees used their agency information, personal experience, internet information, and other resources identifying to identify hazards, noting any data limitations, and provide an explanation for eliminating hazards from consideration.  
**Plan Revisions:** The plan was revised by updating the Profile and Risk Index. The committees identified the hazards that presented a risk to the jurisdictions of Lee County. The rankings and profiling of the hazards on the **Lee County Natural Hazards Profile and Risk Index** changed slightly for a few hazards in comparison to the previous plan.
- **Profiling Hazard Events** – The committees and stakeholders described the location and extent of all natural hazards that can affect the jurisdictions. The profile included the following information: a) description of previous occurrences of hazard events in terms of their severity and resulting impacts on the jurisdictions and b) description of the probability of future hazard events for each identified hazard to include the magnitude or severity of the hazard, geographical extent or areas in the community that would be affected, and the conditions that make it prone to the hazard. When appropriate and possible, the hazard analysis identified on a map the area affected by each identified hazard. If a jurisdiction is impacted by a natural hazard differently than other jurisdictions, it was detailed under each hazard.  
**Plan Revisions:** The general overview defining each hazard was not changed by the committees but information relating to previous occurrences and future probability for each hazard was updated. Additionally, the committees reviewed the hazard profiles and ranked each hazard based on the risk to the jurisdictions. Some hazards remained the same while others moved up and down in the risk index.
- **Assessing Vulnerability: Overview** – The committees and stakeholders described the jurisdiction's vulnerability to natural hazards by providing an overall summary of each hazard and its impact on the community.

**Plan Revisions:** This subsection was revised to include a list of updated natural hazards that are impacting Lee County based on the input from Planning and Working Committees, stakeholders, and the public.

- **Assessing Vulnerability: Identifying Assets and Estimating Potential Dollar Losses -** Under this subsection, the following information will be provided:

**A) Identifying Assets** – The committees and stakeholders determined the vulnerability in terms of the type and numbers of existing buildings, infrastructure, new developments and critical facilities located in each identified hazard area. A rationale for designating a facility as critical is explained.

**B) Estimating Potential Dollar Losses** – The committees and stakeholders determined the vulnerability in terms of an estimate of the potential dollar losses to vulnerable structures identified in the above subsection and a description of the methodology used to prepare the estimates.

**Plan Revisions:** The process for identifying assets and estimating potential dollars losses was not revised. However, revisions were made to Tables 5.13 by the committees. These tables were updated to show each jurisdiction’s current asset inventory as well as the potential dollar losses of these assets as result of a natural hazard occurrence.

- **Assessing Vulnerability: Analyzing Development Trends** – The committees and stakeholders reviewed and described the vulnerability in terms of a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions. This information provides a basis for making decisions on the type of mitigation approaches to consider, and the locations in which these approaches should be applied. If a jurisdiction’s development trends are impacted by a natural hazard differently than other jurisdictions, it will be detailed under this subsection.

**Plan Revisions:** This subsection was updated by the committees to include recent trends that will have a significant impact on the jurisdictions in Lee County such as the expansion of Fort Benning and the location of new industries. Additionally, development goals were added to the subsection.



## 5.2 Identifying Hazards

The Lee County Natural Hazards Mitigation Advisory and Working Committees identified ten natural hazards as having an impact on the jurisdictions of the City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka and Auburn University. The Lee County Natural Hazards Planning and Working Committees reviewed risk assessment reports, public input, stakeholder interviews, past occurrences, and internet resources to determine which natural hazards had a direct impact on the jurisdictions. This vulnerability analysis was a result of extensive input by the subcommittee and the sources listed above to determine the overall vulnerability ranking for each hazard. The committee completed **Table 5.1: Lee County Natural Hazards Profile and Risk Index** to identify the hazards that presented a risk to the jurisdictions of Lee County. This worksheet was completed in order to provide a broad profile for each hazard relative to one another. The worksheet classifies each hazard according to their potential frequency, magnitude, severity level by examining possible property damage, damages to function, and threat to safety, duration of impact, and location. The result of this process was the creation of a risk index, which establishes numeric ratings for each hazard relative to one another. Based on this analysis, the Lee County Natural Hazards Mitigation Working committee identified the following natural hazards as ones that continuously impact the jurisdictions:

- A) Severe Storms (Lightning/Wind/Hail)
- B) Tornado
- C) Hurricane
- D) Dam/Levee Failure
- E) Winter Storm/Freezes/Snow
- F) Drought/Heat Wave
- G) Floods
- H) Wildfires
- I) Sinkholes (City of Opelika and Lee County)
- J) Earthquakes

The committees made a determination that landslides rated very low in terms of its probability of occurring in the jurisdictions of Lee County. Additionally, the committee also felt that volcanoes and tsunamis were not a threat to the jurisdictions of Lee County. These assessments were based on the review of reports documenting no past occurrences. In addition, these reports indicated a very low or no probability of occurrence in the future, which is further documented in the subsection titled, Profiling Hazard Events. On the next page, the Hazard Profile and Risk Index Worksheet were used by the committees to determine which natural hazards have an impact on the jurisdictions and their hazard ranking. This analysis of the natural hazards impacting the jurisdictions of Lee County is detailed in **Table 5.1: Lee County Natural Hazard and Risk Index**.

## WORKSHEET 5.1: HAZARD PROFILE AND RISK INDEX WORKSHEET

The following worksheet was completed by Lee County Natural Hazards Working Subcommittee in order to provide a broad profile for each hazard relative to one another. The worksheet classifies each hazard according to their potential frequency, magnitude, severity level, duration, and specific location. The result of this process was the creation of a risk index, which establishes numeric ratings for each hazard relative to one another.

<b><u>Frequency:</u></b>	How often the event may occur
Highly Likely (HL) -	Near 100% probability in the next year
Likely (L) -	Between 10% and 100% in the next year, or at least one chance in 10 years
Possible (P) -	Between 1% and 10% in the next year, or at least one chance in 100 years
Unlikely (U) -	Less than 1% probability in next 100 years

<b><u>Magnitude:</u></b>	Classifications are based upon the extent of the jurisdiction affected by the hazard, according to the following scale:
Large -	More than 50% of the jurisdiction affected
Moderate -	25% to 50% of the jurisdiction affected
Small -	10% to 25% of the jurisdiction affected
Very Small -	Less than 10% of the jurisdiction affected

**Severity Level:** How much damage can be expected from the event in the following areas:

### **A. Property Damage:**

Catastrophic (C) -	More than 50% of property is severely damaged.
Critical (CR) -	More than 25% of property is damaged.
Limited (L) -	More than 10% of property is severely damaged.
Negligible (N) -	Less than 10% of property is severely damaged.

**B. Damages to Function:** Services provided by agencies such as governmental, schools, health care, etc.

Catastrophic (C) -	Complete shutdown of facilities for more than 30 days.
Critical (CR) -	Complete shutdown of critical facilities for more than 1 week.
Limited (L) -	Complete shutdown of critical facilities for more than 1 day.
Negligible (N) -	Shutdown of critical facilities and services for 24 hours or less.

**C. Threat to Safety:**

Catastrophic (C) -  
Critical (CR) -  
Limited (L) -  
Negligible (N) -

Multiple deaths or injuries possible.  
Injuries and/or illnesses result in permanent disability.  
Injuries and/or illnesses do not result in permanent disability.  
Very few injuries; Injuries and/or illnesses are treatable with first aid.

**Duration of Impact:**

Classifications are based upon the length of time that the hazard event lasts, according to the following scale:

Short = Minutes  
Medium = Hours  
High = Days

**Hazard Rankings:**

Determined based upon the cumulative analysis of the above classifications. Hazard Rankings are based on a scale of 1 (lowest risk) through 10 (highest risk).

**Table 5.1: Lee County Natural Hazards Profile and Risk Index**

Hazards	Vulnerability Ranking  1 = Low 10 = High	Frequency  -High Likely -Likely -Possible -Unlikely	Magnitude  -Large -Moderate -Small -Very Small	Severity Level			Duration  -Short -Medium -High	Specific Geographic Areas in each Jurisdiction that are Vulnerable to this Hazard (Residential, Commercial, Agricultural, Critical Facilities, Infrastructure, Future Developments)
				-Catastrophic (C) -Critical (CR) -Limited (L) -Negligible (N)	Property	Services		
<b>A. Severe Storms (Thunderstorms /Lightning/ Wind/Hail)</b>	10	High Likely	Moderate	CR	N	L	Short	City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to this hazard. A specific area is not more prone than others.
<b>B. Tornado</b>	8	Likely	Small	C	CR	C	Short	City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to this hazard. A specific area is not more prone than others.
<b>C. Hurricane</b>	8	Likely	Large	CR	CR	L	Moderate	City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to this hazard. A specific area is not more prone than others.
<b>D. Dam/Levee Failure</b>	7	Likely	Small	CR	CR	CR	Moderate	All structures in the City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University that are located downstream of a private dam or levee are vulnerable to this hazard.
<b>E. Winter Storm/ Freezes / Snow</b>	6	Likely	Large	L	L	L	Moderate	City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to this hazard. A specific area is not more prone than others.
<b>F. Drought/ Heat Wave</b>	6	Likely	Large	L	N	L	Long	City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to this hazard. A specific

Hazards	Vulnerability Ranking 1 = Low 10 = High	Frequency -High Likely -Likely -Possible -Unlikely	Magnitude -Large -Moderate -Small -Very Small	Severity Level			Duration -Short -Medium -High	Specific Geographic Areas in each Jurisdiction that are Vulnerable to this Hazard (Residential, Commercial, Agricultural, Critical Facilities, Infrastructure, Future Developments)
				-Catastrophic (C) -Critical (CR) -Limited (L) -Negligible (N)	Property	Services		
								area is not more prone than others
<b>G. Floods</b>	5	Likely	Small	CR	L	L	Long	<p>City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to repetitive flooding.</p> <p>Repetitive flooding occurs specifically in these areas:  a) Lee County (including Town of Loachapoka and City of Smiths Station) includes Lee Road 298, Lee Road 325, Tranquil Pines North, and Tranquil Pines South;  b) City of Opelika include Columbus Parkway at 4<sup>th</sup> Street, the bridge on Saugahatchee Lake Road, North Uniroyal Road, and Pepperell Parkway at North 20<sup>th</sup> Street; and  c) City of Auburn (including Auburn University) includes: Bonnie Glenn Road, East University Drive, Burke Place, Annalue Drive, East Glenn Avenue, Samford Avenue, Marion Circle, Virginia Avenue, Janet Drive, Loftin Drive, Pumphrey Avenue, Conway Parkway, Mall Boulevard, Gatewood Drive, Johnston Street, Freeman Street, Sanders Street, Cary Drive, White Street, Boykin Street, Clark Avenue, Foster Street, White Street/Bragg Avenue, Deer Run Road, and Middlebrook Lane</p>
<b>H. Wildfires</b>	5 – Lee County 2 - All other jurisdictions	Possible	Varies with intensity of wildfire	CR	L	CR	Moderate	Most wildfires are manmade, Areas in the City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University with heavily wooded areas are all vulnerable to hazard.
<b>I. Sinkholes</b>	3 – Lee County	Possible	Varies	CR	CR	L	Short	Lee County and the City of Opelika are the jurisdictions that have or will be vulnerable to this hazard. Lee Road

Hazards	Vulnerability Ranking 1 = Low 10 = High	Frequency -High Likely -Likely -Possible -Unlikely	Magnitude -Large -Moderate -Small -Very Small	Severity Level			Duration -Short -Medium -High	Specific Geographic Areas in each Jurisdiction that are Vulnerable to this Hazard (Residential, Commercial, Agricultural, Critical Facilities, Infrastructure, Future Developments)
				-Catastrophic (C) -Critical (CR) -Limited (L) -Negligible (N)	Property	Services		
	2 - Opelika 1 – All other jurisdictions.							166 and 148 are the areas that have sinkholes. Due to the proximity to the city limits of Opelika, these jurisdictions could have to deal with the impacts of sinkholes.
<b>J. Earthquake</b>	2	Unlikely	Varies	N	N	N	Short	At this time, the jurisdictions of Lee County have not experienced this natural hazard as a regular and reoccurring event but in the future it could be an issue in the future.
<b>K. Landslides</b>	Not Vulnerable							
<b>L. Tsunamis</b>	Not Vulnerable							
<b>M. Volcano</b>	Not Vulnerable							



### 5.3 Profiling Hazard Events

The data sources used to profile the natural hazards impacting the jurisdictions of Lee County were taken from various internet and local sources to include but not limited to the following: the National Climatic Data Center, National Inventory of Dams, Lee County Natural Hazards Planning Committee and Working Committee. The reporting periods vary according to the source of data and the level of detail is different according to the availability of data.

Additionally, the data that is available for some natural hazards is very limited due to a lack of a centralized reporting system. The plan had to rely on internet and local resources to provide past occurrences. In some cases, there was little or no data which makes it difficult to describe future occurrences and overall vulnerability to the hazard. Appendix F has additional support resources documenting the occurrence of natural hazards in Lee County and an overview of the natural hazard events by year.

The updated plan will profile the following hazards: severe storms, tornadoes, hurricanes, dam/levee failure, winter storms/freezes/snow, drought/heat wave, floods, wildfires, sinkholes, and earthquakes. **Landslides, volcanoes and Tsunamis will not be profiled since they do not pose a significant threat to the jurisdictions in Lee County.**

#### A) Severe Storms

##### *Overview*

When discussing severe storms, all of the jurisdictions of Lee County are impacted by thunderstorms, lightning, wind and hail. A thunderstorm is the result of a combination of moisture, rapidly rising warm air and a force capable of lifting air such as a warm and cold front, a sea breeze or a mountain. All thunderstorms contain lightning and are accompanied by winds that can become destructive at 58 miles per hour. Heavy rains (which can cause flash flooding), hail, and tornadoes can also occur during a thunderstorm which may occur singly, in clusters, or in lines – sometime with very little warning. Thus, it is possible for several thunderstorms to affect one location in the course of a few hours. Some of the most severe weather occurs when a single thunderstorm affects one location for an extended time.

Lightning, that is sometimes unseen, is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning reaches a temperature approaching 50,000 degrees Fahrenheit in a split second. The rapid heating and cooling of air near the lightning causes thunder. Lightning is a major threat during a thunderstorm. In the United States, 75 to 100 Americans are hit and killed each year by lightning, making it a major killer amongst all natural hazards, second only to flooding. However, of the population struck by lightning, only 10% are killed while the other 90% are left with various disabilities such as irreversible brain damage.

While thunderstorms and lightning can be found throughout the United States, they are most likely to occur in the central and southern states.

### *Previous Occurrence of Severe Storm Events*

All of the six jurisdictions located in Lee County have been subjected to severe storms – thunderstorms, lightning, wind, and hail - during the past 59 years. Table 5.2 shows a detailed chart of these 43 years of severe weather events. Lee County has experienced since 1966, 12 lightning storm, 88 hail storms, and 130 thunder/wind storms. These events cost an estimated millions to residential and commercial structures. For additional information, please refer to Tables 5.2 – 5.4.

### *Future Probability of a Severe Storm*

All of the jurisdictions of Lee County are very susceptible to severe storms. The frequency that a severe storm will occur is highly likely. The advisory and working committees determined that there is 100% chance in the next year that a severe storm will occur. As detailed on Table 5.1, the threat to property damage is critical with a possibility that more than 25% of the property in affected area would be damaged or destroyed. Additionally, the threat of safety to each jurisdiction is limited resulting in injuries and illness that do not result in permanent disability. The damages to functions were rated as negligible with only a temporary shutdown of facilities in the event of a severe storm. The committees determined that the 25% to 50% of the jurisdiction would be impacted by this hazard event. Overall, the risk to the jurisdictions of Lee County was ranked a 10 by the working sub-committee. They determined that the jurisdictions were at high risk from this natural hazard. The jurisdictions are faced with the following dangers from severe storms: 1) strong winds blowing down trees across roads and power lines; 2) extensive damage to roof, windows, and mobile homes; 3) lightning causing death, injuries, and/or property damage; 4) flash floods and tornadoes developing; and 5) hail damaging agricultural crops.

**Table 5.2: Overview of Thunderstorm and Wind Storm Events for Lee County by Year**

Location or County	Date	Time	Type	Mag	D th	Inj	PrD	CrD
1 <a href="#">LEE</a>	07/10/1966	1500	Tstm Wind	0 kts.	0	0	0	0
2 <a href="#">LEE</a>	08/23/1968	1930	Tstm Wind	0 kts.	0	0	0	0
3 <a href="#">LEE</a>	06/20/1969	1700	Tstm Wind	0 kts.	0	0	0	0
4 <a href="#">LEE</a>	07/16/1970	1630	Tstm Wind	0 kts.	0	0	0	0
5 <a href="#">LEE</a>	03/01/1971	2125	Tstm Wind	0 kts.	0	0	0	0
6 <a href="#">LEE</a>	04/23/1971	1346	Tstm Wind	0 kts.	0	0	0	0
7 <a href="#">LEE</a>	04/23/1971	1346	Tstm Wind	0 kts.	0	0	0	0
8 <a href="#">LEE</a>	05/12/1971	1345	Tstm Wind	0 kts.	0	0	0	0
9 <a href="#">LEE</a>	05/12/1971	1350	Tstm Wind	0 kts.	0	0	0	0
10 <a href="#">LEE</a>	05/23/1973	2330	Tstm Wind	0 kts.	0	0	0	0

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
11 <a href="#">LEE</a>	03/21/1974	0315	Tstm Wind	0 kts.	0	0	0	0
12 <a href="#">LEE</a>	03/21/1974	0320	Tstm Wind	0 kts.	0	0	0	0
13 <a href="#">LEE</a>	01/10/1975	1815	Tstm Wind	0 kts.	0	0	0	0
14 <a href="#">LEE</a>	05/14/1976	1420	Tstm Wind	0 kts.	0	0	0	0
15 <a href="#">LEE</a>	04/13/1979	0905	Tstm Wind	0 kts.	0	0	0	0
16 <a href="#">LEE</a>	04/13/1980	1450	Tstm Wind	0 kts.	0	0	0	0
17 <a href="#">LEE</a>	07/17/1980	1541	Tstm Wind	0 kts.	0	0	0	0
18 <a href="#">LEE</a>	07/17/1980	1845	Tstm Wind	0 kts.	0	0	0	0
19 <a href="#">LEE</a>	03/18/1981	1025	Tstm Wind	55 kts.	0	0	0	0
20 <a href="#">LEE</a>	03/30/1981	0435	Tstm Wind	0 kts.	0	0	0	0
21 <a href="#">LEE</a>	03/31/1981	2345	Tstm Wind	0 kts.	0	0	0	0
22 <a href="#">LEE</a>	05/16/1983	0300	Tstm Wind	0 kts.	0	0	0	0
23 <a href="#">LEE</a>	05/03/1984	1309	Tstm Wind	0 kts.	0	0	0	0
24 <a href="#">LEE</a>	05/03/1984	1330	Tstm Wind	0 kts.	0	0	0	0
25 <a href="#">LEE</a>	11/10/1984	1634	Tstm Wind	0 kts.	0	0	0	0
26 <a href="#">LEE</a>	04/05/1985	1910	Tstm Wind	53 kts.	0	0	0	0
27 <a href="#">LEE</a>	06/07/1985	2020	Tstm Wind	0 kts.	0	0	0	0
28 <a href="#">LEE</a>	03/19/1986	0550	Tstm Wind	0 kts.	0	0	0	0
29 <a href="#">LEE</a>	07/30/1986	1315	Tstm Wind	0 kts.	0	0	0	0
30 <a href="#">LEE</a>	07/31/1986	1545	Tstm Wind	0 kts.	0	0	0	0
31 <a href="#">LEE</a>	07/31/1986	1600	Tstm Wind	55 kts.	0	0	0	0
32 <a href="#">LEE</a>	07/31/1986	1720	Tstm Wind	0 kts.	0	0	0	0
33 <a href="#">LEE</a>	11/26/1986	0200	Tstm Wind	0 kts.	0	0	0	0
34 <a href="#">LEE</a>	08/20/1987	1500	Tstm Wind	0 kts.	0	0	0	0
35 <a href="#">LEE</a>	08/25/1987	1527	Tstm Wind	0 kts.	0	0	0	0
36 <a href="#">LEE</a>	01/19/1988	2335	Tstm Wind	0 kts.	0	0	0	0
37 <a href="#">LEE</a>	04/18/1988	2245	Tstm Wind	0 kts.	0	0	0	0
38 <a href="#">LEE</a>	04/04/1989	1515	Tstm Wind	0 kts.	0	0	0	0
39 <a href="#">LEE</a>	06/05/1989	1335	Tstm Wind	0 kts.	0	0	0	0

Location or County	Date	Time	Type	Mag	D th	Inj	PrD	CrD
40 <a href="#">LEE</a>	06/12/1989	1900	Tstm Wind	0 kts.	0	0	0	0
41 <a href="#">LEE</a>	02/10/1990	0415	Tstm Wind	0 kts.	0	0	0	0
42 <a href="#">LEE</a>	02/22/1990	0815	Tstm Wind	0 kts.	0	1	0	0
43 <a href="#">LEE</a>	04/10/1990	1600	Tstm Wind	0 kts.	0	0	0	0
44 <a href="#">LEE</a>	04/10/1990	1630	Tstm Wind	0 kts.	0	0	0	0
45 <a href="#">LEE</a>	04/10/1990	1645	Tstm Wind	0 kts.	0	0	0	0
46 <a href="#">LEE</a>	07/23/1990	1628	Tstm Wind	61 kts.	0	0	0	0
47 <a href="#">LEE</a>	07/23/1990	1722	Tstm Wind	0 kts.	0	0	0	0
48 <a href="#">LEE</a>	03/01/1991	1515	Tstm Wind	0 kts.	0	0	0	0
49 <a href="#">LEE</a>	03/29/1991	0920	Tstm Wind	0 kts.	0	0	0	0
50 <a href="#">LEE</a>	05/05/1991	1450	Tstm Wind	0 kts.	0	0	0	0
51 <a href="#">LEE</a>	05/05/1991	1510	Tstm Wind	0 kts.	0	0	0	0
52 <a href="#">LEE</a>	05/05/1991	1630	Tstm Wind	0 kts.	0	0	0	0
53 <a href="#">LEE</a>	06/04/1991	1425	Tstm Wind	0 kts.	0	0	0	0
54 <a href="#">LEE</a>	04/20/1992	1600	Tstm Wind	0 kts.	0	0	0	0
55 <a href="#">LEE</a>	08/27/1992	1350	Tstm Wind	0 kts.	0	0	0	0
56 <a href="#">LEE</a>	08/27/1992	1515	Tstm Wind	0 kts.	0	0	0	0
57 <a href="#">LEE</a>	11/22/1992	1030	Tstm Wind	0 kts.	0	0	0	0
58 <a href="#">Auburn</a>	06/26/1994	1740	Tstm Wind	50 kts.	0	0	50K	0
59 <a href="#">Auburn</a>	07/27/1994	1130	Tstm Wind	0 kts.	0	0	50K	0
60 <a href="#">Auburn</a>	10/11/1994	0000	Tstm Wind	0 kts.	0	0	0K	0
61 <a href="#">LEE</a>	05/15/1995	1500	Tstm Wind	0 kts.	0	0	15K	0
62 <a href="#">Opelika</a>	05/15/1995	1522	Tstm Wind	50 kts.	0	0	0	0
63 <a href="#">Salem</a>	07/16/1995	1755	Tstm Wind	0 kts.	0	0	2K	0
64 <a href="#">Montgomery</a>	07/17/1995	1255	Tstm Wind	0 kts.	0	0	2K	0
65 <a href="#">Opelika</a>	07/29/1995	1700	Tstm Wind	0 kts.	0	0	2K	0
66 <a href="#">Auburn</a>	08/19/1995	2045	Tstm Wind	0 kts.	0	0	12K	0
67 <a href="#">ALZ001&gt;050</a>	10/04/1995	1200	Hurricane Opal/high Winds	N/A	2	0	0.1B	10.0M

Location or County	Date	Time	Type	Mag	D th	Inj	PrD	CrD
68 <a href="#">Opelika</a>	01/26/1996	10:20 PM	Tstm Wind	50 kts.	0	0	15K	0
69 <a href="#">Opelika</a>	03/06/1996	06:00 AM	Tstm Wind	50 kts.	0	0	80K	10K
70 <a href="#">Opelika</a>	03/06/1996	11:50 PM	Tstm Wind	70 kts.	1	0	50K	0
71 <a href="#">Phenix City</a>	06/20/1996	04:00 PM	Tstm Wind	50 kts.	0	0	25K	0K
72 <a href="#">Auburn</a>	07/05/1996	06:20 PM	Tstm Wind	50 kts.	0	0	5K	0K
73 <a href="#">Opelika</a>	09/21/1996	02:00 PM	Tstm Wind	50 kts.	0	0	8K	1K
74 <a href="#">Auburn</a>	01/24/1997	09:00 AM	Tstm Wind	50 kts.	0	0	7K	1K
75 <a href="#">Auburn</a>	06/05/1998	03:50 PM	Tstm Wind	55 kts.	1	0	10K	0K
76 <a href="#">Auburn</a>	06/19/1998	01:35 PM	Tstm Wind	50 kts.	0	0	15K	0K
77 <a href="#">Auburn</a>	07/11/1998	02:50 PM	Tstm Wind	55 kts.	0	0	20K	0K
78 <a href="#">Hopewell</a>	05/07/1999	06:25 PM	Tstm Wind	50 kts.	0	0	0K	0K
79 <a href="#">Loachapoka</a>	09/08/1999	05:55 PM	Tstm Wind	50 kts.	0	0	1K	0K
80 <a href="#">Countywide</a>	07/20/2000	06:55 PM	Tstm Wind	55 kts.	0	0	30K	0K
81 <a href="#">Auburn</a>	07/23/2000	01:00 PM	Tstm Wind	55 kts.	0	0	2K	0K
82 <a href="#">Opelika</a>	01/19/2001	10:40 AM	Tstm Wind	50 kts.	0	0	2K	0K
83 <a href="#">Loachapoka</a>	03/15/2001	02:10 AM	Tstm Wind	50 kts.	0	0	2K	0K
84 <a href="#">Auburn</a>	03/15/2001	02:15 AM	Tstm Wind	52 kts.	0	0	2K	0K
85 <a href="#">Countywide</a>	07/05/2001	04:25 PM	Tstm Wind	55 kts.	0	0	2K	0K
86 <a href="#">Opelika</a>	01/22/2003	05:45 AM	Tstm Wind	65 kts.	0	0	35K	0K
87 <a href="#">Opelika</a>	05/18/2003	11:23 AM	Tstm Wind	50 kts.	0	0	8K	0K
88 <a href="#">Loachapoka</a>	06/13/2003	01:00 PM	Tstm Wind	50 kts.	0	0	4K	0K
89 <a href="#">Auburn</a>	05/31/2004	06:00 AM	Tstm Wind	50 kts.	0	0	16K	0
90 <a href="#">ALZ021 - 036 - 045 - 047</a>	09/07/2004	12:15 AM	Strong Wind	33 kts.	0	0	4K	0
91 <a href="#">ALZ047</a>	09/16/2004	05:30 AM	High Wind	60 kts.	0	0	1.0M	0
92 <a href="#">Opelika</a>	10/19/2004	12:17 PM	Tstm Wind	50 kts.	0	0	8K	0
93 <a href="#">Loachapoka</a>	10/19/2004	12:27 PM	Tstm Wind	50 kts.	0	0	17K	0
94 <a href="#">Salem</a>	10/19/2004	12:56 PM	Tstm Wind	50 kts.	0	0	3K	0
95 <a href="#">Countywide</a>	01/13/2005	02:55 PM	Tstm Wind	50 kts.	0	0	4K	0

<b>Location or County</b>	<b>Date</b>	<b>Time</b>	<b>Type</b>	<b>Mag</b>	<b>D th</b>	<b>Inj</b>	<b>PrD</b>	<b>CrD</b>
96 <a href="#">ALZ037 - 044 - 047 - 049</a>	04/02/2005	08:00 AM	Strong Wind	30 kts.	0	0	4K	0
97 <a href="#">Central Portion</a>	04/22/2005	03:22 PM	Tstm Wind	52 kts.	0	0	2K	0
98 <a href="#">Countywide</a>	04/30/2005	05:57 AM	Tstm Wind	52 kts.	0	0	4K	0
99 <a href="#">Auburn</a>	04/30/2005	07:23 AM	Tstm Wind	52 kts.	0	0	2K	0
100 <a href="#">Smiths</a>	05/20/2005	02:18 PM	Tstm Wind	52 kts.	0	0	7K	0
101 <a href="#">Auburn</a>	03/20/2006	07:05 PM	Tstm Wind	50 kts.	0	0	5K	0
102 <a href="#">Opelika</a>	03/20/2006	07:30 PM	Tstm Wind	50 kts.	0	0	5K	0
103 <a href="#">Opelika</a>	05/10/2006	03:08 PM	Tstm Wind	50 kts.	0	0	2K	0
104 <a href="#">Smiths</a>	05/10/2006	03:09 PM	Tstm Wind	50 kts.	0	0	2K	0
105 <a href="#">Smiths Station</a>	07/28/2006	10:01 PM	Tstm Wind	50 kts.	0	0	4K	0
106 <a href="#">Pine Grove</a>	10/11/2006	17:40 PM	Tstm Wind	50 kts.	0	0	1K	0K
107 <a href="#">Pepperell</a>	06/11/2007	21:08 PM	Tstm Wind	55 kts.	0	0	20K	0K
108 <a href="#">Chewacla</a>	07/20/2007	13:30 PM	Tstm Wind	50 kts.	0	0	2K	0K
109 <a href="#">Smiths</a>	07/20/2007	13:50 PM	Tstm Wind	50 kts.	0	0	50K	0K
110 <a href="#">(auo)auburn Opelika</a>	01/31/2008	21:10 PM	Tstm Wind	51 kts.	0	0	5K	0K
111 <a href="#">ALZ047</a>	03/07/2008	05:24 AM	Strong Wind	40 kts.	0	0	5K	0K
112 <a href="#">Pine Grove</a>	04/04/2008	18:30 PM	Tstm Wind	50 kts.	0	0	2K	0K
113 <a href="#">Beulah</a>	06/11/2008	14:35 PM	Tstm Wind	50 kts.	0	0	1K	0K
114 <a href="#">Shotwell</a>	07/22/2008	13:12 PM	Tstm Wind	50 kts.	0	0	1K	0K
115 <a href="#">Auburn</a>	08/07/2008	16:07 PM	Tstm Wind	45 kts.	0	0	10K	0K
116 <a href="#">Auburn</a>	08/07/2008	16:20 PM	Tstm Wind	45 kts.	0	0	1K	0K
117 <a href="#">Mitchell Xrd</a>	08/07/2008	16:20 PM	Tstm Wind	45 kts.	0	0	1K	0K
118 <a href="#">Motts</a>	08/07/2008	16:57 PM	Tstm Wind	50 kts.	0	0	2K	0K
119 <a href="#">ALZ047</a>	12/11/2008	06:57 AM	Strong Wind	40 kts.	0	0	20K	0K
120 <a href="#">Auburn</a>	05/03/2009	15:15 PM	Tstm Wind	50 kts.	0	0	50K	0K
121 <a href="#">Opelika</a>	05/03/2009	15:21 PM	Tstm Wind	53 kts.	0	0	0K	0K

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
122 <a href="#">Pine Grove</a>	05/10/2009	14:35 PM	Tstm Wind	50 kts.	0	0	2K	0K
123 <a href="#">Auburn</a>	06/14/2009	12:55 PM	Tstm Wind	50 kts.	0	0	3K	0K
124 <a href="#">Beehive</a>	06/14/2009	12:55 PM	Tstm Wind	50 kts.	0	0	2K	0K
125 <a href="#">Beehive</a>	06/15/2009	23:36 PM	Tstm Wind	50 kts.	0	0	1K	0K
126 <a href="#">Opelika</a>	06/15/2009	23:48 PM	Tstm Wind	50 kts.	0	0	2K	0K
127 <a href="#">Opelika</a>	06/28/2009	16:07 PM	Tstm Wind	50 kts.	0	0	2K	0K
128 <a href="#">Roxana</a>	06/28/2009	16:18 PM	Tstm Wind	50 kts.	0	0	2K	0K
129 <a href="#">Mitchell Xrd</a>	07/28/2009	14:24 PM	Tstm Wind	43 kts.	0	0	2K	0K
130 <a href="#">Smiths Station</a>	08/05/2009	14:59 PM	Tstm Wind	35 kts.	0	0	1K	0K
TOTALS:					4	1	101.73 2M	10.012M

(Source: National Climatic Data Center)

**Table 5.3: Overview of Lightning Events for Lee County by Year**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 Opelika	09/08/1994	1110	Lightning	N/A	0	0	50K	0
2 Auburn	06/23/1996	01:18 PM	Lightning	N/A	0	0	15K	0K
3 Auburn	06/23/1996	01:48 PM	Lightning	N/A	0	0	15K	0K
4 Auburn	09/09/1996	08:00 PM	Lightning	N/A	0	0	20K	0K
5 Auburn	04/27/1997	12:30 PM	Lightning	N/A	0	0	10K	0K
6 Auburn	07/11/1998	02:50 PM	Lightning	N/A	0	0	10K	0K
7 Opelika	05/30/2002	04:32 PM	Lightning	N/A	0	0	3K	0K
8 Opelika	07/23/2002	08:45 PM	Lightning	N/A	0	0	75K	0K
9 Opelika	12/24/2002	04:15 AM	Lightning	N/A	0	0	7K	0K
10 Mc Culloh	08/15/2003	02:56 PM	Lightning	N/A	0	0	2K	0K
11 Auburn	04/14/2007	14:45 PM	Lightning	N/A	0	0	2K	0K
12 Beehive	07/22/2008	13:15 PM	Lightning	N/A	0	0	100K	0K
TOTALS:					0	0	309K	0

(Source: National Climatic Data Center)

**Table 5.4: Overview of Hail Events for Lee County by Year**

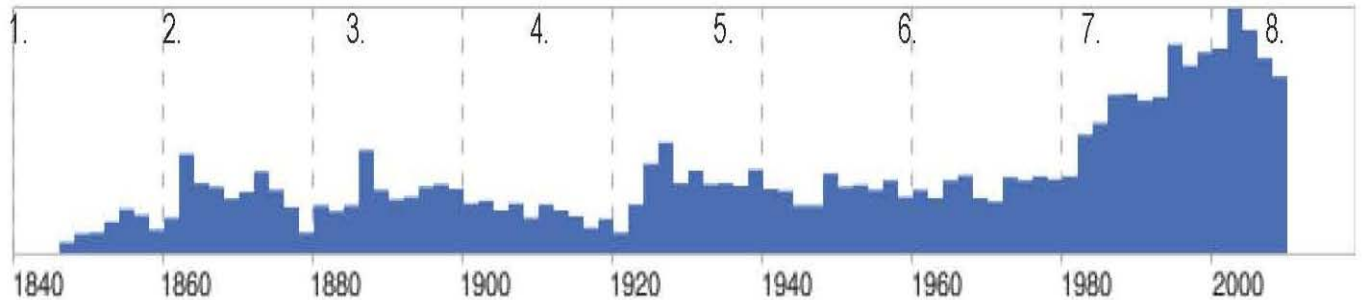
Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 <a href="#">LEE</a>	03/17/1965	1530	Hail	2.00 in.	0	0	0	0
2 <a href="#">LEE</a>	04/03/1980	1815	Hail	1.75 in.	0	0	0	0
3 <a href="#">LEE</a>	03/21/1982	1550	Hail	1.75 in.	0	0	0	0
4 <a href="#">LEE</a>	04/23/1983	1416	Hail	2.75 in.	0	0	0	0
5 <a href="#">LEE</a>	04/23/1983	1456	Hail	1.50 in.	0	0	0	0
6 <a href="#">LEE</a>	04/19/1988	2310	Hail	1.75 in.	0	0	0	0
7 <a href="#">LEE</a>	04/25/1988	1741	Hail	1.75 in.	0	0	0	0
8 <a href="#">LEE</a>	11/04/1988	1545	Hail	2.75 in.	0	0	0	0
9 <a href="#">LEE</a>	04/04/1989	1420	Hail	0.75 in.	0	0	0	0
10 <a href="#">LEE</a>	04/04/1989	1435	Hail	0.75 in.	0	0	0	0
11 <a href="#">LEE</a>	04/04/1989	1535	Hail	0.75 in.	0	0	0	0
12 <a href="#">LEE</a>	04/04/1989	1554	Hail	0.75 in.	0	0	0	0
13 <a href="#">LEE</a>	05/21/1990	1335	Hail	1.75 in.	0	0	0	0
14 <a href="#">Opelika</a>	03/18/1995	1315	Hail	0.75 in.	0	0	0	0
15 <a href="#">Gold Hill</a>	04/23/1995	1715	Hail	1.75 in.	0	0	0	0
16 <a href="#">Marvyn</a>	10/27/1995	1553	Hail	0.88 in.	0	0	0	0
17 <a href="#">Smiths</a>	12/18/1995	1953	Hail	0.75 in.	0	0	0	0
18 <a href="#">Salem</a>	03/16/1996	12:38 PM	Hail	1.00 in.	0	0	12K	0
19 <a href="#">Smith Station</a>	03/18/1996	10:34 PM	Hail	0.75 in.	0	0	8K	5K
20 <a href="#">Beauregard</a>	04/14/1996	08:05 PM	Hail	0.75 in.	0	0	8K	2K
21 <a href="#">Smiths</a>	06/23/1996	11:38 AM	Hail	0.75 in.	0	0	10K	0K
22 <a href="#">Auburn</a>	05/09/1997	03:00 PM	Hail	0.75 in.	0	0	4K	0K
23 <a href="#">Smiths Station</a>	05/09/1997	03:12 PM	Hail	1.25 in.	0	0	6K	0K
24 <a href="#">Opelika</a>	07/15/1997	04:02 PM	Hail	0.75 in.	0	0	3K	0K
25 <a href="#">Opelika</a>	11/01/1997	03:40 PM	Hail	1.75 in.	0	0	8K	0K
26 <a href="#">Smiths Station</a>	11/01/1997	08:15 AM	Hail	0.75 in.	0	0	2K	0K
27 <a href="#">Marvyn</a>	03/20/1998	02:59 AM	Hail	0.75 in.	0	0	0K	0K
28 <a href="#">Auburn</a>	04/08/1998	02:30 PM	Hail	1.00 in.	0	0	2K	2K
29 <a href="#">Auburn</a>	04/08/1998	02:33 PM	Hail	1.00 in.	0	0	2K	2K



30	<a href="#">Opelika</a>	04/08/1998	02:37 PM	Hail	0.88 in.	0	0	0K	OK
31	<a href="#">Opelika</a>	04/08/1998	11:10 AM	Hail	0.75 in.	0	0	0K	OK
32	<a href="#">Opelika</a>	05/03/1998	04:30 PM	Hail	0.75 in.	0	0	0K	OK
33	<a href="#">Opelika</a>	06/05/1998	03:55 PM	Hail	0.75 in.	0	0	0K	OK
34	<a href="#">Auburn</a>	06/25/1998	12:48 PM	Hail	0.75 in.	0	0	0K	OK
35	<a href="#">Smiths</a>	10/07/1998	04:00 PM	Hail	0.75 in.	0	0	0K	OK
36	<a href="#">Opelika</a>	10/07/1998	04:10 PM	Hail	0.88 in.	0	0	0K	OK
37	<a href="#">Opelika</a>	02/27/1999	09:45 PM	Hail	0.75 in.	0	0	0K	OK
38	<a href="#">Smiths</a>	05/06/1999	09:30 AM	Hail	0.75 in.	0	0	0K	OK
39	<a href="#">Auburn</a>	05/13/1999	02:25 PM	Hail	0.75 in.	0	0	0K	OK
40	<a href="#">Opelika</a>	05/13/1999	02:40 PM	Hail	1.00 in.	0	0	0K	OK
41	<a href="#">Opelika</a>	06/04/1999	03:25 PM	Hail	0.75 in.	0	0	0K	OK
42	<a href="#">Opelika</a>	06/04/1999	03:40 PM	Hail	1.00 in.	0	0	0K	OK
43	<a href="#">Opelika</a>	02/13/2000	04:40 PM	Hail	0.75 in.	0	0	0K	OK
44	<a href="#">Opelika</a>	02/13/2000	04:44 PM	Hail	0.88 in.	0	0	0K	OK
45	<a href="#">Opelika</a>	02/13/2000	04:48 PM	Hail	1.00 in.	0	0	0K	OK
46	<a href="#">Salem</a>	02/13/2000	04:56 PM	Hail	0.75 in.	0	0	0K	OK
47	<a href="#">Opelika</a>	03/10/2000	04:05 PM	Hail	0.75 in.	0	0	0K	OK
48	<a href="#">Smiths</a>	08/10/2000	03:30 PM	Hail	1.00 in.	0	0	1K	OK
49	<a href="#">Auburn</a>	08/10/2000	04:00 PM	Hail	0.75 in.	0	0	0K	OK
50	<a href="#">Smiths</a>	06/03/2001	12:38 PM	Hail	0.75 in.	0	0	0K	OK
51	<a href="#">Loachapoka</a>	07/10/2001	05:00 PM	Hail	1.00 in.	0	0	0K	OK
52	<a href="#">Marvyn</a>	05/30/2002	03:18 PM	Hail	1.00 in.	0	0	2K	OK
53	<a href="#">Salem</a>	06/04/2002	03:25 PM	Hail	1.00 in.	0	0	0K	OK
54	<a href="#">Opelika</a>	08/20/2002	03:37 PM	Hail	0.75 in.	0	0	0K	OK
55	<a href="#">Auburn</a>	08/20/2002	04:10 PM	Hail	0.75 in.	0	0	0K	OK
56	<a href="#">Auburn</a>	01/22/2003	06:15 AM	Hail	0.75 in.	0	0	0K	OK
57	<a href="#">Auburn</a>	03/14/2003	06:30 PM	Hail	0.88 in.	0	0	0K	OK
58	<a href="#">Opelika</a>	03/19/2003	05:10 PM	Hail	0.75 in.	0	0	0K	OK
59	<a href="#">Loachapoka</a>	04/25/2003	03:56 PM	Hail	2.75 in.	0	0	250K	OK
60	<a href="#">Opelika</a>	10/19/2004	12:32 PM	Hail	1.75 in.	0	0	2K	0

61	<a href="#">Smiths</a>	03/22/2005	12:34 PM	Hail	1.75 in.	0	0	16K	0
62	<a href="#">Loachapoka</a>	03/27/2005	04:26 PM	Hail	0.75 in.	0	0	0	0
63	<a href="#">Loachapoka</a>	03/31/2005	12:00 AM	Hail	1.75 in.	0	0	23K	0
64	<a href="#">Loachapoka</a>	04/22/2005	03:03 PM	Hail	1.00 in.	0	0	1K	0
65	<a href="#">Smiths</a>	05/20/2005	02:18 PM	Hail	1.00 in.	0	0	0	0
66	<a href="#">Auburn</a>	08/17/2005	03:05 PM	Hail	0.75 in.	0	0	0	0
67	<a href="#">Bleecker</a>	12/28/2005	12:30 PM	Hail	0.75 in.	0	0	0	0
68	<a href="#">Smiths</a>	12/28/2005	12:43 PM	Hail	0.75 in.	0	0	0	0
69	<a href="#">Opelika</a>	03/20/2006	07:42 PM	Hail	1.00 in.	0	0	0	0
70	<a href="#">Smiths</a>	03/20/2006	08:10 PM	Hail	1.00 in.	0	0	0	0
71	<a href="#">Opelika</a>	04/08/2006	07:05 AM	Hail	0.88 in.	0	0	0	0
72	<a href="#">Opelika</a>	05/10/2006	03:08 PM	Hail	1.00 in.	0	0	0	0
73	<a href="#">Opelika</a>	05/13/2006	08:02 PM	Hail	0.88 in.	0	0	0	0
74	<a href="#">Loachapoka</a>	10/11/2006	18:45 PM	Hail	0.88 in.	0	0	0K	0K
75	<a href="#">Opelika</a>	06/11/2007	21:00 PM	Hail	0.88 in.	0	0	0K	0K
76	<a href="#">Auburn</a>	04/04/2008	18:00 PM	Hail	0.75 in.	0	0	0K	0K
77	<a href="#">Opelika</a>	04/04/2008	18:10 PM	Hail	1.00 in.	0	0	0K	0K
78	<a href="#">Andrews</a>	04/04/2008	18:20 PM	Hail	1.75 in.	0	0	0K	0K
79	<a href="#">Motts</a>	03/28/2009	11:57 AM	Hail	0.75 in.	0	0	0K	0K
80	<a href="#">Smiths Station</a>	03/28/2009	11:58 AM	Hail	0.88 in.	0	0	0K	0K
81	<a href="#">Motts</a>	03/28/2009	12:34 PM	Hail	0.75 in.	0	0	0K	0K
82	<a href="#">Shotwell</a>	03/28/2009	12:55 PM	Hail	0.75 in.	0	0	0K	0K
83	<a href="#">Roxana</a>	04/10/2009	18:22 PM	Hail	1.00 in.	0	0	0K	0K
84	<a href="#">Smiths Station</a>	04/10/2009	19:12 PM	Hail	1.25 in.	0	0	0K	0K
85	<a href="#">Auburn</a>	05/28/2009	14:10 PM	Hail	0.75 in.	0	0	0K	0K
86	<a href="#">Auburn</a>	05/28/2009	14:21 PM	Hail	0.75 in.	0	0	0K	0K
87	<a href="#">Auburn</a>	06/02/2009	16:30 PM	Hail	0.88 in.	0	0	0K	0K
88	<a href="#">Auburn</a>	07/05/2009	12:20 PM	Hail	0.75 in.	0	0	0K	0K
TOTALS:						0	0	360K	11K

**Chart 5.1: Overview of Lightning Events for Alabama  
1840-2009**



**Table 5.5: Overview of Lightning Reports for the United States in 2008 –  
Ranked by State (Note: Alabama is ranked 10<sup>th</sup>)**

\*All of the lightning deaths in 2008 occurred outdoors

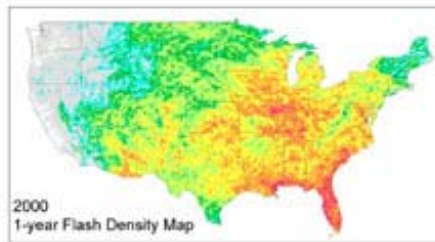
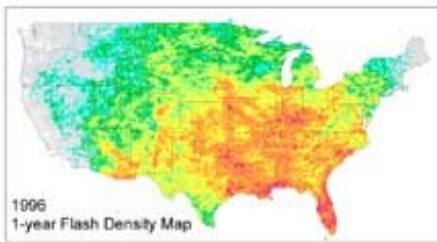
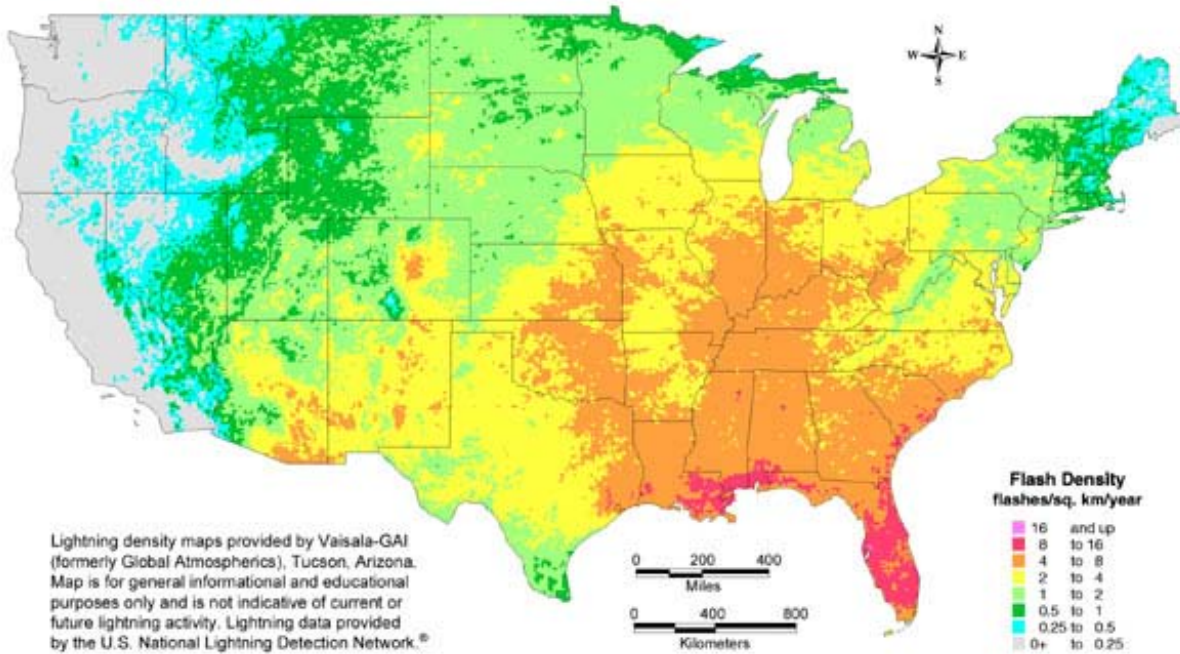
State	Reports	Deaths	Injuries
Georgia	78	0	16
Massachusetts	68	1	21
Florida	63	4	21
Texas	47	1	5
Indiana	37	0	5
New Jersey	31	1	8
Arkansas	30	1	3
Illinois	28	0	1
Wisconsin	26	1	3
<b>Alabama</b>	<b>25</b>	<b>1</b>	<b>6</b>
Mississippi	24	1	1
New York	21	0	13
Pennsylvania	21	1	6
South Carolina	21	2	10
Colorado	20	4	7
Virginia	19	1	1
Louisiana	18	0	4
Missouri	18	1	17
Iowa	17	1	3
New Hampshire	15	0	1
Maryland	15	0	1
Connecticut	13	1	5
Kansas	12	1	10
North Carolina	12	1	14
Arizona	11	0	6
Maine	8	2	0
Delaware	7	0	0
Oklahoma	7	0	0

North Dakota	6	0	0
Rhode Island	5	0	1
Tennessee	4	0	0
Oregon	4	0	2
Michigan	4	0	0
Kentucky	4	0	0
Nevada	4	0	2
Minnesota	3	0	4
South Dakota	3	0	5
Montana	2	0	1
Ohio	2	2	1
Nebraska	2	0	1
Washington	2	0	0
Utah	1	0	1
New Mexico	1	0	0
Idaho	1	0	0
California	1	0	0

## Map 5.1: 5-year Flash Density Map



5-year Flash Density Map — U.S.  
(1996–2000)



The 5-year Flash Density Map shows the average amount of lightning recorded in 1996–2000. The average amount of lightning that occurs in any given area varies significantly from year to year, as shown in the annual maps for 1996 and 2000.

U.S. Flash Density - www.vaisala.com/020002

## Map 5.2: Lightning Facts

### Lightning Facts



## B) Tornado

### Overview

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is a result of a thunderstorm (or sometimes as a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornado season is generally March through August, although tornadoes can occur at any time of year. They tend to occur in the afternoons and evenings and over 80 percent of all tornadoes strike between noon and midnight.

Tornadoes are the most unpredictable storms. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. The damage from a tornado is a result of the high wind velocity and wind-blown debris. Damage paths can be in excess of 1 mile wide and 50 miles long. Tornadoes are the most unpredictable of storms. They are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks fourth in the nation in the number of killer tornadoes and fifth in the number of fatalities. The entire state is vulnerable to the threat of tornadoes.

Tornadoes are classified by the damaging pattern which is categorized by F0 through F5. Table 5.6 below describes the Fujita Tornado Measurement scale which details each tornado category and the expected damages and corresponding wind speed that results from this type of tornado.

**Table 5.6: Fujita Tornado Measurement Scale**

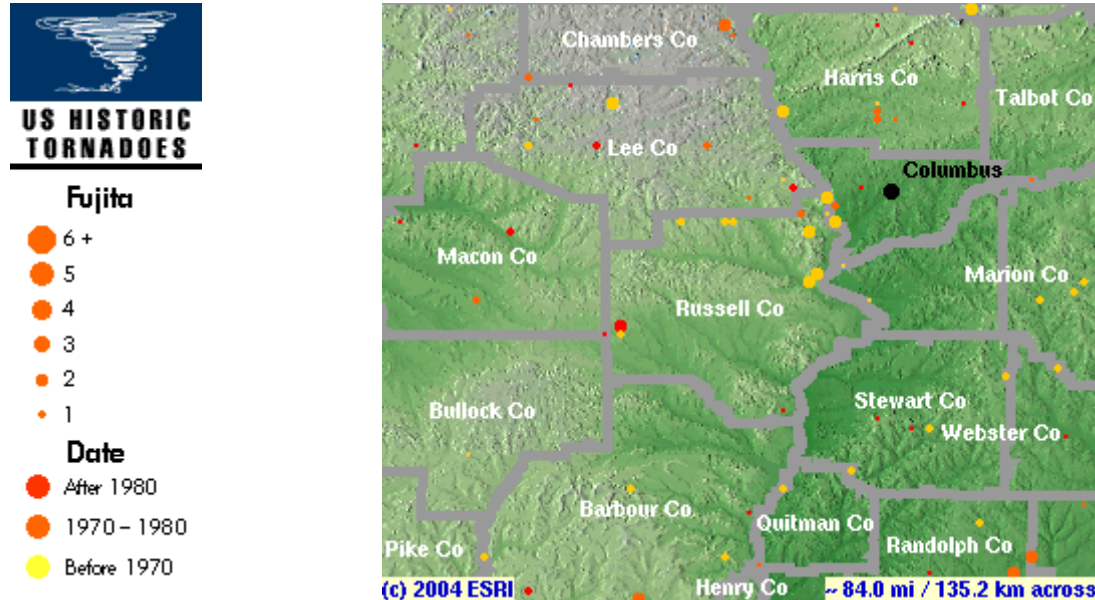
<b>Category F0</b>	Gale tornado (40-72 mph);	Light damage. Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage to sign boards.
<b>Category F1</b>	Moderate tornado (73-112 mph)	Moderate damage. The lower limit is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.
<b>Category F2</b>	Significant tornado (113-157 mph)	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
<b>Category F3</b>	Severe tornado (158-206 mph)	Severe damage. Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.
<b>Category F4</b>	Devastating tornado (207-260 mph)	Devastating damage. Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.
<b>Category F5</b>	Incredible tornado (261-318 mph)	Incredible damage. Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile sized missiles fly through the air in excess of 100 yards; trees debarked; incredible phenomena will occur.

## Previous Occurrence of Tornado Events

Since 1875, Lee County has experienced thirty-two tornadoes that have ranged from a Category F0 to a F4 and have taken place in all jurisdictions in Lee County; and since 1953 has made the Federal Disaster Declarations for one tornado incident. The damage that occurred from the tornadoes ranged from light damage to considerable damage to homes and businesses. Some of the damages included structural damage to homes and businesses, uprooted trees and flying debris. Tornadoes have caused 541 injuries and 31 deaths to Lee County residents. The most destructive tornado to hit Lee County was a Category F3 that hit in 1953 in both Lee and Russell County. That tornado alone injured 195 and killed 6 residents with a destruction path of only one mile.

The greatest impact, however, has been property damage totaling more than 9+ million dollars. Map 5.4 further documents the wind zones in the United States and how Alabama is especially affected by wind / tornados. Lee County is located in Zone III. Tornado winds could possible reach 200 miles per hour. While, Map 5.5 shows the frequency of tornados between 1953-2004 to be an average of 25 per year and Table 5.8 demonstrates that Alabama is the 7th most prone state in relation to tornado /wind events. It depicts forty years of tornado history and over 100 years of hurricane history. Table 5.7 provides more detail about the occurrences of tornado events in Lee County providing details on the date, location, and severity of each event between 1875 and 2009.

### Map 5.3: Lee County Historic Tornadoes



(Source: ESRI/FEMA Project Impact Hazard Site)

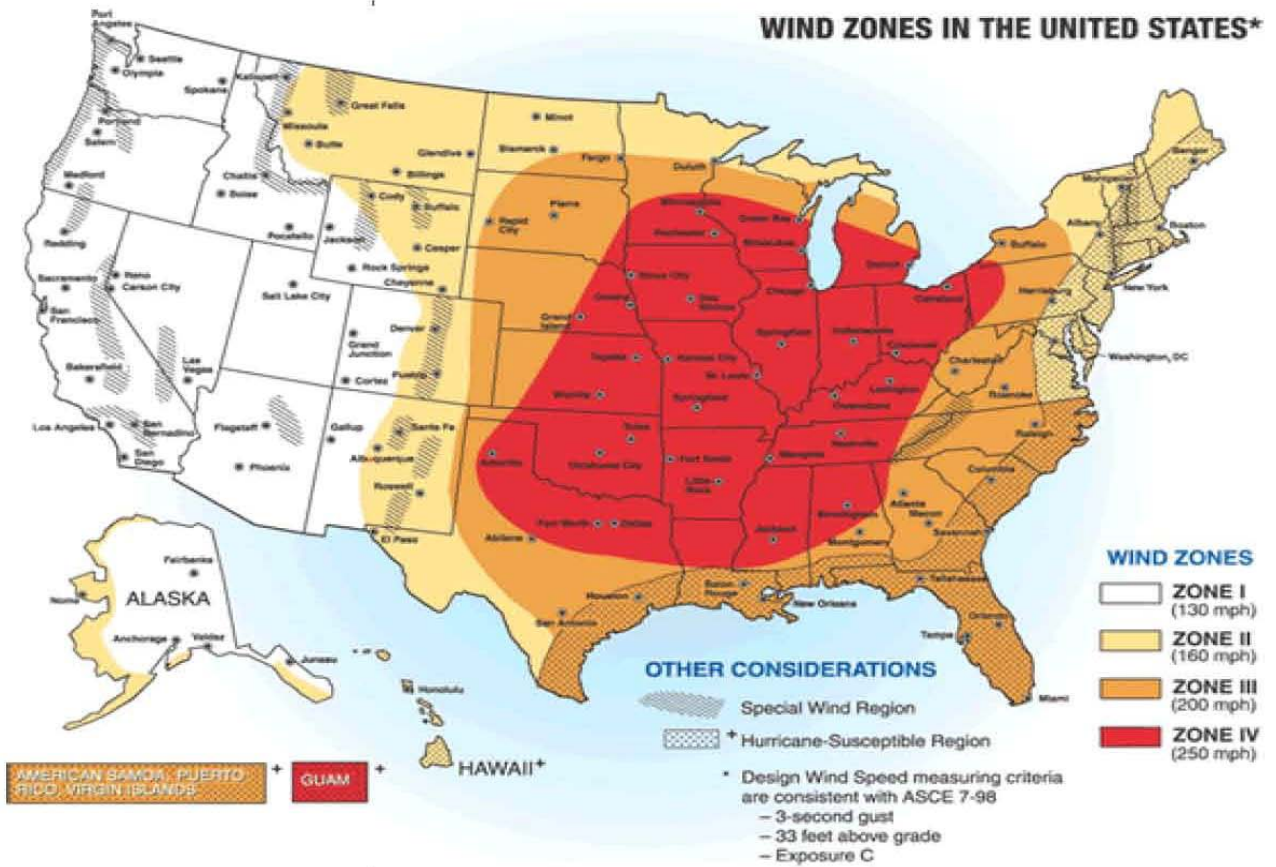
**Table 5.7: Overview of Tornado Events for the Lee County by Year**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 LEE	03/20/1875	1330	Tornado	F4	7	20		
2 LEE	05/01/1875	1200	Tornado	F3	6	30		
3 LEE	04/16/1879		Tornado	F2	1	15		
4 LEE	03/27/1882	2300	Tornado	F3	2	8		
5 LEE	04/14/1884	2345	Tornado	F2	2	7		
6 LEE	03/28/1899	1100	Tornado	F2	1	0		
7 LEE	04/05/1907	1600	Tornado	F2	0	5		
8 LEE	03/19/1922	1800	Tornado	F2	2	10		
9 LEE	04/30/1924	0500	Tornado	F2	4	25		
10 LEE	03/18/1933	1800	Tornado	F2	0	5		
11 LEE	02/12/1945	1930	Tornado	F2	0	1		
12 LEE	03/26/1948	2317	Tornado	F2	0	4		
13 LEE	04/18/1953	1700	Tornado	F3	6	195	2.5M	0
14 LEE	12/05/1954	1200	Tornado	F3	0	4	250K	0
15 LEE	08/15/1957	1730	Tornado	F1	0	0	3K	0
16 LEE	01/10/1975	1830	Tornado	F2	0	0	2.5M	0
17 LEE	06/08/1978	1300	Tornado	F1	0	0	25K	0
18 LEE	04/13/1980	1430	Tornado	F2	0	13	2.5M	0
19 LEE	05/03/1984	1330	Tornado	F2	0	1	250K	0
20 Opelika	08/02/1994	1725	Tornado	F0	0	0	50K	0
21 Opelika	07/22/1997	01:48 PM	Tornado	F0	0	0	12K	0K
22 J C Meadows Xrds	09/28/1998	04:28 PM	Tornado	F0	0	0	0K	0K
23 Opelika	11/24/2004	08:09 AM	Tornado	F0	0	0	28K	0
24 Opelika	07/06/2005	02:40 PM	Tornado	F0	0	0	34K	0
25 Smiths	03/01/2007	17:27 PM	Tornado	F1	0	0	100K	0K
26 Ridge Grove	02/28/2009	07:56 AM	Tornado	F1	0	0	65K	0K
27 Salem	02/28/2009	08:25 AM	Tornado	F2	0	3	1.1M	0K
28 Roxana	04/10/2009	18:24 PM	Tornado	F0	0	0	2K	0K

29 Loachapoka	04/10/2009	18:30 PM	Tornado	F1	0	0	150K	0K
30 Mitchell Xrd	04/10/2009	18:51 PM	Tornado	F1	0	0	30K	0K
31 Bupree	04/10/2009	19:57 PM	Tornado	F1	0	0	5K	0K
32 Cawatchee	05/23/2009	15:59 PM	Tornado	F0	0	0	100K	0K
TOTALS:					31	541	9.704M	0

### Map 5.4: Wind Zones in the United States

FEMA: Wind Zones in the United States





**Table 5.8: Ranking - Top Ten Tornado Prone States**

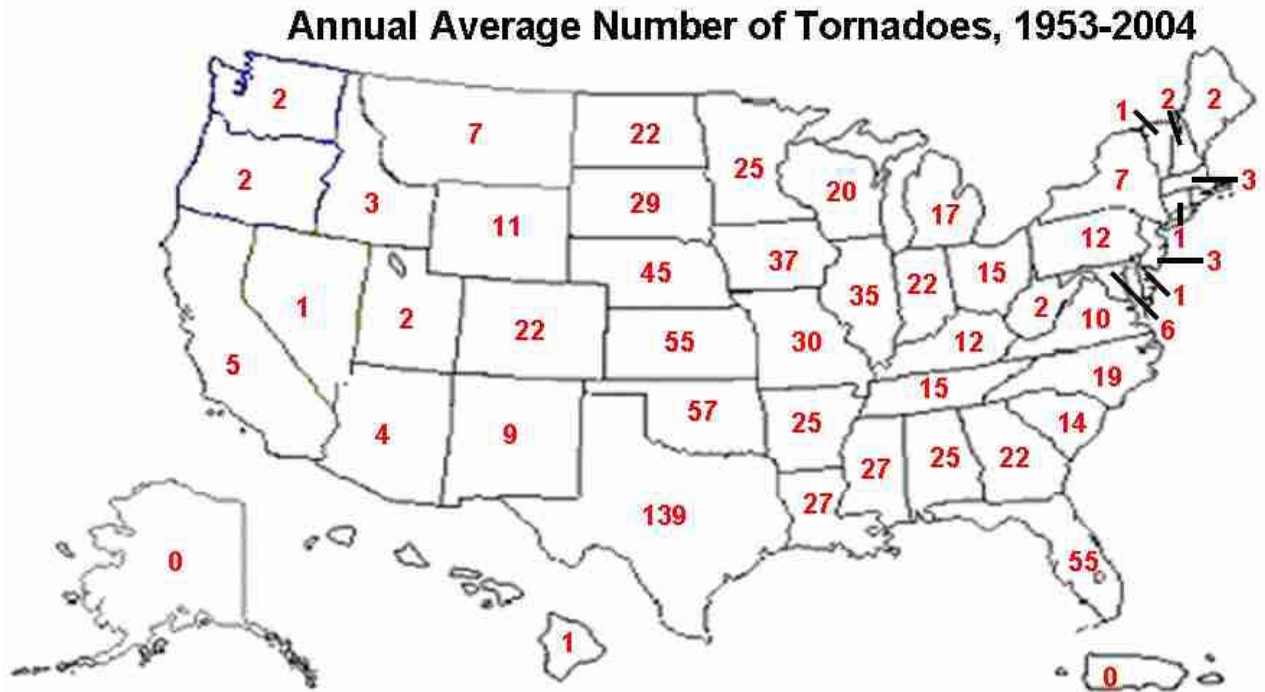
Rank	State	Factor
1	Indiana	4.25
2	Massachusetts	4.25
3	Mississippi	6.75
4	Oklahoma	8.25
5	Ohio	8.25
6	Illinois	8.75
<b>7</b>	<b>Alabama</b>	<b>8.75</b>
8	Louisiana	9.5
9	Arkansas	11
10	Kansas	11.75

(The Disaster Center bases its risk assessment by dividing the square mileage of each state against the frequency of death, injury, number of tornadoes, and cost of damages for each state. We then rank each State by these individual categories. We then add the total of each State's individual rankings and divided by the number of factors (four). The data used covers the period of 1950 -1995. The period of the data is somewhat limited, but the results are interesting. The facts presented here challenge some present day assumptions about where tornado risk is greatest. Source: Disaster

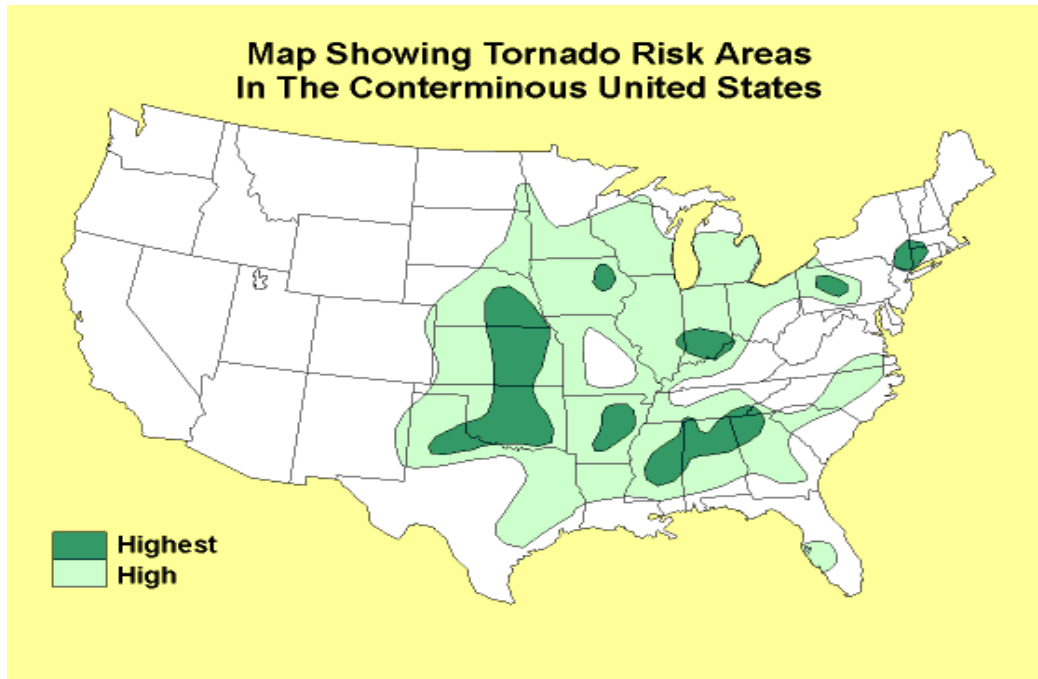
***Future Probability of a Tornado***

The jurisdictions of City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka and Auburn University are vulnerable to tornadoes. The probability that a tornado will occur is likely. The committees determined that there was between a 10% to 100% chance that one will occur in the next year and at least one chance in ten years. By examining the number of past tornadoes, the pattern of occurrence is one tornado every three to four years in Lee County. This natural hazard event has occurred in one or more of the jurisdictions. In Table 5.1, the committees indicated that the severity of a tornado for each jurisdictions was as follows: the extent of the jurisdiction being affected by the hazard is 10% to 25%; the threat to property is catastrophic with a possibility of more than 50% of the property in the affected area being damaged or destroyed; the damage to functions is critical with a complete shutdown of facilities for more than a week; and the threat to safety is critical with a possibility that there would be injuries and/or illnesses resulting in permanent injury resulting from the storm. The immediate threat to each jurisdiction is the safety and welfare of the citizens in City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka and Auburn University. Overall, the risk to the jurisdictions of Lee County was ranked an 8 by the committees. The long-term dangers are the possibility of structural damage to residences and businesses, fallen trees and power lines, broken sewer and water mains, the outbreak of fires, and the destruction of agricultural crops.

**Map 5.5: Map of Tornado Averages – United States**



**Map 5.6: Tornado Risk Areas in the United States**



(Source: Federal Emergency Management Agency)

## Map 5.7: Tornado Activity in the United States

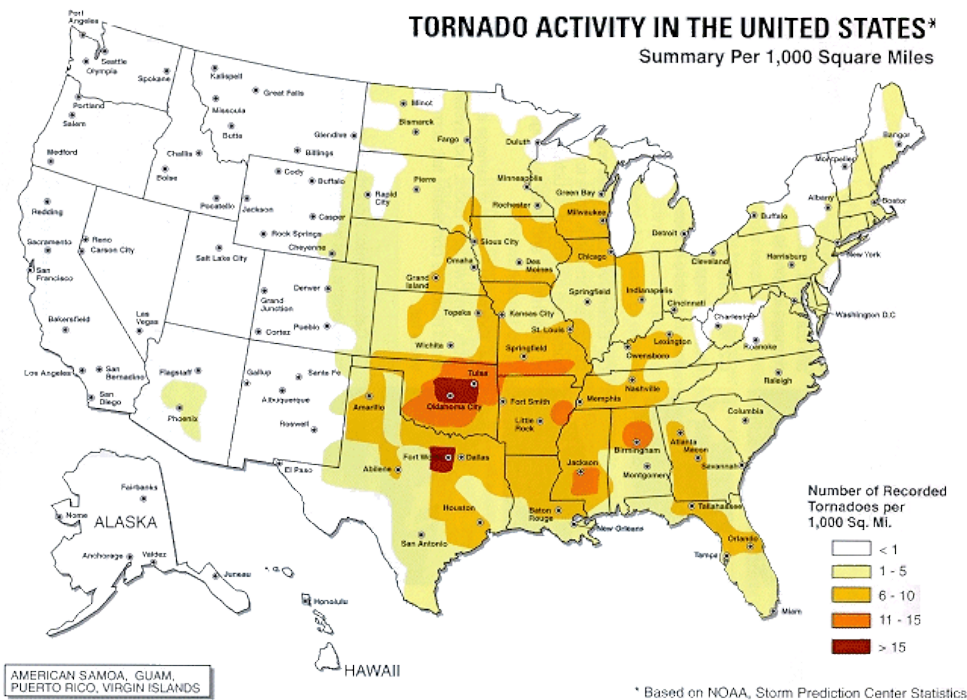


Figure 1.1 The number of tornadoes recorded per 1,000 square miles

### C) Hurricane

#### Overview

A hurricane is a tropical storm with winds that have reached a constant speed of 74 miles per hour or more. Hurricane winds blow in a large spiral around a relatively calm center known as the "eye." The "eye" is generally 20 to 30 miles wide, and the storm may extend outward 400 miles. As a hurricane approaches, the skies will begin to darken and winds will grow in strength. As a hurricane approaches land, it can bring torrential rains, high winds, and storm surges.

A single hurricane can last for more than 2 weeks over open waters and can run a path across the entire length of the eastern seaboard. August and September is the peak months during the hurricane season that lasts from June 1 through November 30. On average, five hurricanes strike the United States every year. In a two year period, an average of three significant (category 3 or higher) hurricanes will strike the United States.

The 74 to 160 mile per hour winds of a hurricane can extend inland for hundreds of miles. Hurricanes can spawn tornadoes, which add to the destructiveness of the storm. Floods and flash floods generated by torrential rains also cause damage and loss of life. Following a hurricane, inland streams and rivers can flood and trigger landslides. Like the Fujita Tornado Scale, the Saffir-Simpson Hurricane Scale can be used to give an estimate of the potential property damage and flooding expected along the coast with a hurricane.

**Table 5.9: Saffir/Simpson Hurricane Scale**

Category	Definition	Effects
One	Winds 74-95 mph	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal road flooding and minor pier damage
Two	Winds 96-110 mph	Some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of center. Small craft in unprotected anchorages break moorings.
Three	Winds 111-130 mph	Some structural damage to small residences and utility buildings with a minor amount of curtain wall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain continuously lower than 5 feet ASL may be flooded inland 8 miles or more.
Four	Winds 131-155 mph	More extensive curtain wall failures with some complete roof structure failure on small residences. Major erosion of beach. Major damage to lower floors of structures near the shore. Terrain continuously lower than 10 feet ASL may be flooded requiring massive evacuation of residential areas inland as far as 6 miles.
Five	Winds greater than 155 mph	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Major damage to lower floors of all structures located less than 15 feet ASL and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required.

***Previous Occurrence of a Hurricane***

Since 1900, the State of Alabama has been significantly affected by 10 hurricanes. The jurisdictions of Lee County were clear of any tropical activity between 1985 and 1994 until Hurricane Opal cause major damage to Lee County. Hurricane Opal caused 2 deaths, approximately 100 million in property damage and approximately 10 million in crop damage. Hurricane Opal, on October 4, 1995, was the most devastating hurricane of the 1995 season to impact the State of Alabama and resulted in a presidential disaster declaration for 38 counties, including Lee County. Additionally, the occurrences of hurricanes that have taken place in other counties have been felt by Lee County through severe storms. Lee County has experienced 9 hurricanes in past 111 years. Please note that due to a lack of reporting on this event, data was only available for the year 1995 and 2005. Map 5.8 shows the Gulf Coast hurricanes that occurred from 1950-2004

**Table 5.10: Overview of Hurricane Events for the Lee County by Year**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 <a href="#">ALZ001&gt;050</a>	10/04/1995	1200	Hurricane Opal/high Winds	N/A	2	0	0.1B	10.0M
2 <a href="#">ALZ047</a>	07/10/2005	03:00 PM	Tropical Storm	N/A	0	0	35K	0
3 <a href="#">ALZ011&gt;015 - 017&gt;050</a>	08/29/2005	04:00 PM	Tropical Storm	N/A	0	8	34.9M	0
TOTALS:					2	8	134.925M	10.000M

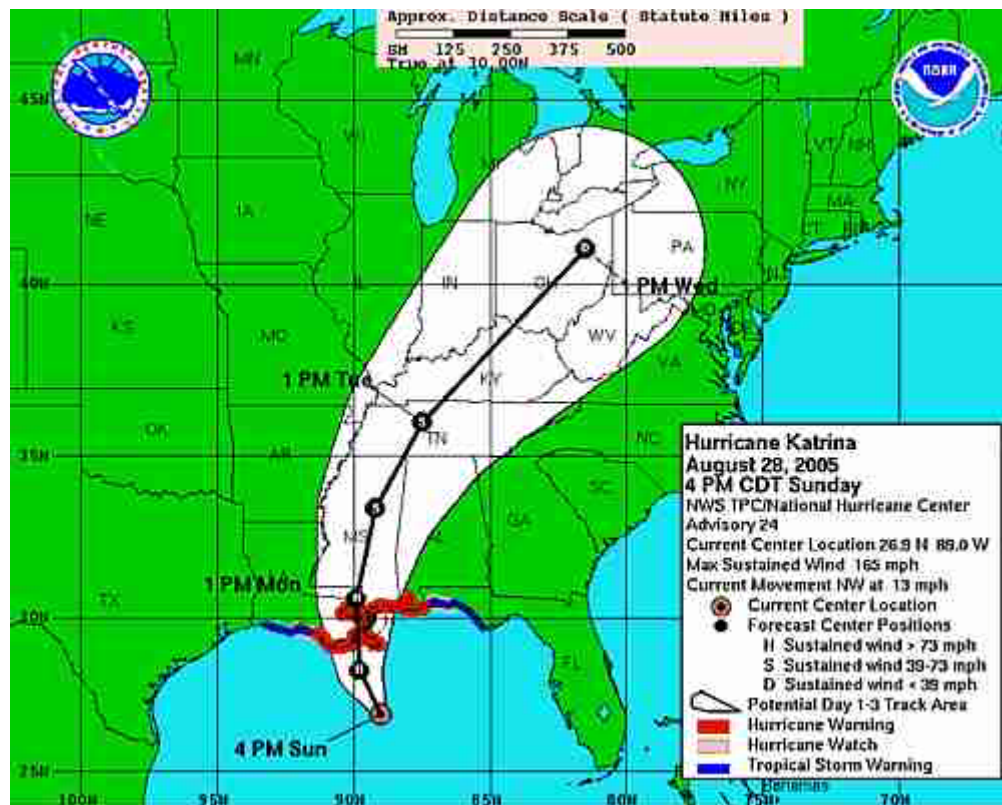
***Future Probability of a Hurricane***

The jurisdictions of City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University are vulnerable to hurricanes. The probability that a hurricane will occur is likely. The working committee determined that there was between a 10% to 100% chance that one will occur in the next year and at least one chance in ten years. The extent of the jurisdiction being affected by the hazard is more than 50%. The threat of loss or damage to property is considered to be critical with more than 25% of the affected area being damaged or destroyed. In terms of damage to services, the committee ranked this area as critical while, threat to safety was ranked as limited. The committee felt that facilities would be shut down for more than a week and there would be injuries and/or illnesses that did not result in permanent disability occurring from a hurricane event. Overall, the risk to the jurisdictions of Lee County was ranked an 8 by the committees. They determined that the jurisdiction had a high risk from this natural hazard. The immediate threat from a hurricane is high winds that can demolish houses, uproot trees, and cause flying debris. Additionally, a tornado might develop as the hurricane passes. The long-term dangers are the possibility of interruptions in utilities, fires and explosions from gas leaks, fallen power lines, and contaminated food and water.

Map 5.8: United States Landfalling Hurricanes 1950-2004



## Map 5.9: Hurricane Katrina Path - 2005



### D) Dam/Levee Failure

#### *Overview*

Dams are subject to a tremendous amount of pressure from the water in the reservoirs behind them. Dam failure can occur from too much rainfall or melted snow, engineering or construction mistakes, inadequate maintenance, or a combination of these factors can cause failure. Flood damage can be caused by events such as floodwater going over the top of the dam. Regardless of the cause, when a dam fails, huge quantities of water rush downstream with great destructive force. Dam failures in the United States have resulted in thousands of people being injured, many killed, and billions in property damage.

Dam safety, especially involving small dams that are privately owned and poorly maintained, has been an on-going hazard mitigation issues in Alabama for the past decade. No state law currently exists to regulate any existing private dams or the construction of new private dams that do not require federal licenses or inspections. To date there have been four attempts to pass legislation which would require inspection of dams on bodies of water over 50 acres or dams higher than 25 feet. This legislation has been hampered by the opposition of agricultural interest groups and insurance companies

Due to the fact that there is not a state law or regulation concerning dam safety which requires the reporting of breaks or other problems, numerous failures go unreported. Local officials submit dam breakages if they are to them by private owners. Some dam owners believe that

government should not impose reporting on private owners, thus the lack of comprehensive statistical data.

### ***Previous Occurrence of a Dam/Levee Failure***

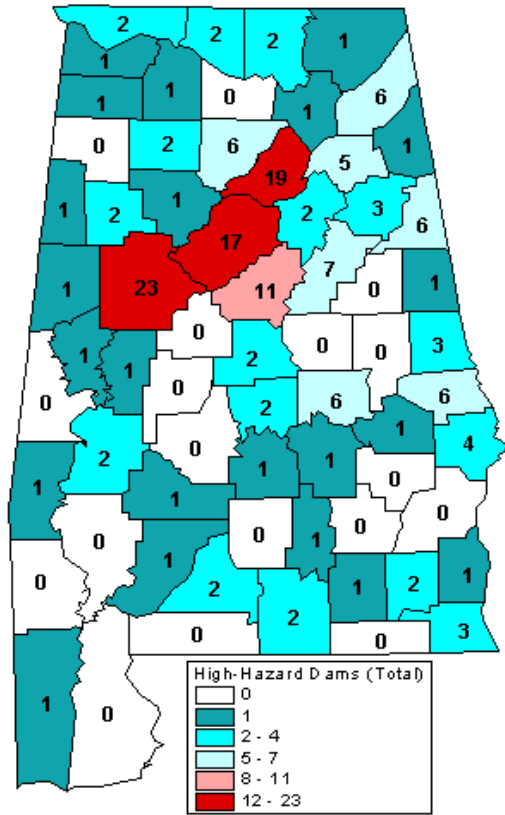
At this time, the jurisdictions of Lee County do not have any documented dam or levee failures on file that were caused by a natural hazard event. However, based on Map 5.10, the number of high hazard dams in Lee County is 6.

### ***Future Probability of a Dam/Levee Failure***

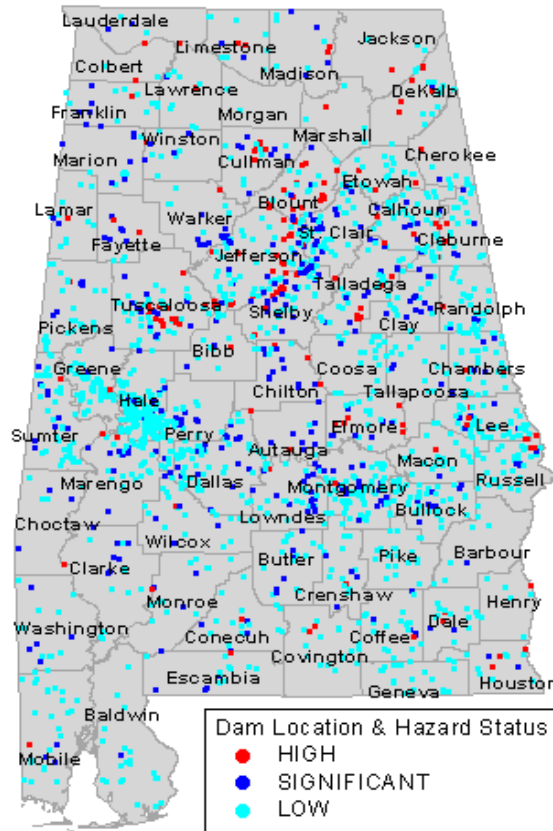
Although the jurisdictions have not experienced a high number dam or levee failure, it is considered a risk to Lee County because there are 64 documented dams and/or levees. Additionally, as illustrated in Maps 5.10 and 5.11, there are number of dams/levees that are ranked as a high or significant hazard. According to the Federal Emergency Management Agency that totaled the number of High-Hazard dams per Alabama Counties, there are six noted in Lee County. The National Inventory of Dams defines hazard as an indicator of potential hazard to downstream areas resulting from failure or disoperation of the dam and facilities. The committees determined that this natural hazard was a high risk with probability that this hazard event had between a 10% and a 100% chance of occurring in the next year, or at least one chance in 10 years. It was determined that more than 10% to 25% of the jurisdiction would be affected by this natural hazard. The threat of loss or damage to property and functions were ranked as critical with more than 25% or more of the property affected being damage or destroyed and more than a week shutdown of facilities if this natural hazard occurred. The threat to safety was also ranked as critical with injuries resulting in permanent disability. Overall, the risk to the jurisdictions of Lee County was ranked a 7 by the committees due to fact that the current structural status of the dams in Lee County is unknown. They determined that the jurisdiction had a high risk from this natural hazard. The immediate threat from a dam or levee failure is rushing water that causes injuries, possible deaths, drowning, and property damage from collapsed building and bridges. The long-term dangers are the spread of disease, animal deaths, and a contaminated water supply. Additionally, utility equipment can be damaged, resulting in power outages and possible fire and explosions. Buildings may be dangerously weakened due to this natural hazard.



**Map 5.10: High Hazard Dams**



**Map 5.11: Dam Location and Hazard Status**



Source: Federal Emergency Management Agency, U.S. Census Bureau

## E) Winter Storm/Freezes/Snow

### Overview

Winter storms vary in size and strength. A storm may be large enough to affect many states or only a portion of a single state. It can range from moderate snow or ice over a few hours to blizzard conditions. All winter storms/freezes are accompanied by low temperatures and blowing snow, which can reduce visibility. A severe winter storm is one that drops 4 or more inches of snow during a 12-hour period, or 6 or more inches during a 24 hours span.

### Previous Occurrence of a Winter Storm/Freeze/Snow

Based on the information provided by the National Climatic Data Center, the jurisdictions in Lee County have experienced eight winter storms and three extreme cold events resulting in one death. In 1993, a federal disaster declaration was made due to severe snowfall and winter storm occurring in Lee County. Information is not available at this time to determine the exact locations and costs of these natural hazard events in the jurisdictions of Lee County. Additionally, due to a lack of reporting on this event, data was only available for the years from 1996 to 2009 (see Tables 5.11-5.12).

**Table 5.11: Overview of Winter Storm/Freeze Events for Lee County**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 ALZ028>029 - 035>038 - 040>049	12/18/1996	02:00 PM	Winter Storm	N/A	0	0	240K	320K
2 ALZ001>010 - 016 - 018>021 - 028>029 - 037>038 - 047	12/29/1997	01:00 AM	Winter Storm	N/A	0	0	0K	0K
3 ALZ037>038 - 040 - 042>049	01/02/2002	06:16 AM	Heavy Snow	N/A	0	0	0K	0K
4 ALZ021 - 029 - 038 - 047>048	01/03/2002	05:00 AM	Heavy Snow	N/A	0	0	0K	0K
5 ALZ020>021 - 028>029 - 037>038 - 047	01/28/2005	07:45 PM	Ice Storm	N/A	0	0	425K	0
6 ALZ021 - 024 - 027>029 - 031>043 - 047	01/19/2008	06:00 AM	Heavy Snow	N/A	0	0	0K	0K
7 ALZ021 - 024 - 027>029 - 031>043 - 047	01/19/2008	06:00 AM	Winter Weather	N/A	0	0	0K	0K
8 ALZ038 - 047 - 048	03/01/2009	06:00 AM	Heavy Snow	N/A	0	0	0K	0K
TOTALS:					0	0	665K	320K

(Source: National Climatic Data Center)

**Table 5.12: Overview of Temperature Extremes for Lee County**

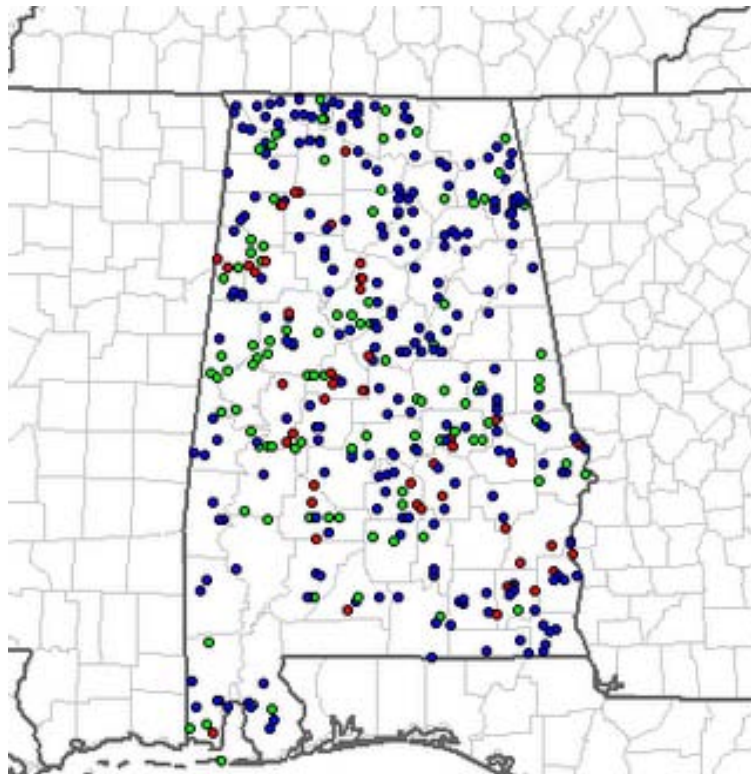
Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
<a href="#">ALZ001&gt;050</a>	02/03/1996	06:00 PM	Extreme Cold	N/A	0	0	0	0
<a href="#">ALZ001&gt;050</a>	03/07/1996	08:00 AM	Extreme Cold	N/A	0	0	0	52.0M
<a href="#">ALZ011&gt;015 - 017&gt;050</a>	01/24/2003	12:00 AM	Extreme Cold	N/A	1	0	0K	0K
TOTALS:					1	0	0	52.0M

***Future Probability of a Winter Storm/Freeze***

Although the six jurisdictions have not experienced a high incidence of winter storms and freezes, these natural hazards are a concern for these jurisdictions due to the number of special populations in the area. Citizens such as the elderly and the handicapped are not prepared for a winter storm or freeze. The committees determined that the probability that these natural hazards would occur was likely. Winter storms and freezes have a 10% to 100% chance in the next year or at least one chance in 10 years of happening in the four jurisdictions. The threat of loss or damage to property and functions was ranked as limited with only 10% or more of the

property affected being damage or destroyed and no more than a one day for the shutdown of facilities if this natural hazard occurred. The threat to safety was also ranked as limited with injuries not resulting in permanent disability. Overall, the risk to the jurisdictions of Lee County was ranked a 6 by the committees. They determined that the jurisdiction had a medium risk from this natural hazard. The immediate threat from a winter storm or freeze is traffic accidents, people trapped in their homes, power outages, frozen water supplies, and physical overexertion. The long-term dangers of a multiple day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages. Additionally, flooding can occur if debris-blocked channels cannot drain off the water from melting ice and thawing soil.

**Map 5.12: The SPC map below shows severe reports in Alabama for 2007**



Hail=green, Wind=blue, Tornado=red

**F) Drought/Heat Wave**

*Overview*

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts occur when a long period passes without any substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

***Previous Occurrence of a Drought/Heat Wave***

The reported data is limited concerning previous occurrences of droughts and heat waves for each jurisdiction. One case has been found to document this natural hazard event. In 1977 and 2000, a federal disaster declaration was made due to droughts that occurred in Lee County. Although the documented reports are limited, the jurisdictions of Lee County have all experienced droughts and heat waves during the past 28 years.

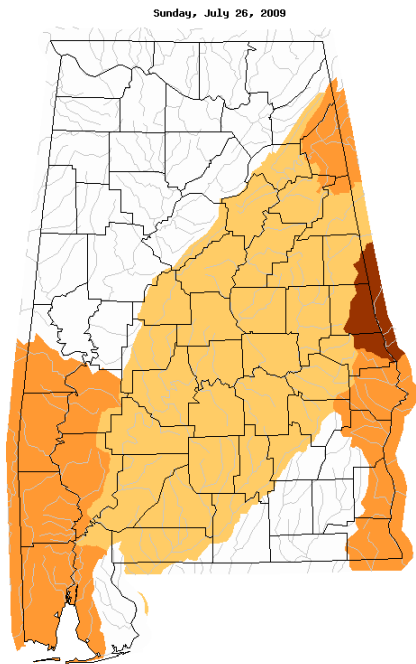
**Table 5.13: Overview of Drought Events for Lee County**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 ALZ039>040 - 042 - 044>050	07/11/2006	07:00 AM	Drought	N/A	0	0	0	0
2 ALZ011>015 - 017>050	08/01/2006	12:00 AM	Drought	N/A	0	0	0	0
3 ALZ011>015 - 017>050	09/01/2006	12:00 AM	Drought	N/A	0	0	0	0
4 ALZ036>038 - 040>045 - 047	05/22/2007	06:00 AM	Drought	N/A	0	0	0K	0K
5 ALZ011>015 - 017>045 - 047	06/01/2007	00:00 AM	Drought	N/A	0	0	0K	0K
6 ALZ011 - 013>015 - 017>021 - 023>029 - 032>038 - 040>045 - 047	04/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
7 ALZ011 - 013>015 - 017>021 - 023>029 - 032>038 - 040>045 - 047	05/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
8 ALZ017>021 - 024>029 - 036>038 - 043 - 045 - 047	06/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
9 ALZ017>021 - 024>029 - 036>038 - 043 - 045 - 047>048 - 050	07/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
10 ALZ011 - 013>015 - 017>019 - 021 - 023>029 - 034>038 - 043 - 045>048 - 050	08/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
TOTALS:					0	0	0	0

**Table 5.14: Overview of Temperature Extremes for Lee County**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
<a href="#">ALZ001&gt;050</a>	02/23/1996	08:00 AM	Excessive Heat	N/A	0	0	0	0

## Map 5:13: State of Alabama Drought Map



Explanation - Percentile classes				
Low	≤5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

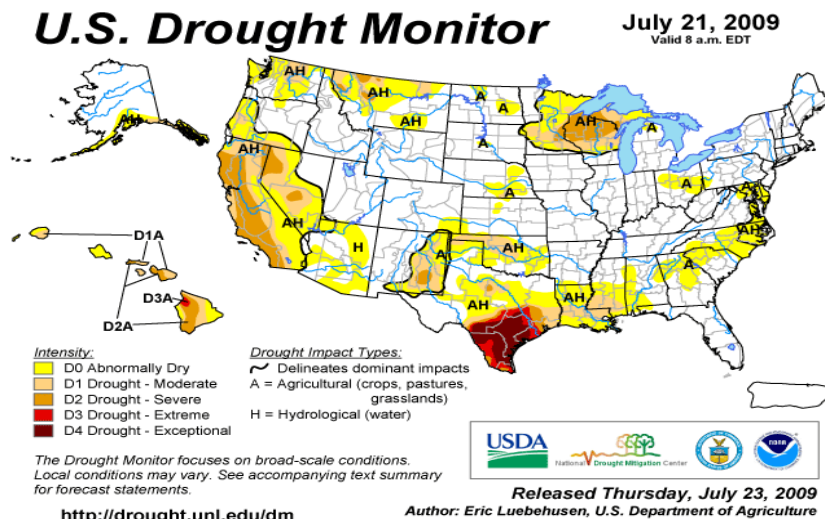


### *Future Probability of a Drought/Heat Wave*

Although the jurisdictions have not experienced a high incidence of documented droughts and heat waves, these natural hazards are a concern for these jurisdictions due the number of special populations in the area such as the elderly and the low income households. The working committee determined that the probability that these natural hazards would occur was likely. Droughts and heat waves have a 10% to 100% chance in the next year or at least one chance in 10 years of happening in the four jurisdictions. This natural hazard would impact more than 50% of the jurisdictions. The threat of loss or damage to property and safety was ranked as limited with only 10% or more of the property affected being damage or destroyed and with injuries occurring that would not result in permanent disability. The threat to functions was ranked as negligible with critical facilities or services being shut down for 24 hours or less. Overall, the risk to the jurisdictions of Lee County was ranked a 6 by the planning working sub-committee. They determined that the jurisdiction had a medium risk from this natural hazard. Map 5.14 and 5.15 further illustrates the vulnerability of drought for Alabama as a whole. The immediate threat from a heat wave is the following: 1) Strain – occurs when hot weather and/or exertion threaten to raise your body core temperature; 2) Impairment – occurs when your body temperature approaches 102 degrees Fahrenheit, creating an abnormal state that disrupts normal physical and mental functions; and 3) Emergencies – when the heat strain from overexposure last too long or become too severe, collapse from water depletion, heatstroke, or heart attack may occur. The long-term dangers of a drought can have serious economic impact on a community. Agricultural production can be damaged or destroyed by loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these

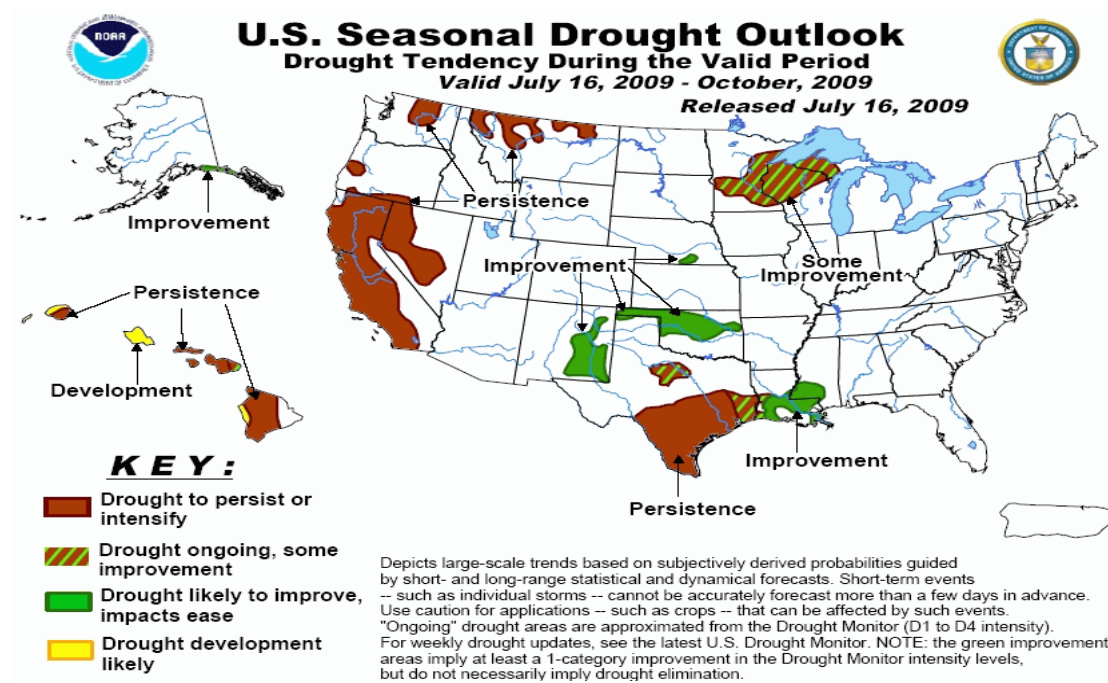
resources. When combined with extreme heat, droughts can make life very difficult especially if the situation lasts for a long time.

**Map 5.14: U.S. Drought Monitor for July 21, 2009**



(Source: [www.drought.uni.edu/dm](http://www.drought.uni.edu/dm))

**Map 5.15: U.S. Seasonal Drought Outlook**



(Source: National Oceanic and Atmospheric Administration)

## **G) Floods**

### *Overview*

Floods are the most common and widespread of all natural disasters--except for fire. Most communities in the United States have experienced some kind of flooding, after spring rains, heavy thunderstorms, or winter snow thaws. Floods can be slow or fast rising. A flood, as defined by the National Flood Insurance Program is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from: overflow of inland or tidal waters, unusual and rapid accumulation or runoff of surface waters from any source, or a mudflow. A flash flood is usually the result of extremely heavy rain or snow and is sudden. Raging torrents flow very fast through river bends after these heavy rains causing water to push forward well beyond banks and sweeping everything before them. Houses, bridges, and boulders can be tossed and rolled by a flash flood. No area in the United States is completely free from the threat of floods.

### *Previous Occurrence of a Flood*

The jurisdictions in Lee County have experienced eleven documented floods between 1994 and 2009 that were not related to a statewide flooding incident (i.e. 2003) according to the National Climatic Data Center. These floods caused approximately \$2.49 million in property damage and \$55,000 in crop damage. Additionally, the inventory of floods that resulted in Federal Disaster Declaration in the State of Alabama shows just how devastating this natural disaster can be and just how frequently it can happen. In the year of 2003, a federal disaster declaration was made due to floods that occurred in Lee County and several other counties in Alabama. These floods caused approximately \$4.5 million in property damage and approximately \$275, 000 in crop damage.

Repetitive flooding has occurred in mostly residential structures and non-residential structures in the following areas: a) Lee County (including Town of Loachapoka and City of Smiths Station) includes Lee Road 298, Lee Road 325, Tranquil Pines North, and Tranquil Pines South; b) City of Opelika include Columbus Parkway at 4<sup>th</sup> Street, the bridge on Saugahatchee Lake Road, North Uniroyal Road, and Pepperell Parkway at North 20<sup>th</sup> Street; and c) City of Auburn (including Auburn University) includes: Bonnie Glenn Road, East University Drive, Burke Place, Annalue Drive, East Glenn Avenue, Samford Avenue, Marion Circle, Virginia Avenue, Janet Drive, Loftin Drive, Pumphrey Avenue, Conway Parkway, Mall Boulevard, Gatewood Drive, Johnston Street, Freeman Street, Sanders Street, Cary Drive, White Street, Boykin Street, Clark Avenue, Foster Street, White Street/Bragg Avenue, Deer Run Road, and Middlebrook Lane.

Currently, all jurisdictions with the exception of the Town of Loachapoka participate in the National Flood Insurance Program (NFIP). The Town of Loachapoka does not participate in the program because it is not mapped. In terms of the number and type of repetitive loss properties for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10-year period since 1978, there are nine residential structures in the City of Auburn.

**Table 5.15: Overview of Flood Events for the Lee County Area by Year**

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 <a href="#">LEE</a>	07/07/1994	0600	Flash Flood	N/A	0	0	500K	50K
2 <a href="#">Countywide</a>	01/07/1998	09:30 AM	Flash Flood	N/A	0	0	25K	5K
3 <a href="#">Countywide</a>	06/28/1999	07:35 AM	Flash Flood	N/A	0	0	1.5M	0K
4 <a href="#">ALZ038 - 047&gt;048</a>	05/07/2003	11:00 PM	Flood	N/A	0	0	4.5M	275K
5 <a href="#">Countywide</a>	07/01/2003	08:30 AM	Flash Flood	N/A	0	0	40K	0K
6 <a href="#">Auburn</a>	07/26/2004	02:45 PM	Flash Flood	N/A	0	0	75K	0
7 <a href="#">Countywide</a>	03/27/2005	04:00 PM	Flash Flood	N/A	0	0	20K	0
8 <a href="#">Countywide</a>	03/31/2005	01:08 AM	Flash Flood	N/A	0	0	80K	0
9 <a href="#">Countywide</a>	04/01/2005	07:00 AM	Flash Flood	N/A	0	0	300K	0
10 <a href="#">Auburn</a>	11/15/2006	13:15 PM	Flash Flood	N/A	0	0	0K	0K
11 <a href="#">Salem</a>	09/19/2009	17:30 PM	Flash Flood	N/A	0	0	0K	0K
12 <a href="#">Auburn</a>	11/10/2009	12:00 PM	Flood	N/A	0	0	0K	0K
TOTALS:					0	0	6.990M	330K

(Source: National Climatic Data Center)

***Future Probability of a Flood***

The jurisdictions of Lee County are vulnerable to flooding. The areas in the following jurisdictions are susceptible to repetitive flooding: a) Lee County (including Town of Loachapoka and City of Smiths Station) includes Lee Road 298, Lee Road 325, Tranquil Pines North, and Tranquil Pines South; b) City of Opelika include Columbus Parkway at 4<sup>th</sup> Street, the bridge on Saugahatchee Lake Road, North Uniroyal Road, and Pepperell Parkway at North 20<sup>th</sup> Street; and c) City of Auburn (including Auburn University) includes Bonnie Glenn Road, East University Drive, Burke Place, Annalue Drive, East Glenn Avenue, Samford Avenue, Marion Circle, Virginia Avenue, Janet Drive, Loftin Drive, Pumphrey Avenue, Conway Parkway, Mall Boulevard, Gatewood Drive, Johnston Street, Freeman Street, Sanders Street, Cary Drive, White Street, Boykin Street, Clark Avenue, Foster Street, White Street/Bragg Avenue, Deer Run Road, and Middlebrook Lane.

The probability that a flood will occur is likely. The committees determined that there was between a 10% to 100% chance that one will occur in the next year and at least one chance in ten years. The threat of loss or damage to the jurisdiction’s property is considered to be critical with more than 25% of the affected area being damaged or destroyed while threat of safety for the population is limited with only minor injuries not resulting in permanent disability. The committee also determined that the damage to functions was limited with a complete shutdown of affected facilities for more than one day. Overall, the risk to the jurisdictions of Lee County



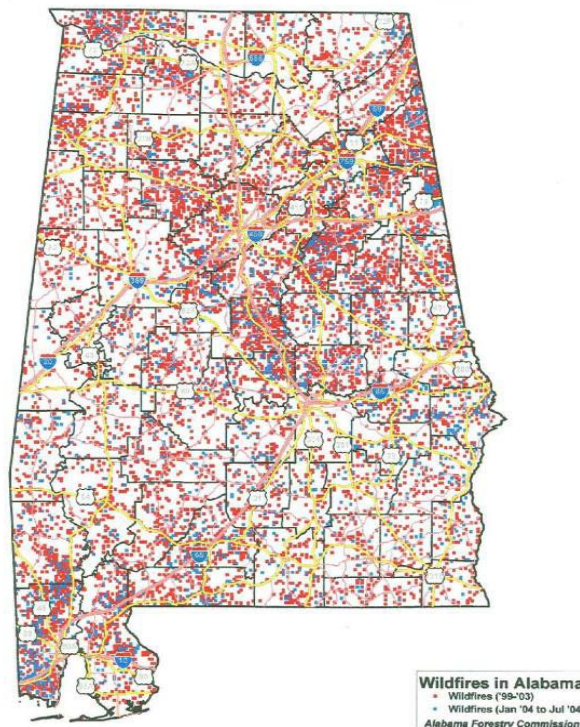
was ranked a 5 by the committees. They determined that the jurisdiction had a moderate risk from this natural hazard. The immediate threat from a flash flood/ flood is from the strength of the water, carrying debris and causing injuries and drowning. The long-term dangers are outbreak of disease, widespread animal deaths, broken sewer lines and widespread water supply decontamination, power outages, and fires. Additionally, large scale flooding can disrupt a community for a long time while the utilities are restored, debris cleaned, and property are repaired. The only map that is currently available is the FEMA Floodway Maps dated 1981 but as of October 1, 2009 map updates are underway and will start being available digitally.

## H) Wildfires

### *Overview*

A wild land fire is a wildfire in an area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities. An Urban-Wild land Interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

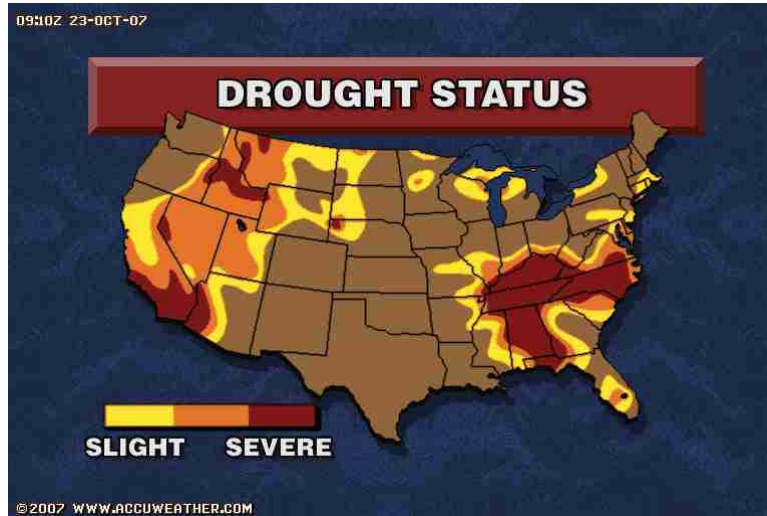
### **Map 5.16: Wildfires in Alabama**



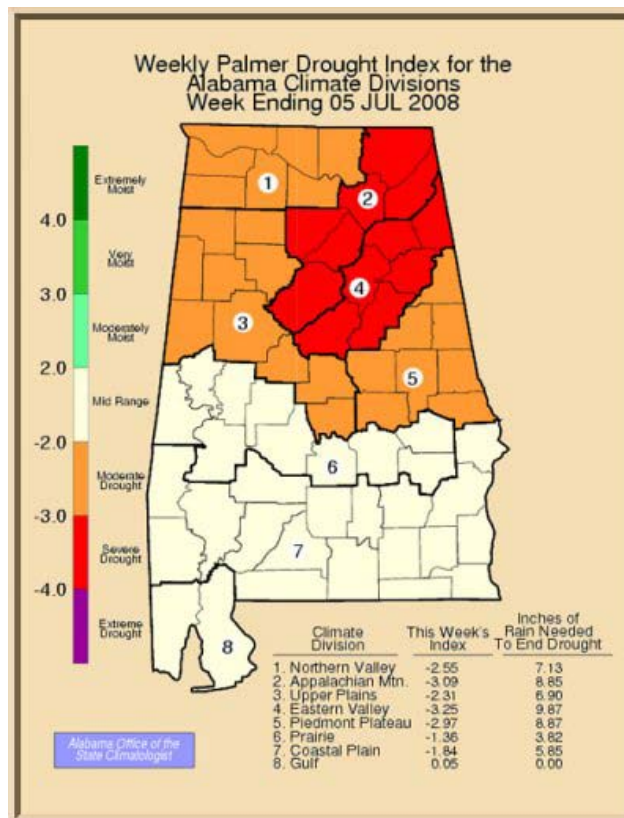
People start more than four out of every five wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior. The continuity of fuels, expressed in both horizontal and vertical components is also a factor in the pattern of vegetative growth and open areas. Topography is important because it affects the

movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the rate of speed at which the fire travels. Weather affects the probability of wildfire and has a significant effect on its behavior. Temperature, humidity and wind (both short and long term) affect the severity and duration of wildfires. Drought also has a very large impact on wildfires, the amount of damage they can do and the likely hood that they could or could not be put out.

**Map 5.17: United States Drought Status Map 2007**



**Map 5.18: Alabama Drought Index July 2008**



### *Previous Occurrence of a Wildfire*

The jurisdiction of Lee County is the only one that has had a continuous occurrence of wildland fires and urban-wildland interface fires. The table below illustrates the number of wildfires that have taken place in Lee County since 1995. These numbers were provided by the Alabama Forestry Commission which only documents the wildfires to which this agency responded.

**Table 5.16: Overview of Wildfire Events for the Lee County Area by Year**

<b>Date</b>	<b>Number of Wildfires</b>	<b>Size of Fire (Acres)</b>	<b>Avg. Size (Acres)</b>
1995	27	177.3	6.6
1996	18	85.7	4.8
1997	21	67	2.6
1998	21	78	3.7
1999	15	59.6	4
2000	51	178.4	3.5
2001	19	70.4	3.7
2002	53	334.9	6.3
2003	9	56.3	6.3
<b>TOTAL</b>	<b>234</b>	<b>1107.6</b>	<b>41.5</b>

### *Future Probability of a Wildfire*

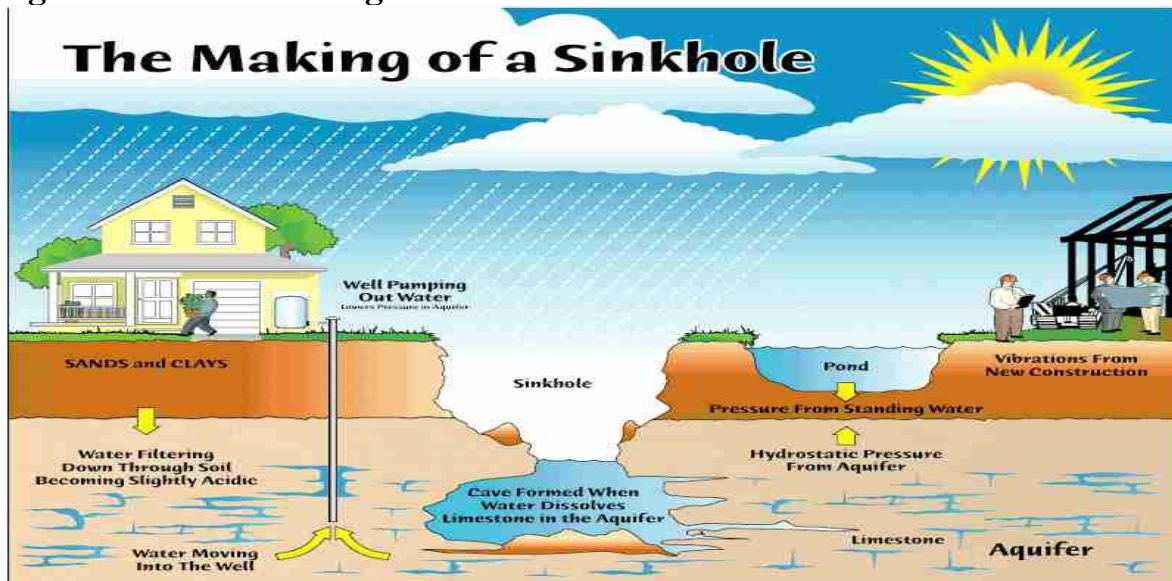
The jurisdictions of the City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka and Auburn University are vulnerable to wild land fires and urban-wildland interface fires. However, Lee County ranked their vulnerability as a 5 (See Table 5.1) while the remaining jurisdictions ranked their vulnerability to the hazard as 2. The probability that wildfires will occur is possible for all jurisdictions. The areas of the jurisdictions that are most susceptible to a wildfire are those that are heavily wooded and with high vegetation. The working committee determined that there was between a 1% to 10% chance that one will occur in the next year and at least one chance in ten years. It was also determined that the threat to property damage was critical causing more than 25% of the affected area to be damaged or destroyed by a wildfire due to the intensity of this hazard. The damage to functions was considered limited with a shutdown of facilities for more than a day depending on the location and intensity of the wildfire. In terms of the threat to safety, wildfires were ranked as critical with injuries and/or illnesses resulting in permanent disability as a result of this natural hazard. The immediate threat from a wildfire is destruction of timber, property, wildlife, and injury or loss of human life. The long-term impact of wildfires is scorched and barren land. This land may take years or decades to return to its pre-fire condition.

## **I) Sinkholes**

### *Overview*

Sinkholes are a common, naturally occurring geologic feature and pose hazards to property and the environment. Sinkholes can sometimes cause substantial damage, threaten water and environmental resources by draining streams, lakes, and wetlands, and creating pathways for transmitting surface waters directly into underlying aquifers. Where these pathways are developed, movement of surface contaminants into the underlying aquifer systems can persistently degrade ground-water resources. In some areas, sinkholes are used as storm drains, and because they are a direct link with the underlying aquifer systems it is important that their drainage areas be kept free of contaminants. Conversely, when sinkholes become plugged, they can cause flooding by capturing surface-water flow and can create new wetlands, ponds, and lakes.

**Diagram 5.1: Making of a Sinkhole**



***Previous Occurrence of a Sinkhole***

Lee County has experienced 100+ sinkhole incidents since 2002. Lee Road 166 and Lee road 148 are the areas of main concern facing this natural hazard. Dozens of these sinkholes on Lee Road 148 have been mitigated. One section of the county road required extensive structural work to be completed to prevent further deterioration.

Since these areas have become some damaged by instances of sinkholes, landowners have had to make arrangements for garbage pickup, school bus routes and other issues that require anything other than a standard size car, van or SUV as the county has closed these roads to all but standard neighborhood traffic. Residents have had vehicles fall into sinkholes, have had to shore up houses because of rook cracking, have had injury to person or animals and have had septic tanks condemned, alarm service disconnected or disruption in water service.

**Pictures 5:1: Sinkhole Damage – January 2009**



Power lines moved because of sinkholes / soil instability



Sinkhole off of Lee County Rd#166



Road damage from sinkhole / soil instability



Sinkhole on residential private property



Road damage to sinkholes / soil instability



Road closed due to sinkholes



Alternative means of disposing of solid waste since garbage pickup has been disrupted



Road closed to neighborhood traffic only (School Buses, Garbage pickup and local services are not allowed to use road)

### ***Future Probability of a Sinkhole***

The probability that a sinkhole will occur for Lee County and the City of Opelika is not only possible but increasing as time passes. Lee County is already experiencing sinkholes and there is a potential threat of sinkholes for the City of Opelika due to the proximity of these roads to the city limits of Opelika. The committees determined that there was a possible chance that sinkholes will continue to develop over the next ten years. The threat of loss or damage to property and functions was ranked as critical with more than 25% or more of the property affected being damaged or destroyed and more than a week for shutdown of facilities if this natural hazard occurred. The threat to safety was also ranked as limited with injuries not resulting in permanent disability. Lee County ranked these natural hazards as a 3 and City of Opelika ranked this hazard as a 2. The remaining jurisdictions ranked this natural hazard as a 1.

## **J) Earthquakes**

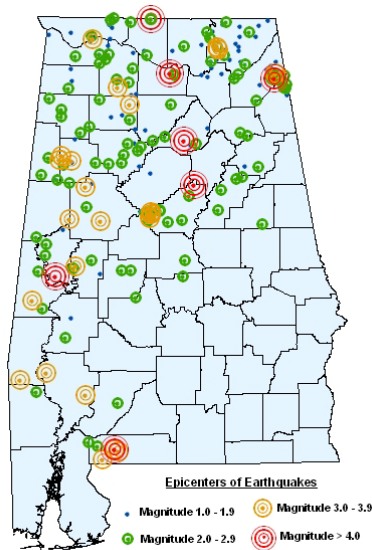
### ***Overview***

An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. This shaking can cause buildings and bridges to collapse; disrupt gas, electric, and phone service; and sometimes trigger landslides, avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis).

### ***Previous Occurrence of Earthquakes***

While instances are rare in Lee County to experience earthquakes, there are still some instances of tremors /quakes that happen hundreds of miles away that can be felt.

### **Map 5.19: Alabama Documented Earthquake / Tremor History**



***Future Probability of an Earthquake***

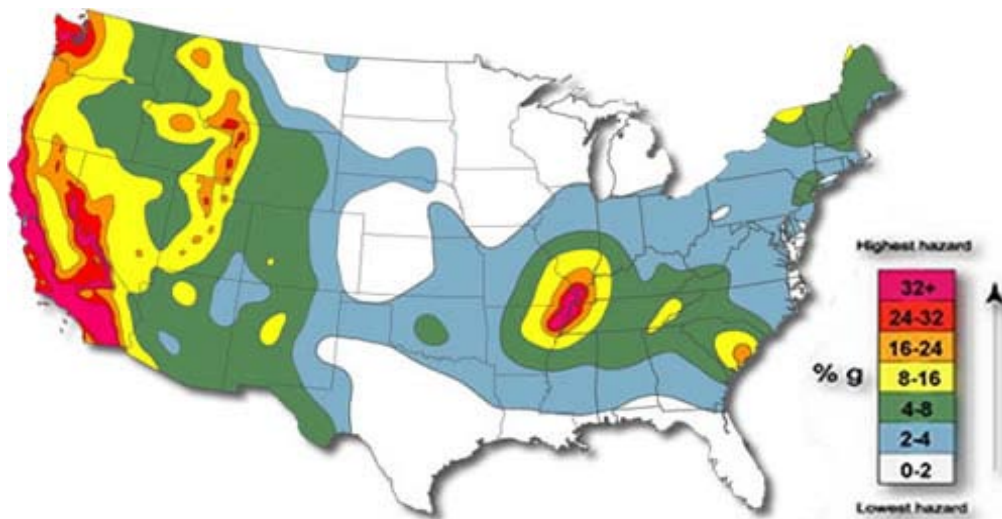
Based on the locations of the jurisdictions of Lee County, they are not vulnerable to earthquakes. Map 5.21 shows the very low probability that an earthquake will occur in Lee County.

**Map 5.21: U.S. Historic Earthquakes**



**Map 5.21: U.S. Highest Hazard / Probability Map**





The map above is an earthquake hazard map for the United States. Two factors were considered in making this map: 1) the frequency of earthquakes in different parts of the United States, and 2) how far ground shaking extends from an earthquake source (related to earthquake strength and how well vibrations travel through the bedrock in area surrounding the earthquake). The scale used for this map represents different levels of horizontal ground shaking that have a one-in-ten chance of being exceeded in a 50 year period (shaking is expressed as a percentage of acceleration due to gravity). High values of probable ground motion (shown in red) correspond to areas with highest hazard. Low values (shown in white) correspond to areas of lowest hazard. The areas shown in white are not free from earthquakes - instead strong earthquakes that cause significant ground motion are very rare events in those areas.

## 5.4 Assessing Vulnerability: Overview

In terms of the each jurisdictions vulnerability to include the impact of the natural hazards listed above, a description is provided under future probability for each jurisdiction in the previous subsection. Additionally, the next section on identifying assets and estimating potential losses also provides insight to the vulnerability of each jurisdiction in terms of their assets and potential dollar losses. Further, the following chart lists the vulnerability of the jurisdictions to specific natural hazards:

**Table 5.17: Natural Hazard Vulnerability Overview**

Risk Ranking	Natural Hazard
High	Severe Storms
Moderate	Tornado Hurricane Dam/Levee Failures Winter Storm/Freezes Drought/Heat Wave Wildfires (Lee County) Floods
Low	Wildfires (All jurisdictions except Lee County) Sinkholes (Lee County)
Very Low	Sinkholes (All jurisdictions except Lee County) Earthquakes
Not Vulnerable	Landslides Tsunamis Volcanoes

## 5.5 Assessing Vulnerability: Identifying Assets and Estimating Potential Dollar Losses

This subsection describes each jurisdiction's vulnerability to hazards by identifying their assets and estimating their potential dollar losses. The methodology used to prepare an inventory of jurisdiction structural holdings and estimated losses was to first identify the jurisdictions that this plan would cover and then the major entities within these jurisdictions that would be able to provide us with information in reference to large structural holdings. After determining what hazard impacted each jurisdiction, contact was made with different agencies to gather information on the number and type of assets and potential dollars losses for structures and property located in a hazard area.

First, the major jurisdictions to be included in the plan were City of Auburn, City of Opelika, Lee County, Town of Loachapoka, City of Smiths Station, and Auburn University. Second these jurisdictions were broken down into several different areas and/or entities to gather asset information and potential dollar loss estimates. Some of the agencies/businesses contacted were but not limited to:

- School Boards
- Institutions of Higher Education
- Gas Company
- Electric Companies
- City / County Governments
- County Highway Department
- City / County Eng. and/or Planning Departments
- Tax Assessors Records
- Water Boards
- Chambers of Commerce
- Fire Departments (Paid & Volunteer)
- Police / Sheriff's Departments
- Communications Companies
- National Weather Service
- Forestry Commission
- County Extension Service
- Local EMA
- Census Data through the United States Department
- ADEM (AL Dept. of Environmental Management)
- Internet
- Institutions of Higher Learning / Trade Schools
- City/County Agencies

Each one of these agencies/businesses was then asked in reference to their respective municipality or county, to submit the information on their assets and their values. For example, the following information was received by these agencies:

- A. Tax Assessors Office – Data on commercial and residential structural value

- B. Water Boards – Data on structural value of water treatment facilities, pumping stations and storage tanks
- C. Chambers of Commerce – Industrial and commercial listings
- D. Census Website – Census data
- E. School Boards – Value and quantity of structures by jurisdiction and/or campus
- F. City/County Planning or Engineering Departments – Flood data, sinkhole data, and dam and levee data
- G. Utility Companies – Location, value and quantity of structural assets
- H. Fire Departments – Wildfire and structural fire data
- I. Emergency Management Agency – SARA Title III Data, and shelter data

Once all of the data was received it was then broken down by jurisdiction and compiled in spreadsheet fashion to determine the number of structures, their value and their vulnerability to specific natural hazards. Due to the way information is collected for structural assets, Lee County data includes the jurisdictions of Lee County, Town of Loachapoka, and the City of Smiths Station. Census was also looked at to define population for each municipality.

As data was being collected, a master contact list was compiled so that future statistics would be easier to update. This list contained agency/jurisdiction names, contact names, phone and fax numbers and e-mails. Appendix B provides a copy of this detailed list. The Lee County Natural Hazards Planning Committee and Working Sub-Committee were also utilized as a source to obtain the needed information. Appendix A provides a copy of these committees.

In terms of determining the number of critical facilities that were impacted by a particular hazard, the HAZUS definition critical buildings and facilities was used as a guide. For the purpose of this plan, all of the following elements were considered in defining the critical facilities. A complete list of critical facilities can be found in Appendix C:

- A. **Essential Facilities** are essential to the health and welfare of the whole population and are especially important following hazard events. The potential consequences of losing them are so great that they should be carefully inventoried. Be sure to consider not only their structural integrity and content value, but also the effects on the interruption of their functions because the vulnerability is based on the service they provide rather than simply their physical aspects. Essential facilities include hospitals and other medical facilities, police and fire stations, emergency operations centers and evacuation shelters and schools.
- B. **Transportation Systems** include airways – airports, heliports; highways – bridges, tunnels, roadbeds, overpasses, transfer centers; railways – track, tunnels, bridges, rail yards, depots; and waterways – canals, locks, seaports, ferries, harbors, dry docks, piers.
- C. **Lifeline Utility Systems** such as potable water, wastewater, oil, natural gas, electric power, propane and communication systems.
- D. **High Potential Loss Facilities** are facilities that would have a high loss

associated with them, such as nuclear power plants, dams, and military installations.

- E. Hazardous Material Facilities** include facilities housing industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

Once data was collected, it was then sorted by jurisdiction and then placed on the sample Worksheet 5.2 illustrated below:

**Worksheet 5.2: Jurisdiction Asset Inventory and Potential Dollar Loss Estimate**

Asset Type	Total Assets		Severe Storms		Tornado		Hurricane		Dam/Levee Failure	
	#	Value	#	Value	#	Value	#	Value	#	Value
Residential										
Commercial / Industrial										
Infrastructure / Utilities										
Agricultural / Crops at Market Value										
Religion										
Government										
Education										
Critical Facilities										
Future Buildings										
Total Number of Buildings										
Total Approx. Value										
Total Number of People										

Structural assets were grouped in the following occupancy classes:

- o Residential
- o Commercial / Industrial
- o Infrastructure / Utilities (Power, Water, Gas, Propane, etc.)
- o Agricultural / Crops at Market Value
- o Religion (Churches, Synagogues, Parishes, etc.)
- o Government (Structures owned by County Commissions, Town Council or City Council government's)
- o Education (Public, Private and institutions of higher learning)
- o Critical Facilities (Infrastructure, Utilities, Government and Education)
- o Future Buildings / Developments (Any other large developments projected over the next five years)

The hazards that were looked at for the Lee County Natural Hazards Mitigation Plan were as follows:

- o Severe Storms
- o Tornadoes
- o Hurricanes
- o Dam/Levee Failure
- o Winter Storm / Freezes
- o Drought/Heat Wave
- o Floods
- o Wildfires
- o Sinkholes/Landslides/Earthquakes

Once critical structures and hazards were identified then data could be disseminated into these tables by jurisdiction, as data was made available. Certain data was found to be lacking in various areas. There were data limitations in identifying assets and their value such as multiple sources of data that were not uniform, missing data, and outdated information. Due to these limitations, Lee County's data includes the unincorporated areas of Lee County, the Town of Loachapoka, and the City of Smiths. Before the next plan update, data limitations will be addressed to fill in the missing data. A description of the data collection process and limitations is described below:

**A. Residential:** The Lee County Tax Assessor was able to give current quantities and dollar amount of residential structures for several different municipal tax districts including City of Auburn, City of Opelika, and Lee County which includes City of Smiths Station and Town of Loachapoka. This information combined with current housing data from the U.S. Census website gave a good accounting of residential structures within Lee County.

**B. Commercial/Industrial:** The Lee County Tax Assessor was able to give current quantities and dollar amount of commercial/industrial structures for several different municipal tax districts including City of Auburn, City of Opelika, and Lee County which includes the City of Smiths Station and the Town of Loachapoka. The water work boards and systems were also polled as to the number of commercial/industrial meters they had within each jurisdiction. Census numbers were not an adequate way to break down these statistics because they were county specific and could not be further broken down into county and municipality numbers. Once the water works boards and system's statistics were tabulated, and the data from each

individual submitting entity was combined and tabulated it was possible to come up with a comprehensive picture of the county as a whole and also by each jurisdiction.

**C. Infrastructure/Utilities:** While response was given by all of the surveyed water works boards and systems, Alabama Gas, Dixie Electric Cooperative and Tallapoosa River Electric Cooperative Opelika Power and Light and Alabama Power did not submit and statistics for this mitigation plan. Alabama Power officials notified the Lee-Russell Council of Governments that they were in negotiations with Alabama Emergency Management Agency about how much or how little they would be willing to disclose for these plans (documentation on file). The water works inventories do include water treatment plants, lift stations, lines, and office buildings.

**D. Agricultural/Crops at Market Value:** The Lee County Extension Coordinator was contacted to obtain statistics regarding the number and market value of agricultural structures, crops and livestock in the three jurisdictions. The Extension Coordinator was not able to determine if there were any agriculture assets of any discernable value within the limits of City of Auburn or City of Opelika, so he estimated the quantity of Greenhouse or Agricultural Producing entities, but he was able to give a significant figure for Lee County as a whole to include the Town of Loachapoka and the City of Smiths Station. Livestock and crops are shown at market value because if there is a natural hazard and it did destroy a current year crop/herd there would not be enough time to plant/raise another viable crop/heard for that year. Therefore, Lee County shows the total monetary value of all of the Agricultural assets because currently there is not an inventory that separates the information between each jurisdiction.

**E. Religion:** Religion statistics were determined by a count of churches, synagogues, parishes and other religious structures from the Lee County Phone Book, census numbers, Auburn-Opelika Convention and Visitor Bureau. Auburn Chamber of Commerce and Opelika Chamber of Commerce. Because the Lee County Tax Assessor does not list religious affiliated entities differently on their county tax assessments, there was not a way to break out religion structural statistics from commercial/industrial statistics for the county as a whole. The numbers shown on the Jurisdiction Asset Inventory and Potential Dollar Losses Estimate Tables show a total count of structures with no monetary figure attached. Before the next plan is updated, a source of data to complete the table will be found and information will be tabulated.

**F. Government:** These figures were taken from the inventories from the overall insurance property listing from Auburn University, City of Auburn, Lee County, Town of Loachapoka, City of Opelika and the City of Smiths Station. Each jurisdiction was able to share their itemized structural inventories. This did include their town hall/city hall/county courthouse and their law enforcement offices. The City Auburn and City of Opelika did include their fire protection departments. Lee County is served by seven volunteer fire departments and to date they have not responded with their structural inventories.

**G. Education:** These figures were taken from the overall insurance property listing from each school boards and higher institutions of higher learning. The entities inventoried were City of Auburn Board of Education, Lee County Board of Education, City of Opelika Board of Education, Auburn University and Southern Union State Community College. Lee County has one major private school called Lee-Scott Academy that has a Kindergarten through High School program and their numbers are listed in the City of Auburn Educational inventory. There are

several other small religious based primary schools and their totals are carried on the religion portion of the inventory charts dependent upon which municipality they are located in.

**H. Critical Facilities:** The critical facilities total was value was derived from adding all governmental, educational and infrastructure, and utilities figures together. These figures were not added into the overall totals at the bottom of the spreadsheets. Before the next update of the plan, the total dollar cost of the critical facilities will be determined and will be mapped indicating their location and vulnerability to specific natural hazards.

**I. Future Buildings:** City of Auburn, Lee County, City of Opelika, Town of Loachapoka, and the City of Smiths Station were all polled as to their knowledge of future buildings/developments. None of the polled municipalities submitted figures for this classification.

**J. Tornado:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from tornadoes.

**K. Severe Storms:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from severe storms.

**L. Hurricane:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from hurricanes

**M. Dam/Levee Failures:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from winter/storm freezes. Plans are being made to map the location of the dams/levee in the jurisdictions of Lee County. Once this has been completed, we will be able to better determine the asset inventory and potential losses as a result of a dam and/or levee failure.

**N. Winter/Storm Freezes:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from winter/storm freezes.

**O. Drought/Heat Wave:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from drought/heat waves. It is assumed that crops and livestock would most probably suffer a higher rate of monetary loss during a natural disaster event of this kind. This information was not available at the time of the draft plan.

**P. Floods:** Floods maps in Lee County to include the Town of Loachapoka and the City of Smiths are 20+ years old and currently are not reliable. It is the hopes that by implementing this plan that one of the goals will be to better assess flood prone areas within Lee County and therefore have a better ability to mitigate potential problems/disasters and determine the potential structural and dollar losses for this hazard. The data collected would not lend itself to identify one area over another in terms of severity of trauma impacting the physical assets resulting from



floods. In the jurisdictions of Auburn and Opelika, more updated flood maps have been developed to show the areas prone to flooding. However, at this time, there has not been a survey completed to determine the value of the structures located in these areas.

**Q. Wildfires:** The data that was available would not lend itself to identify one area and/or jurisdiction over another in terms of severity of trauma impacting the physical assets resulting from wildfires.

**R. Sinkholes/Landslides/Earthquakes:** It was determined by the Lee County Engineer and City of Opelika Engineer that sinkholes were a potential threat, especially in the unincorporated areas of Lee County where a few sinkholes are already in process of being mitigated. At this time of data collection for this mitigation plan, there was no discernable historical or current data showing potential losses on landslides and earthquakes. At this time, these hazards events are not included in the Asset Inventory and Potential Dollar Loss Estimate Tables.

The data used for the methodology portion of this plan and the structural asset composite that has been done for the jurisdictions in Lee County is as complete as possible at this time. As more data becomes available from any of the non-reporting sources cited or any new or additional sources, it will be added until the Lee County Natural Hazards Mitigation Plan before the next scheduled update.

**Table 5.18: City of Auburn Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Severe Storms		Tornado		Hurricane		Dam/Levee Failure	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	8964	811,232,662	8964	811,232,662	8964	811,232,662	8964	811,232,662	See Methodology	See Methodology
<b>Commercial / Industrial</b>	507	818,432,981	507	818,432,981	507	818,432,981	507	818,432,981	See Methodology	See Methodology
<b>Infrastructure / Utilities</b>	17	25,920,000	17	25,920,000	17	25,920,000	17	25,920,000	See Methodology	See Methodology
<b>Agricultural</b>	7	See Methodology	7	See Methodology	7	See Methodology	7	See Methodology	See Methodology	See Methodology
<b>Religion</b>	44	49,214,025	44	49,214,025	44	49,214,025	44	49,214,025	See Methodology	See Methodology
<b>Government</b>	39	47,018,332	39	47,018,332	39	47,018,332	39	47,018,332	See Methodology	See Methodology
<b>Education</b>	49	82,201,507	49	82,201,507	49	82,201,507	49	82,201,507	See Methodology	See Methodology
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	9,627		9,627		9,627		9,627		See Methodology	
<b>Total Approx. Value</b>	1,834,019,507		1,834,019,507		1,834,019,507		1,834,019,507		See Methodology	
<b>Total Number of People</b>	51,906 (estimate 2006)		51,906 (estimate 2006)		51,906 (estimate 2006)		51,906 (estimate 2006)		See Methodology	

**Table 5.18: City of Auburn Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Winter Storm/ Freezes		Drought/ Heat Wave		Floods		Wildfires	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	8964	811,232,662	8964	811,232,662	8964	811,232,662	Waiting for new floods maps to be drawn	See Methodology	8964	811,232,662
<b>Commercial / Industrial</b>	507	818,432,981	507	818,432,981	507	818,432,981	See Methodology	See Methodology	507	818,432,981
<b>Infrastructure / Utilities</b>	17	25,920,000	17	25,920,000	17	25,920,000	See Methodology	See Methodology	17	25,920,000
<b>Agricultural</b>	7	See Methodology	7	See Methodology	7	See Methodology	See Methodology	See Methodology	7	See Methodology
<b>Religion</b>	44	49,214,025	44	49,214,025	44	49,214,025	See Methodology	See Methodology	44	49,214,025
<b>Government</b>	39	47,018,332	39	47,018,332	39	47,018,332	See Methodology	See Methodology	39	47,018,332
<b>Education</b>	49	82,201,507	49	82,201,507	49	82,201,507	See Methodology	See Methodology	49	82,201,507
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	9,627		9,627		9,627		See Methodology		9,627	
<b>Total Approx. Value</b>	1,834,019,507		1,834,019,507		1,834,019,507		See Methodology		1,834,019,507	
<b>Total Number of People</b>	51,906 (estimate 2006)		51,906 (estimate 2006)		51,906 (estimate 2006)		See Methodology		51,906 (estimate 2006)	

**Table 5.19: City of Opelika Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Severe Storms		Tornado		Hurricane		Dam/Levee Failure	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	7985	431,706,013	7985	431,706,013	7985	431,706,013	7985	431,706,013	See Methodology	See Methodology
<b>Commercial / Industrial</b>	4045	342,054,611	4045	342,054,611	4045	342,054,611	4045	342,054,611	See Methodology	See Methodology
<b>Infrastructure / Utilities</b>	16	3,989,924	16	3,989,924	16	3,989,924	16	3,989,924	See Methodology	See Methodology
<b>Agricultural</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Religion</b>	22	22,504,000	22	22,504,000	22	22,504,000	22	22,504,000	See Methodology	See Methodology
<b>Government</b>	46	21,424,012	46	21,424,012	46	21,424,012	46	21,424,012	See Methodology	See Methodology
<b>Education</b>	31	104,222,003	31	104,222,003	31	104,222,003	31	104,222,003	See Methodology	See Methodology
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	12,145		12,145		12,145		12,145		See Methodology	
<b>Total Approx. Value</b>	925,900,563		925,900,563		925,900,563		925,900,563		See Methodology	
<b>Total Number of People</b>	24,563 (2006 Estimate)		24,563 (2006 Estimate)		24,563 (2006 Estimate)		24,563 (2006 Estimate)		See Methodology	

**Table 5.19: City of Opelika Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Winter Storm/ Freezes		Drought/ Heat Wave		Floods		Wildfires	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	7985	431,706,013	7985	431,706,013	7985	431,706,013	Waiting for new maps	See Methodology	7985	431,706,013
<b>Commercial / Industrial</b>	4045	342,054,611	4045	342,054,611	4045	342,054,611	See Methodology	See Methodology	4045	342,054,611
<b>Infrastructure / Utilities</b>	16	3,989,924	16	3,989,924	16	3,989,924	See Methodology	See Methodology	16	3,989,924
<b>Agricultural</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Religion</b>	22	22,504,000	22	22,504,000	22	22,504,000	See Methodology	See Methodology	22	22,504,000
<b>Government</b>	46	21,424,012	46	21,424,012	46	21,424,012	See Methodology	See Methodology	46	21,424,012
<b>Education</b>	31	104,222,003	31	104,222,003	31	104,222,003	See Methodology	See Methodology	31	104,222,003
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	12,145		12,145		12,145		See Methodology		12,145	
<b>Total Approx. Value</b>	925,900,563		925,900,563		925,900,563		See Methodology		925,900,563	
<b>Total Number of People</b>	24,563 (2006 Estimate)		24,563 (2006 Estimate)		24,563 (2006 Estimate)		See Methodology		24,563 (2006 Estimate)	

**Table 5.20: Lee County Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Severe Storms		Tornado		Hurricane		Dam/Levee Failure	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	24,298	978,042,953	24,298	978,042,953	24,298	978,042,953	24,298	978,042,953	24,298	978,042,953
<b>Commercial / Industrial</b>	6,208	200,415,371	6,208	200,415,371	6,208	200,415,371	6,208	200,415,371	6,208	200,415,371
<b>Infrastructure / Utilities</b>	46	51,401,640	46	51,401,640	46	51,401,640	46	51,401,640	46	51,401,640
<b>Agricultural / Crops at Market Value</b>	31	32,400,000	31	32,400,000	31	32,400,000	31	32,400,000	31	32,400,000
<b>Religion</b>	37	10,614,000	37	10,614,000	37	10,614,000	37	10,614,000	37	10,614,000
<b>Government</b>	19	39,514,089	19	39,514,089	19	39,514,089	19	39,514,089	19	39,514,089
<b>Education</b>	60	159,042,612	60	159,042,612	60	159,042,612	60	159,042,612	60	159,042,612
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	30,699		30,699		30,699		30,699		30,699	
<b>Total Approx. Value</b>	1,471,430,665		1,471,430,665		1,471,430,665		1,471,430,665		1,471,430,665	
<b>Total Number of People</b>	49,312 (2006 Estimate)		49,312 (2006 Estimate)		49,312 (2006 Estimate)		49,312 (2006 Estimate)		49,312 (2006 Estimate)	

Please note information contained for this table is for the jurisdictions of Lee County, Town of Loachapoka, and City of Smiths Station.

**Table 5.20: Lee County Vulnerability Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Winter Storm/ Freezes		Drought/ Heat Wave		Floods		Sinkholes		Wildfires	
	#	Value	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	24,298	978,042,953	24,298	978,042,953	24,298	978,042,953		See Methodology	115	Not Available	24,298	978,042,953
<b>Commercial / Industrial</b>	6,208	200,415,371	6,208	200,415,371	6,208	200,415,371		See Methodology	6	Not Available	6,208	200,415,371
<b>Infrastructure / Utilities</b>	46	51,401,640	46	51,401,640	46	51,401,640		See Methodology	0?	Not Available	46	51,401,640
<b>Agricultural / Crops at Market Value</b>	31	32,400,000	31	32,400,000	31	32,400,000		See Methodology	0	Not Available	31	32,400,000
<b>Religion</b>	37	10,614,000	37	10,614,000	37	10,614,000		See Methodology	0	0	37	10,614,000
<b>Government</b>	19	39,514,089	19	39,514,089	19	39,514,089		See Methodology	0	0	19	39,514,089
<b>Education</b>	60	159,042,612	60	159,042,612	60	159,042,612		See Methodology	0	0	60	159,042,612
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology		See Methodology		See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	30,699		30,699		30,699			See Methodology	Not Available		30,699	
<b>Total Approx. Value</b>	1,471,430,665		1,471,430,665		1,471,430,665			See Methodology	Not Available		1,471,430,665	
<b>Total Number of People</b>	49,312 (2006 Estimate)		49,312 (2006 Estimate)		49,312 (2006 Estimate)			See Methodology	See Methodology		49,312 (2006 Estimate)	

**Please note information contained for this table is for the jurisdictions of Lee County, Town of Loachapoka, and City of Smiths Station.**

**Table 5.21: Auburn University Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Severe Storms		Tornado		Hurricane		Dam/Levee Failure	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	98?	165,410,036	98?	165,410,036	98?	165,410,036	98?	165,410,036	See Methodology	See Methodology
<b>Commercial</b>	45	252,801,512	45	252,801,512	45	252,801,512	45	252,801,512	See Methodology	See Methodology
<b>Other Structure/ Infrastructure</b>	34	71,456,603	34	71,456,603	34	71,456,603	34	71,456,603	See Methodology	See Methodology
<b>Agricultural</b>	184	78,410,678	184	78,410,678	184	78,410,678	184	78,410,678	See Methodology	See Methodology
<b>Religion</b>	1	315,309	1	315,309	1	315,309	1	315,309	See Methodology	See Methodology
<b>Government</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Education</b>	65	398,451,634	65	398,451,634	65	398,451,634	65	398,451,634	See Methodology	See Methodology
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	427		386		386		386		See Methodology	
<b>Total Approx. Value</b>	\$966,845,772		\$880,453,328		\$880,453,328		\$880,453,328		See Methodology	
<b>Total Number of People</b>	29,992 Total School Hour Pop. As of Fall 08		29,992 Total School Hour Pop. As of Fall 08		29,992 Total School Hour Pop. As of Fall 08		29,992 Total School Hour Pop. As of Fall 08		See Methodology	

**Note:** Auburn University has buildings being condemned that are not currently being carried on current inventory, building that are in transition, building that are being revamped for student housing and new student housing that is in process of being finished. For this reason, many of the Auburn University inventory #'s are tentative and will vary from month to month over the next 36 months.



**Table 5.21: Auburn University Asset Inventory and Potential Dollar Loss Estimate**

Occupancy Class	Total Assets		Winter Storm/ Freezes		Drought/ Heat Wave		Floods		Wildfires	
	#	Value	#	Value	#	Value	#	Value	#	Value
<b>Residential</b>	98?	165,410,036	98?	165,410,036	98?	165,410,036	See Methodology	See Methodology	98?	165,410,036
<b>Commercial</b>	45	252,801,512	45	252,801,512	45	252,801,512	See Methodology	See Methodology	45	252,801,512
<b>Other Structure/ Infrastructure</b>	34	71,456,603	34	71,456,603	34	71,456,603	See Methodology	See Methodology	34	71,456,603
<b>Agricultural</b>	184	78,410,678	184	78,410,678	184	78,410,678	See Methodology	See Methodology	184	78,410,678
<b>Religion</b>	1	315,309	1	315,309	1	315,309	See Methodology	See Methodology	1	315,309
<b>Government</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Education</b>	65	398,451,634	65	398,451,634	65	398,451,634	See Methodology	See Methodology	65	398,451,634
<b>Future Buildings</b>	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology	See Methodology
<b>Total Number of Buildings</b>	427		427		427		See Methodology		427	
<b>Total Approx. Value</b>	\$966,845,772		\$966,845,772		\$966,845,772		See Methodology		\$966,845,772	
<b>Total Number of People</b>	29,992 Total School Hour Pop. As of Fall 08		29,992 Total School Hour Pop. As of Fall 08		29,992 Total School Hour Pop. As of Fall 08		See Methodology		29,992 Total School Hour Pop. As of Fall 08	

**Note:** Auburn University has buildings being condemned that are not currently being carried on current inventory, building that are in transition, building that are being revamped for student housing and new student housing that is in process of being finished. For this reason, many of the Auburn University inventory #'s are tentative and will vary from month to month over the next 36 months.

## 5.5 Assessing Vulnerability: Analyzing Development Trends

As the fourth fastest growing county in Alabama, Lee County continues to experience remarkable growth. In the past decade, Lee County's population grew by more than 32% or 27,946 people. Lee County has seen growth in industries, hundreds of new businesses, bank expansions, and a large number of new single-family homes. The Auburn- Opelika Area was designated as a Metropolitan Statistical Area by the U.S. Government in June of 1999.

Since the 2000 Census, two important economic development situations have arisen in the region that could potentially affect population growth and development trends which are the expected impacts of Fort Benning and the expansion of automotive industry.

The I-85 corridor has become a hot spot for the location of automobile manufacturers and tier one automotive suppliers. Hyundai is located in Montgomery, Alabama, 50 miles west of the region. KIA is constructing a massive automotive plant in West Point, GA, 25 miles northeast of the region. KIA is expected to bring 2,500 new jobs to Georgia and Alabama. The automotive suppliers are expected to bring in an additional 3,000 jobs.

Fort Benning, located in west Georgia and east Alabama will be profoundly impacted by BRAC realignment. The projected population growth, of military personnel, DoD civilian and contract company personnel and their families assigned to Fort Benning will total nearly 30,000 when BRAC implementation is complete. Seventy-five percent of the population growth associated with BRAC is expected to occur in Muscogee County, Georgia. The other 25% will be spread across adjacent counties in Georgia and Alabama.

Lee County in East Central Alabama is adjacent to Muscogee County Georgia and Fort Benning. Statistics from Fort Benning tell us that historically 8% of military personnel live off post in Alabama and 19% of the civilian workers at Fort Benning reside in Alabama. Applying historical data to the projected BRAC growth statistics reveals that Lee and Russell Counties could reasonably expect growth of 1,030 family units between 2009 and 2011.

The largest employer in Lee County is Auburn University, which employs about 5,000 people. Other large employers include Uniroyal Goodrich-Tire Manufacturing, 1,700 employees; the East Alabama Medical Center (EAMC), 1,600 employees; and a textile producer, West Point Stevens, 1,500. The County has strong leadership in economic development by elected officials, economic development departments, and other leaders who support industrial growth in the region. The City of Opelika has four industrial parks. Orr and W.C. Davis are privately owned parks. The future growth of the area will take place in the other two parks: Fox Run Industrial Park and the Northeast Opelika Industrial Park. While, the City of Auburn currently has three industrial parks: Auburn Industrial Parks I and II, Auburn Technology Park South and Auburn Technology Park North.

### **Priority: Infrastructure**

- Promote expansion of existing water and sewer systems.
- Promote new construction and expansion of wastewater treatment plants.
- Utilize federal grant sources to fund construction/expansion.

### **Update:**

- Efforts have been made to plan for and expand water and sewer programs.

- Grant money has been received for construction and expansion of water lines.

**Priority: Planning/Zoning**

- Encourage support of planning and zoning throughout the county.
- Plan public facilities to support cluster commercial development.

**Update:**

- Strategic plans for Lee County, the City of Auburn, and the City of Opelika include land planning and zoning as priority issues.
- Lee County has drafted subdivision regulations which are in the process of being approved.

**Priority: Environment**

- Form a county-wide Environmental Department.
- Increase litter education efforts.
- Educate public on non-point source pollution.

**Update:**

- No substantial progress has been made on this priority.

**Priority: Growth**

- Increase county tax base.
- Maintain current level of public services.
- Protect current quality of life.
- Preserve the environment.

**Update:**

- Governments in Lee County continue their efforts to plan effectively for growth.

**Priority: Law Enforcement**

- Acquire funding and form a centralized jail

**Update:**

- The centralized jail has been completed.

**Priority: Regional Economic Development**

- Educate citizens to think regionally.
- Attract compatible industries to expand county employment opportunities.
- Diversify economy.

**Update:**

- New industry and retail development have been attracted to the county.
- Government remains the highest employment sector in the county.

## SECTION 6: MITIGATION STRATEGY

### 6.1 Overview of Section and Plan Revisions

The section describes the natural hazards mitigation strategy that provides the jurisdiction's blueprint for reducing potential losses identified in the risk assessment in Section 5 of the plan. The strategy is based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools.

The following subsections and revisions are included in Section 6:

- **Overview of the Mitigation Strategy** – The Lee County Natural Hazards Mitigation Committees and stakeholders reviewed, updated, and prioritized the original mitigation strategies. The process used is described in this subsection.  
**Plan Revisions:** The same strategy was used to review, update, and prioritize the mitigation strategies as the original plan.
- **Natural Hazards Mitigation Plan Mission Statement** - The overall mission of the Lee County Natural Hazards Mitigation Plan that was reviewed by the committees and stakeholders.  
**Plan Revisions:** The committees reviewed the mission statement for the Lee County Mitigation Plan. They felt that the goals were still valid and remained effective in addressing natural hazards in Lee County.
- **Natural Hazards Mitigation Plan Goals** – The advisory and stakeholder committees reviewed and evaluated the mitigation goals to reduce or avoid long-term vulnerabilities for the natural hazards that impact each jurisdiction. These goals will guide the development and implementation of the mitigation measures.  
**Plan Revisions:** The goals were reevaluated by the committees and stakeholders. The majority of the mitigation plan goals did not change from the original plan. However, one goal was added to the list. It was goal 8 which was not in the original plan. They felt that the goals 1-7 were still valid and remained effective in addressing natural hazards in Lee County.
- **Natural Hazards Mitigation Plan Objectives and Actions** – This subsection includes the following information:
  1. **Identification and Analysis of Mitigation Measures** – The committees and stakeholders identified, evaluated, and analyzed a comprehensive range of specific mitigation actions to reduce the effects of each natural hazard identified in Section 5: Risk Assessment.
  2. **Implementation of Mitigation Measures** – The committees and stakeholders outlined an action plan for how the actions will be prioritized, implemented and administered by the jurisdictions. The action plan includes the implementation timeline, responsible agency, funding sources, and priority for each action.  
**Plan Revisions:** The committees and the stakeholders updated the plan's objectives and actions based on the risk assessment, hazard profiling and vulnerability assessment. Several goals were added to the plan.

## 6.2 Overview of the Mitigation Strategy Methodology

The risk assessment was compiled from meetings, telephone interviews, and public input that were provided by the Planning and Working Committees, general public, and other key stakeholders in the county. Based on this review of the risk assessment, the Natural Hazard Plan's vision, goals, objectives, and mitigation actions were reviewed by the committees and stakeholders. The goals, objectives, and mitigation actions that are listed were determined to be of the greatest benefit in hazard reduction for the jurisdictions in Lee County.

In terms of the mitigation actions, the actions were identified and developed by examining the existing programs, plans, and personnel. The Natural Hazards Mitigation Plan Objectives and Actions Table identify the action along with the impacted hazard, jurisdiction, timeline, responsible agency, funding sources, and priority. The actions were prioritized first by the Planning Committee based on the consensus of the group's knowledge and expertise in dealing with natural hazards and then approved by the Working Committee. The Lee County Emergency Management Agency Director was present and agreed with the prioritization of each mitigation action. The primary considerations used by the committees to prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, and economic, as well as environmental issues.

The actions will be implemented in the order that meets the majority of these considerations or as needed due to emergency or safety concerns. For example, implementing buy outs, offering storm shelters to individuals, distributing NOAA weather radios, and installing sirens has taken priority over other actions due to the availability of funding, staffing capabilities, urgency, and benefit to the public.

In terms of the cost-benefit review of the mitigation strategy, the mitigation actions with the highest priority were considered the most cost effective and achievable for each jurisdiction in the county. Each of the actions that were rated high were considered the most cost effective based on the following rating criteria: the action could be completed by existing staff; the cost to implement the actions could be provided by the existing resources of the local agencies or possible funding by the state or federal government agency; it can be accomplished in a short time-frame; and it will have immediate and lasting benefits on reducing the impact of the natural hazards on Lee County. Before projects are submitted for possible funding and implementation, it will be reviewed to determine if its benefit outweighs its cost. If cost exceeds benefit, an alternative project will be selected and pursued.

The above mitigation strategy is multi-jurisdictional. Each jurisdiction that is represented on the Planning and Working Committees felt that all of the mitigation actions applied to their area. The jurisdictions will equally participate in ensuring the implementation and monitoring of each mitigation action. However, if a participating jurisdiction does not have a department to take responsibility for the mitigation action, the Lee County Emergency Management Agency will coordinate with the governing body of the jurisdiction to ensure involvement and completion of the action. The jurisdictions did not designate specific mitigation actions for their area but designated all actions as needed for their citizens.

### **6.3 Natural Hazards Mitigation Plan Mission Statement**

To ensure that the communities of Lee County are less vulnerable to the effects of natural hazards through the effective administration of hazard mitigation grant programs, implementation of hazard risk assessments, promotion of wise floodplain management, and facilitation of a coordinated approach to mitigation policy through state, regional, and local planning activities.

### **6.4 Natural Hazards Mitigation Plan Goals**

The natural hazards mitigation plan goals were reevaluated by the Lee County Natural Hazards committees and stakeholders during the update process. They felt that the goals with an addition on one new goal were remain valid and effective in addressing natural hazards in Lee County.

- Goal 1:** Minimize future losses of property and lives by making current and future residential, commercial structures and critical facilities less vulnerable to natural hazards through protection strategies.
- Goal 2:** Implement structural projects to protect people and property at risk and control the impacts of natural hazards.
- Goal 3:** Improve efforts to compile hazard and asset information in order to make recommendations to prevent new development from occurring in areas vulnerable to natural hazards and to promote preventative strategies for existing structures in areas that are vulnerable to natural hazards.
- Goal 4:** Increase efforts to inform and educate citizens, elected officials, emergency personnel and property owners about natural hazards and the potential ways to mitigate them.
- Goal 5:** Promote efforts for the conservation, protection, and restoration of natural resources.
- Goal 6:** Increase the coordination and participation of citizens, public agencies, non-profit agencies and individuals in mitigation projects.
- Goal 7:** Strengthen the preparedness and response of emergency services before, during, and immediately after a disaster or hazard event.
- Goal 8:** Identify and maintain a working list of county projects in an effort to keep member governments aware of possible grant funding.

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
<b>OBJECTIVE 1: DEVELOP AND MAINTAIN GEOGRAPHIC INFORMATION SYSTEM THAT INDICATES THE EXISTING AND FUTURE STRUCTURES, CRITICAL FACILITIES, INFRASTRUCTURE, AND SPECIFIC AREAS IN EACH JURISDICTION THAT ARE VULNERABLE TO NATURAL DISASTERS.</b>														
		X						Develop an up-to-date map of the current and future public and private dams/levees in all jurisdictions.	All Jurisdictions	1-2 years	Local Jurisdictions Engineering/Public Works and Information Technology Departments ,Lee County Emergency Management Agency, Lee-Russell Council of Governments	Local	Medium	Ongoing
					X			Develop up-to-date Flood Plain Maps for Lee County in digital format by participating in FEMA’s Floodplain Map Modernization Program.	All Jurisdictions	3 years Currently ongoing through FEMA	Local Jurisdiction’s Engineering/Public Works and Information Technology Departments ,Lee County Emergency Management Agency, Lee-Russell Council of Governments	Local, AEMA	Medium	Ongoing
							X	Identify and map the areas that are vulnerable to sinkholes by conducting asphalt and geotechnical soil testing.	City of Opelika Lee County	3 years	Local Jurisdiction’s Engineering/Public Works and Information Technology Departments ,Lee County Emergency Management Agency, Lee-Russell Council of Governments	Local, AEMA ALDOT	High	Ongoing
		X			X	X	X	Identify and map	All Jurisdictions	1-2 years	Local Jurisdiction’s	Local	Medium	Ongoing

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								the critical facilities in each jurisdiction that are vulnerable to natural disasters.			Engineering/Public Works and Information Technology Departments ,Lee County Emergency Management Agency, Lee-Russell Council of Governments			
<b>OBJECTIVE 2: IMPLEMENT PROGRAMS TO PROTECT THE STRUCTURE AND ACCESS TO COMMERCIAL BUILDINGS, RESIDENTIAL STRUCTURES, CRITICAL FACILITIES AND INFRASTRUCTURE DURING AND AFTER A NATURAL HAZARD.</b>														
X	X		X		X	X		Implement a tree maintenance program to prevent loss and protect lives, property, and infrastructure during a natural hazard.	All Jurisdictions	1-2 years	Local Jurisdiction’s Engineering/Public Works Departments Lee County Emergency Management Agency	Local	High	Deferred
X	X		X		X	X		Develop a debris management program before and after a natural hazard for residence, businesses, critical facilities, and public roads.	All Jurisdictions	1-2 years	Local Jurisdiction’s Engineering/Public Works Departments Lee County Emergency Management Agency	Local	Medium	Ongoing
							X	Implement mitigation projects to correct current problems and prevent future	City of Opelika Lee County	3-5 years	Local Jurisdiction’s Engineering/Public Works Departments, Lee County Emergency	Local, Alabama Emergency Management Agency,	High	Ongoing



**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								sinkholes from occurring in areas that are prone to this natural hazard.			Management Agency	Alabama Department of Transportation		
X								Update the public utility subsystems.	All Jurisdictions	5 years	Public Utility Companies	Local	Low	Deferred
				X				Promote the interconnection of the public water systems.	All Jurisdictions	5 years	Local Jurisdiction's Water Boards and Authorities	CDBG Local, USDA	Low	Deferred
					X			Implement the recommended projects from the Storm Water Drainage Plans of Auburn University, City of Auburn, City of Opelika, and Lee County (in process) Plan into the Lee County Natural Hazards Mitigation Plan. (See Appendix D for possible current project Listings)	All Jurisdictions	5 years	Lee County Emergency Management Agency and Local Jurisdiction's Public Works/Engineering Departments	Local, Alabama Emergency Management Agency	High	Ongoing
X	X				X			Develop a dredging program where lakes, streams, creeks & rivers can be dredged on an as needed basis in an effort to keep them	All Jurisdictions	2-4 Years	Local Jurisdictions Public Works Engineering Departments	Local State Federal	High	New

6.5

**Natural Hazards Mitigation Plan Objectives and Actions**

(Hazard Key: **SS**=Severe Storms **T/H**=Tornado/Hurricanes **DF**=Dam/Levee Failure **WS**=Winter Storm/Freezes **D**=Drought/Heat Wave  
**F**=Floods **W**=Wildfires **S**=Sinkholes)

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								from overflowing and flooding structures, commercial & residential. (See attached list of sites – Appendix D)						
X	X				X	X		Develop and coordinate a list of possible areas to build and or repair retention ponds in an effort to keep repetitive flooding from damaging structures, commercial & residential. (See attached list of sites – Appendix D)	All Jurisdictions	2-4 Years	Local Jurisdictions Public Works Engineering Departments	Local State Federal	High	New
X	X				X		X	Develop and coordinate a list of possible roads and bridges that need to be mitigated, replaced and/or repaired in an effort to keep repetitive flooding from being an issue in terms of entrance to or egress out of specific areas of the	All Jurisdictions	2-4 Years	Local Jurisdictions Public Works Engineering Departments	Local State Federal	High	New

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave  
F=Floods W=Wildfires S=Sinkholes)

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								county. (See attached list of sites – Appendix D)						
<b>OBJECTIVE 3: ENHANCE DAMAGE ASSESSMENT REPORTING TO INCREASE THE ACCURACY OF THE NATURAL HAZARD INFORMATION RELATING TO THE TYPE AND DEGREE OF DAMAGE THAT OCCURS.</b>														
X	X	X	X	X	X	X	X	Implement a reporting system to obtain detailed damage reports from agencies of law enforcement, emergency management services, fire rescue, and other governmental entities when natural hazards occur in the jurisdictions.	All Jurisdictions	Ongoing	Lee County Emergency Management Agency, Local Jurisdiction’s Law Enforcement Agencies, Emergency Management Services, and Fire Departments	Local	Low	Ongoing
<b>OBJECTIVE 4: IDENTIFY AND IMPLEMENT RELOCATION PROJECTS FOR RESIDENCE AND BUSINESSES IMPACTED BY POSSIBLE NATURAL HAZARDS.</b>														
		X						Identify and implement relocation projects for residence and businesses impacted by possible dam or levee failures	All Jurisdictions	As federal funds become available	Lee County Emergency Management Agency, Local Jurisdiction’s Public Works/Engineering Departments	FEMA	High	Ongoing
					X			Continue to acquire and preserve land that is subject to	City of Auburn, City of Opelika, Lee County,	As federal funds become	Lee County Emergency Management Agency,	FEMA	High	Ongoing

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								repetitive flooding from landowners who are willing to participate in the program. (See attached list – Appendix D)	City of Smiths Station, Town of Loachapoka, and Auburn University are all vulnerable to repetitive flooding.  Repetitive flooding occurs specifically in these areas: a) Lee County (including Town of Loachapoka and City of Smiths Station) includes Lee Road 298, Lee Road 325, Tranquil Pines North, and Tranquil Pines South; b) City of Opelika include Columbus Parkway at 4 <sup>th</sup> Street, the bridge on Saugahatchee Lake Road, North Uniroyal	available	Local Jurisdiction’s Public Works/Engineering Departments			

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								Road, and Pepperell Parkway at North 20 <sup>th</sup> Street; and c) City of Auburn (including Auburn University) includes: Bonnie Glenn Road, East University Drive, Burke Place, Annalue Drive, East Glenn Avenue, Samford Avenue, Marion Circle, Virginia Avenue, Janet Drive, Loftin Drive, Pumphrey Avenue, Conway Parkway, Mall Boulevard, Gatewood Drive, Johnston Street, Freeman Street, Sanders Street, Cary Drive, White						

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								Street, Boykin Street, Clark Avenue, Foster Street, White Street/Bragg Avenue, Deer Run Road, and Middlebrook Lane						
X	X							Identify and implement wind retrofit options/procedures for homes that are subject to repetitive wind damage for landowners who are willing to participate in the program.	All Jurisdictions	As federal funds become available	Lee County Emergency Management Agency, Local Jurisdiction's Public Works/Engineering Departments	FEMA	High	New
<b>OBJECTIVE 5: ENCOURAGE AND PROMOTE THE USE OF EFFECTIVE LAND MANAGEMENT PRACTICES THAT REDUCE OR LESSEN THE IMPACTS OF WILDFIRES.</b>														
						X		Develop an educational program with State Forestry Office to distribute land management practices and regulations with county landowners.	All Jurisdictions	3-5 years	Lee County Emergency Management Agency, Alabama Forestry Commission, Local Jurisdiction's Fire Departments	Local	Medium	Deferred
<b>OBJECTIVE 6: IMPLEMENT, IMPROVE AND INCREASE THE NATURAL HAZARD WARNING SYSTEMS ESPECIALLY IN AREAS WITH HIGH NUMBERS OF VULNERABLE POPULATIONS.</b>														
X	X	X	X	X	X	X	X	Continue seeking	All Jurisdictions	2-3 years	Lee County	Local.	High	Ongoing

6.5

**Natural Hazards Mitigation Plan Objectives and Actions**

(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								funding to secure and place weather sirens in needed places in the county. (See site locations listing – Appendix D)			Emergency Management Agency, Local Jurisdiction’s Emergency Agencies	Alabama Emergency Management Agency		
X	X	X	X	X	X	X	X	Seek funding for NOAA Weather Radios to be placed in area of high citizen traffic and areas of high population of at risk populations, etc.	All Jurisdictions	2 years	Lee County EMA, Lee County 911 Coordinator, Municipalities	Local, Alabama Emergency Management Agency, Federal	High	New
X	X	X	X	X	X	X	X	Seek funding for portable HAM Radio stations to be placed in shelters, hospital/medical clinics, etc. during times of natural disaster to enable better communication abilities with service agencies. (See attached list – Appendix D)	All Jurisdictions	2 years	Lee County EMA, Lee County 911 Coordinator, Municipalities, Lee County Red Cross, RACES HAM Radio Club	Local, Alabama Emergency Management Agency, Federal	High	New
X	X	X	X	X	X	X	X	Purchase, maintain, or work with existing electronic billboards on interstate off ramps	All Jurisdictions	As federal funds become available	Lee County Emergency Management Agency, Local Jurisdiction’s Public	FEMA State Local	High	New

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								and also high traffic roadways and highways within Lee County that can be updated on an as needed basis to inform citizens of impending weather conditions or needed evacuation procedures.			Works/Engineering Departments			
<b>OBJECTIVE 7: ENSURE THAT CURRENT EMERGENCY SERVICES ARE SUFFICIENT TO PROTECT THE SAFETY AND HEALTH OF COUNTY RESIDENTS DURING A NATURAL HAZARD.</b>														
X	X	X	X	X	X	X	X	Conduct a survey for the county’s emergency response agencies to identify any existing needs & possible funding sources in terms of safety equipment, personnel, & other needed resources.	All Jurisdictions	1 – 2 years	Lee County Emergency Management Agency, Local Jurisdiction’s Fire Departments and other emergency response agencies	Local	Medium	Deferred
X	X	X	X	X	X	X	X	Continue to offer annual training courses on the occurrence of natural hazards and the recovery efforts associated with the natural hazard.	All Jurisdictions	1 – 5 years	Lee County Emergency Management Agency	Local	Medium	Ongoing
<b>OBJECTIVE 8: ENHANCE MASS CARE AND SHELTERS THAT ARE AVAILABLE DURING AND AFTER A NATURAL HAZARD.</b>														



**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
X	X	X	X	X	X	X	X	Develop a media and public information packet to advertise the location of available shelters and the services that are available at the shelter in the event of a disaster.	All Jurisdictions	2-3 years	Lee County Emergency Management Agency, Lee County Natural Hazards Mitigation Plan Advisory Committee, East Alabama Volunteer Organization Aiding in Disasters	Local	Medium	Complete
X	X	X	X	X	X	X	X	Develop and coordinate a list of independent homeowners and/or agencies who wish to have safe room shelters as part of their residence and/or agency. Implement a grant writing program in an effort to obtain funds for these homeowners and/or agencies. (See attached list – Appendix D)	All Jurisdictions	2 Years	Lee County EMA, Lee-Russell Council of Governments, Municipalities	FEMA AEMA Local	Medium	New
X	X	X	X	X	X	X	X	Develop and coordinate a list of sites that might be available to host a community shelter in areas of high risk	All Jurisdictions	2 Years	Lee County EMA, Lee-Russell Council of Governments, Municipalities	FEMA AEMA Local	Medium	New

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								populations.						
X	X	X	X	X	X	X	X	Increase the emergency water supply that is available to ensure sufficient supply during a natural disaster.	All Jurisdictions	5 years	Local Jurisdiction's Water Boards and Authorities	CDBG Local, USDA	Medium	Ongoing
X	X	X	X		X	X		Acquire portable generators that will be available for mass care community shelters during times of natural disasters. (See attached list – Appendix D)	All Jurisdictions	5 years	Lee County E.M.A. or municipality	State, Federal, Local	Medium	New
<b>OBJECTIVE 9: ENHANCE RECOVERY EFFORTS OF LEE COUNTY CITIZENS DURING A NATURAL HAZARD.</b>														
X	X	X	X	X	X	X	X	Establish a recovery response team to initiate recovery efforts and to provide damage reports to the Lee County EMA.	All Jurisdictions	1-2 years	Lee County Emergency Management Agency, Local Jurisdiction's Emergency Agencies	Local	High	Ongoing
<b>OBJECTIVE 10: EDUCATE AGENCY PERSONNEL AND PROVIDE TECHNICAL ASSISTANCE ON WHAT GRANTS ARE AVAILABLE TO SECURE FUNDS FOR EQUIPMENT AND TRAINING.</b>														
X	X	X	X	X	X	X	X	Develop a database of contact personnel to send grant alerts to concerning the availability of funds for equipment and	All Jurisdictions	1 year	Lee County Emergency Management Agency, Lee-Russell Council of Governments	Local	Medium	Ongoing

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

**(Hazard Key: SS=Severe Storms T/H=Tornado/Hurricanes DF=Dam/Levee Failure WS=Winter Storm/Freezes D=Drought/Heat Wave F=Floods W=Wildfires S=Sinkholes)**

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								training.						
<b>OBJECTIVE 11: ENHANCE AND DEVELOP EDUCATIONAL PROGRAMS AIMED AT LEE COUNTY CITIZENS ON HOW THEY CAN PREVENT AND PROTECT THEIR HOME, BUSINESSES, LIVES, AND PROPERTY FROM NATURAL HAZARDS.</b>														
X	X	X	X	X	X	X	X	Distribute natural hazard information at public buildings such as the library to promote and assist residential and commercial owners in constructing storm shelters.	All Jurisdictions	1-2 years	Lee County Emergency Management Agency, Lee County Natural Hazards Mitigation Plan Advisory Committee, East Alabama Volunteer Organizations Aiding in Disasters	Local, Alabama Emergency Management Agency	Medium	Ongoing
X	X	X	X	X	X	X	X	Continue to hold Community Emergency Response Team (CERT) Training for citizens of Lee County to increase their knowledge and ability to respond to natural hazard events.	All Jurisdictions	1-2 years	Lee County Emergency Management Agency, CERT Trainers	Local, Alabama Emergency Management Agency	Medium	Ongoing
<b>OBJECTIVE 12: CONTINUE TO PROMOTE, EDUCATE AND PROVIDE ASSISTANCE TO CITIZENS AND LOCAL GOVERNMENTS CONCERNING THE NATIONAL FLOOD INSURANCE PROGRAM.</b>														
					X			Offer assistance to citizens by providing current maps and information on the National Flood	All Jurisdictions	2-3 years	Lee County Emergency Management Agency and Local Jurisdiction's Emergency Agencies	Local, Alabama Emergency Management Agency	High	Ongoing

6.5

**Natural Hazards Mitigation Plan Objectives and Actions**

(Hazard Key: **SS**=Severe Storms **T/H**=Tornado/Hurricanes **DF**=Dam/Levee Failure **WS**=Winter Storm/Freezes **D**=Drought/Heat Wave  
**F**=Floods **W**=Wildfires **S**=Sinkholes)

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
								Insurance Program.			and Public Works/Engineering Departments			
					X			Continue to participate in NFIP by the following activities: 1) participate in floodplain identification and mapping, including any local requests for map updates; 2) offer community assistance to encourage property owners to participate in NFIP to encourage purchase of insurance as a protection against flood losses and 3) develop monitoring activities.	All Jurisdictions besides the Town of Loachapoka currently participate in the program.	Ongoing	Lee County EMA	Local	High	New
					X			Promote the National Flood Insurance Program to the jurisdictions in Lee County that are not currently enrolled in the program.	Loachapoka	2-3 years	Lee County Emergency Management Agency, Local Jurisdiction's Emergency Agencies	Local, Alabama Emergency Management Agency	High	Ongoing

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

(Hazard Key: **SS**=Severe Storms **T/H**=Tornado/Hurricanes **DF**=Dam/Levee Failure **WS**=Winter Storm/Freezes **D**=Drought/Heat Wave  
**F**=Floods **W**=Wildfires **S**=Sinkholes)

Hazard								Action	Jurisdiction	Timeline	Responsible Agency	Funding Sources	Priority	Progress
SS	T/H	DF	WS	DH	F	W	S							
<b>OBJECTIVE 13: DEVELOP A PLAN AND SEEK FUNDING FOR GENERATORS TO BE PLACED IN AREA OF NEED TO GUARANTEE AN ADEQUATE POTABLE WATER SOURCE.</b>														
X	X		X		X	X		Purchase generators and trailers in an effort to be able to keep lift stations at water distributors in the event of power outages, ensuring that there will be the ability to have potable water. (See attached list of sites – Appendix D)	All Jurisdictions	1-3 Years	Lee County EMA Lee County Water Boards, Municipalities	Local AEMA Federal State	Medium	New

## **SECTION 7: PLAN MAINTENANCE PROCEDURES**

### **7.1 Section Overview and Plan Revisions**

This section documents the formal maintenance process that will take place to ensure that the Lee County Natural Hazards Mitigation Plan remains an active and pertinent document. The plan maintenance procedure includes a schedule for monitoring and evaluating the plan at least every five years and details how continued public participation will occur throughout the plan maintenance process. This section will include an explanation of how local governments intend to incorporate their mitigation strategies into any existing planning mechanisms such as comprehensive or capital improvement plans.

The following subsections and applicable **revisions** are included in Section 7:

- **Monitoring, Evaluating, and Updating the Plan** – The planning and working committees reviewed and established strategies to monitor the plan. They detailed how, when, and by whom the plan will be evaluated, and the criteria used to evaluate the plan. Finally, the committees decided how, when, and under what conditions the plan will be updated and what agencies and interested parties will participate in the update.  
**Plan Revisions:** The process of implementing the Interim, Annual and Five Year Update Process was included in this update. The original plan only included a yearly update and five year update but did not document the process for interim updates.
- **Implementation Through Existing Programs** – The planning and working committees reviewed the process by which the jurisdictions will incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive and capital improvement plans, when appropriate.  
**Plan Revisions:** No revisions were made to this section since the last update.
- **Continued Public Participation** – The planning and working committees discussed and reviewed what opportunities would be implemented to allow the broader public to comment during the plan’s periodic review and the proposed plan revisions. The committee confirmed the mechanisms for keeping the public involved.  
**Plan Revisions:** No revisions were made to this section since the last update.

## **7.2 Monitoring, Evaluating, and Updating the Plan**

The City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka and Auburn University will be the governing bodies who formally adopt the Lee County Natural Hazards Mitigation Plan. Once the plan has been adopted by these jurisdictions, the Lee County Natural Hazards Mitigation Plan Advisory Committee will be formed as the permanent planning group to monitor, evaluate, and update the plan. The Lee County Emergency Management Agency will recommend agencies and/or individuals to serve on this committee to the governing officials of each jurisdiction. The number of members of this committee will be determined based on the needed expertise from each jurisdiction. The appointed individuals will serve on the committee for a term of two years and will meet on an annual or as needed basis to review and monitor the implementation of the plan. The Lee County Emergency Management Agency is responsible for contacting committee members and organizing the yearly meeting.

In addition to implementing the plan in conjunction with the Lee County Emergency Management Agency, the advisory committee will be responsible for interim, yearly, and five year updates and evaluations of the Lee County Natural Hazards Mitigation Plan.

### ***Interim Update Process***

The interim update process will be used on an as needed basis. During this process, each jurisdiction will keep data on the status of the jurisdiction's risk assessment, mitigation objectives, mitigation actions, and mitigation projects. The jurisdiction will be responsible for reporting any new or changed information as needed to the Lee County Emergency Management Agency (EMA) Director and/or Lee County EMA Designee. The information can be delivered to the EMA or provided at a scheduled meeting of the Lee County Natural Hazards Mitigation Plan Advisory Committee. The personnel responsible for getting the updates to the Lee County EMA are the following:

- Auburn University – Risk Manager, University Engineer, or Chancellor
- City of Auburn- City Manager, planning representative, or appointed designee
- Lee County - County Administrator, Deputy Administrator, County Engineer or appointed designee
- Town of Loachapoka – Mayor, Town Council Representative or County Engineer
- City of Opelika - Mayor, Mayor Pro Tem or County Engineer
- Town of Smiths Station - Mayor, Town Council Representative or County Engineer

Once submitted, the EMA staff will determine if the plan requires an interim update and what information needs to be added to the Lee County Natural Hazards Mitigation Plan. Based on this review, the Lee County EMA will schedule a meeting with the Advisory Committee to review the submitted jurisdiction's information and recommend any new objective, actions, or other updates that need to be added to the mitigation plan. During this update, assessments, objectives, and/or actions may be moved by municipality and jurisdiction as needed to accommodate zoning and land incorporation. Additionally, information may be added or deleted in an effort to keep up with the changing standards for grant requirements per Alabama Emergency Management Agency, Federal Emergency Management Agency, local, state and

federal rules and regulations. The Advisory Committee will facilitate public participation through meeting notices in adherence with the State of Alabama Sunshine Laws by newspaper ads, postings of meeting notices and website publication. The Lee County Natural Hazards Mitigation Plan will be updated based on the recommendations of the Lee County Natural Hazards Mitigation Advisory Committee. The interim update will not require formal approval by the governing body of each jurisdiction. Changes to the plan will be sent to each jurisdiction and the AEMA for inclusion in the mitigation plan.

### ***Annual Update Process***

On an annual basis, the advisory committee will review and evaluate the Lee County Natural Hazards Mitigation Plan unless it is decided to postpone the update to a later time due to the possibility of securing grant funds to complete the process. If an annual update is conducted, the committee will review and evaluate plan to determine the following: a) Has the nature, magnitude, and/or type of risks changed; b) Do the goals and objectives address current and expected conditions; c) Are the current resources appropriate for implementing the plan; d) What is the status of implementing the mitigation strategies; e) Are there implementation problems associated with the mitigation strategies; f) Have the outcomes occurred as expected; and g) How are coordination efforts with the public and other community agencies proceeding? Based on this evaluation, a yearly report will be presented to each jurisdiction to summarize the current status of the plan and any changes that are needed. The report will include the following information: a review of the original plan; a review of any disasters or emergencies that occurred during the previous calendar year; a review of the actions taken, including what was accomplished during the previous year; a discussion of any implementation problems; the type and degree of public input; and recommendations for new projects, revised action items, or other needed changes. Each governing body of City of Auburn, City of Opelika, Lee County, City of Smiths Station, Town of Loachapoka, and Auburn University must approve these recommendations in the report before inclusion into the hazard mitigation plan.

Once this evaluation is complete and the recommendations are adopted by each jurisdiction's governing body, the Lee County Natural Hazards Mitigation Plan Advisory Committee will update the plan. The time frame for updating the plan is four months. After completion, the updated plan will be provided to each jurisdiction, appropriate agencies, and committee members.

### ***Five Year Update***

Every five years the updated plan will be submitted to the Alabama Emergency Management Agency for review and approval following the required rules and regulations of the Federal Emergency Management Agency.



### **7.3 Implementation through Existing Programs**

At this time, the jurisdictions of Lee County have the following planning documents: A) Auburn University Storm Water Drainage Plan; B) City of Auburn Building Codes, Zoning Ordinances, Subdivision Regulations, Draft Land Use Plan, Growth Boundary Plan, Greenway Master Plan, Village Centers Strategic Development Concept, Auburn 2020 Strategic Plan, Traffic Calming Policy, Fire Codes, Storm Water Drainage Plan, Sewer Master Plan, and Water System Plan; C) City of Opelika Building Codes, Zoning Ordinances, Subdivision Regulations, Land Development Regulations, Fire Codes, Storm Water Drainage Plans, Public Works Manual, and Comprehensive Plan; D) Lee County Emergency Operations Plan including Standard Operating Procedures, annexes and checklists and E) City of Smiths Station Comprehensive Plan and Draft Zoning Ordinances. Currently, the Lee County Hazard Mitigation Plan has been incorporated into Emergency Operation Plans of Lee County Emergency Management Agency and City of Auburn.

Once the Lee County Natural Hazards Mitigation Plan is approved, the advisory committee will work with each jurisdiction to integrate the hazard mitigation goals and action items into other planning documents. An education process will need to take place to ensure that the natural hazard mitigation actions are a component of all planning documents in each jurisdiction. This will not happen overnight. In order to ensure that this takes place, the advisory committee will review existing planning documents during their yearly review of the mitigation plan to determine if these actions have been included.

### **7.4 Continued Public Participation**

The public will have an opportunity to provide feedback during the monitoring, evaluating and updating of the Lee County Natural Hazards Mitigation Plan. Once the initial plan is adopted by the governing bodies of each jurisdiction, a copy will be placed at key locations in the community for review by the public. During the evaluation process, a public meeting will be scheduled to inform the public about the findings of the yearly evaluation and to provide an opportunity for the public to express concerns, opinions, or ideas about the plan before the update is approved by each jurisdiction. The Lee County Emergency Management Agency will be responsible for advertising and hosting the meeting. Additionally, public input will be sought from community agencies and the general public through a natural hazards survey. Once the recommendations of the Lee County Natural Hazards Mitigation Advisory Committee and public have been approved, the updated plan will be made available to the public through public ad in the paper and flyers at key locations. The ad and flyer will detail the availability of the plan for public review and its locations in each jurisdiction.

# APPENDIX A

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN



## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN COMMITTEES LIST (2007-2009)



### Lee County Natural Hazards Mitigation Planning Committee

Note: Committee at Large to receive notices for all general meetings

- Alabama, State of - Area Coordinator Alabama Emergency Management Agency and/or delegate
- Alabama, State of - State Troopers Lee County Post Delegate
- Alabama, State of - Warning Coordinator for the National Weather Service and/or delegate
- Alagasco - Delegate
- Auburn, City of - Auburn City Council Representative
- Auburn, City of - City Manager, Assistant City Manager(s) and/or delegate
- Auburn, City of - Deputy Public Safety Director for Fire Protection (a.k.a. Fire Chief), Auburn Fire Department and/or delegate
- Auburn, City of - Director of Auburn Water Works and/or delegate
- Auburn, City of - Director of Public Works and/or delegate
- Auburn, City of - Director of Planning and Community Development and/or delegate
- Auburn, City of - Mayor and/or delegate
- Auburn, City of - Superintendent, Auburn City Schools and/or delegate
- Auburn University - Associate Provost for Facilities and/or delegate
- Auburn University - Chancellor / President and/or delegate
- Auburn University - Delegate from Risk Management
- Auburn University - Department of Public Safety & Security / Emergency Management and/or delegate
- Auburn University - Department of Public Safety and Security and/or delegate
- Auburn University - Director of Fire Management and/or delegate
- Beuaregard Water Authority - Director and/or delegate
- Dixie Electric Cooperative - Delegate
- East Alabama Medical Center - Delegate from Risk Management and/or delegate
- Lee-Chambers Utilities District - Delegate
- Lee County - County Administrator / Deputy Administrator and/or delegate
- Lee County - County Building Inspector and/or delegate
- Lee County - County Extension Coordinator, Lee County Extension Service
- Lee County - County Forestry Supervisor, Alabama Forestry Commission and/or delegate

- Lee County - Deputy Director of Lee County Emergency Management Agency
- Lee County - Director of Lee County Emergency Management Agency
- Lee County - E911 Representative and/or delegate
- Lee County - Engineer, Lee County Highway Department
- Lee County - Environmental Services Department Delegate
- Lee County - Lee County Commission Chair and/or delegate
- Lee County - Lee County Commission Representative
- Lee County - Lee County Jones Detention Center Delegate
- Lee County - Planner(s) at Lee County Emergency Management Agency
- Lee County - Revenue Commissioner and/or delegate from Tax Assesor's Office
- Lee County - Sheriff and/or delegate
- Lee County - Superintendant Lee County Schools and/or delegate
- Lee County - T.K. Davis Justice Center Delegate
- Lee County Volunteer Firefighter's Association m – Delegate
- Lee-Russell Council of Governments - Director of Planning and Economic Development
- Lee-Russell Council of Governments - Planning and Economic Development Specialist
- Loachapoka, Town of - Mayor and/or delegate
- Loachapoka Water Authority - Delegate
- Opelika, City of - Assistant Director of Opelika Water Works and/or delegate
- Opelika, City of - Chief, Opelika Fire Department and/or delegate
- Opelika, City of - Chief, Opelika Police Department and/or delegate
- Opelika, City of - City Manager and/or delegate
- Opelika, City of - Director of Engineering and/or delegate
- Opelika, City of - Director, Opelika Water Works and/or delegate
- Opelika, City of - Director, Planning Department and/or delegate
- Opelika, City of – Director, Public Works and/or delegate
- Opelika, City of - Mayor and/or delegate
- Opelika, City of - Solid Waste Division Delegate
- Opelika, City of - Superintendant of Opelika City Schools and/or delegate
- Smiths Station, City of - City Clerk
- Smiths Station, City of - Mayor and/or delegate
- Smiths Station Water - Director and/or delegate
- Southern Union State Community College - Delegate
- Tallapoosa River Electric Cooperative - Delegate

### **Lee County Natural Hazards Mitigation Working Committee**

- Alabama, State of - Warning Coordinator for the National Weather Service and/or delegate
- Auburn, City of - City Manager, Assistant City Manager(s) and/or delegate
- Auburn, City of - Deputy Public Safety Director for Fire Protection (a.k.a. Fire Chief), Auburn Fire Department and/or delegate
- Auburn, City of - Director of Public Works and/or delegate
- Auburn, City of - Director of Planning and Community Development and/or delegate

- Auburn University - Department of Public Safety & Security / Emergency Management and/or delegate
- Auburn University - Department of Public Safety and Security and/or delegate
- East Alabama Medical Center - Delegate from Risk Management and/or delegate
- Lee County - County Administrator / Deputy Administrator and/or delegate
- Lee County - County Building Inspector and/or delegate
- Lee County - County Extension Coordinator, Lee County Extension Service
- Lee County - County Forestry Supervisor, Alabama Forestry Commission and/or delegate
- Lee County - Deputy Director of Lee County Emergency Management Agency
- Lee County - Director of Lee County Emergency Management Agency
- Lee County - Engineer, Lee County Highway Department
- Lee County - Planner(s) at Lee County Emergency Management Agency
- Lee County - Sheriff and/or delegate
- Lee County Volunteer Firefighter's Association - Delegate
- Lee-Russell Council of Governments - Planning and Economic Development Specialist
- Loachapoka, Town of - Mayor and/or delegate
- Opelika, City of - Chief, Opelika Fire Department and/or delegate
- Opelika, City of - Chief, Opelika Police Department and/or delegate
- Opelika, City of - City Manager and/or delegate
- Opelika, City of - Director, Public Works and/or delegate
- Smiths Station, City of - City Clerk

### **Project Sponsor**

Lee County Emergency Management Agency, Opelika, AL

### **Plan Preparation**

Lee-Russell Council of Governments, Opelika, AL

### **Represented Jurisdictions**

**Auburn, City of**  
**Auburn University**  
**Lee, County of**  
**Loachapoka, Town of**  
**Opelika, City of**  
**Smiths Station, Town of**

Note: Positions may be represented by designated job title or by delegate. Also, according to jurisdiction, one position may represent one or more departments / vocations.

# APPENDIX B

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN



## Contact List for Lee County Natural Hazards Mitigation Plan

Note: Russell County Information included for regional purposes

Information Category:

- A= Asset
- C=Critical Facility
- EP= Education Primary (K & 1<sup>st</sup> -12<sup>th</sup> Grades)
- ES= Education Secondary (Junior College, Trade School & Higher)
- F= Fire
- HA= Hazmat
- HI= Historical
- I= Informational & Follow up Documentation, Facts, Figures, Input
- L= Law Enforcement
- M= Man Made
- O= Other Miscellaneous
- S= Sinkholes
- U= Utility
- W= Weather

### Alabama Cooperative Extension Service

Lee County

600 S. 7<sup>th</sup> Street, Suite 4, Opelika, AL 36801

334.749.3353 Phone

Contact: Chuck Browne, County Extension Coordinator [browne@auburn.edu](mailto:browne@auburn.edu)

Municipality: Lee County

Category: A/I

Website: <http://www.aces.edu/> or <http://www.aces.edu/counties/Lee/>

### Alabama Department of Environmental Management (ADEM) P.O. Box 301463, Montgomery, AL 36130-1463

334.271.7700 Phone

Contact: Azure Jones or [records@adem.state.al.us](mailto:records@adem.state.al.us)

Municipality: State of Alabama

Category: HA/HI/I

Website: <http://www.adem.state.al.us/>

### Alabama Power

1699 South College Street, Auburn, AL 36830

334.502.2694 Fax 334.502.2601 Phone # Direct for Titus Lindsey

Contact: Titus Lindsey, Manager [tlindse@southernco.com](mailto:tlindse@southernco.com)

Municipality: City of Auburn, Lee County, Smiths Station

Category: A/C/U

Website: <http://www.alabamapower.com/>

### Alagasco (Alabama Gas Corporation)

P.O. Box 2040, Opelika, AL 36803

334.745.8702 Phone 334.745.8720 Fax

Contact: Tommy Drew [Tommy.Drew@emergen.com](mailto:Tommy.Drew@emergen.com)

Municipality: City of Auburn, Lee County, Loachapoka, City of Opelika, Smiths Stations

Category: A/C/U

Website: <https://www.alagasco.com/fw/main/Home-188.html>

### Auburn Chamber of Commerce

741 East Glenn Avenue, Auburn, AL 36830

334.887.7011 Phone

Contact: Lolly Steiner, President [lolly@auburnchamber.org](mailto:lolly@auburnchamber.org)

Municipality: serves City of Auburn

Category: I (Industry Guide)

Website: <http://www.auburnchamber.com/> or <http://www.auburn-opelika.com/>

### Auburn, City of, Administration

144 Tichenor Avenue, Suite 1, Auburn, AL 36830

334.501.7263 Office Phone

Contact: Mayor Bill Ham, Jr. [bham@auburnalabama.org](mailto:bham@auburnalabama.org)

Website: <http://www.auburnalabama.org/cc/ham.asp>

144 Tichenor Avenue, Suite 1, Auburn, AL 36830  
334.501.7261 Office Phone: 334.329.4182 Cell Phone  
Contact: Charlie Duggan, City Manager [cduggan@auburnalabama.org](mailto:cduggan@auburnalabama.org)  
Website: <http://www.auburnalabama.org/ocm/>

144 Tichenor Avenue, Suite 4, Auburn, AL 36830  
334.501.7201 Office Phone: 334.329.4181 Cell Phone: 334.321.1658 SL Cell Phone/Radio  
Contact: Jim Buston, Assistant City Manager/CIO [jbuston@auburnalabama.org](mailto:jbuston@auburnalabama.org)  
Website: <http://www.auburnalabama.org/it/>  
Municipality: City of Auburn  
Category: A/C/HI/I/O <- this is the category for everything at 144 Tichenor Avenue

**Auburn, City of, Fire Division**

161 N. Ross Street, Auburn, AL 36830  
334.501.3110 Office Phone 334.501.7286 Office Fax  
Contact: Lee Lamar, Fire Chief [llamer@auburnalabama.org](mailto:llamer@auburnalabama.org)  
Municipality: City of Auburn/Auburn University  
Category: C/F/HA  
Website: <http://www.auburnalabama.org/ps/>

**Auburn, City of, Judicial**

151 N. Ross Street, Auburn, AL 36830  
334.501.3180 Office Phone: 334.501.7285 Office Fax  
Contact: Joe S. Bailey, Municipal Judge [jbailey@auburnalabama.org](mailto:jbailey@auburnalabama.org)  
Municipality: City of Auburn  
Category: A/C/L  
Website: <http://www.auburnalabama.org/ju/>

**Auburn, City of, Police Division**

161 North Ross Street, Auburn, AL 36830  
334.501.3110 Phone  
Contact: Frank (Buddy) deGraffenried, Police Chief [fdegraffenried@auburnalabama.org](mailto:fdegraffenried@auburnalabama.org)  
Municipality: City of Auburn / Auburn University  
Category: C/I/L/O  
Website: <http://www.auburnalabama.org/ps/>

**Auburn, City of, Public Schools**

855 East Samford Avenue  
P.O. Box 3270 , Auburn, AL 36831-3270  
334.887.2100 Phone 334.887.2107 Fax  
Contact: Todd Freeman, Asst. Superintendent [tfreeman@auburnschools.org](mailto:tfreeman@auburnschools.org)  
Contact: Dr. Terry Jenkins, Superintendent [tjenkins@auburnschools.org](mailto:tjenkins@auburnschools.org)  
Municipality: City of Auburn  
Category: A/C/EP  
Website: <http://www.auburnschools.org/>

**Auburn, City of, Public Safety Department**

161 N. Ross Street, Auburn, AL 36830  
334.501.3110 Office Phone 334.501.7286 Office Fax  
Contact: Bill James, Public Safety Director [bjames@auburnalabama.org](mailto:bjames@auburnalabama.org)  
Municipality: City of Auburn / Auburn University  
Category: C/I/L/O  
Website: <http://www.auburnalabama.org/ps/>

**Auburn, City of, Public Works**

171 N. Ross Street, Suite 200, Auburn, AL 36830  
334.501.3000 Office Phone 334.501.7294 Office Fax  
Contact: Jeff Ramsey, Director of Public Works / City Engineer [jramsey@auburnalabama.org](mailto:jramsey@auburnalabama.org)  
365B North Donahue Drive, Auburn, AL 36832



334.501.3000 Office Phone 334.826.5049 Office Fax  
Contact: Ben Puckett, Construction & Maintenance Division Manager [bpuckett@auburnalabama.org](mailto:bpuckett@auburnalabama.org)  
Municipality: City of Auburn  
Category: A/C  
Website: <http://www.auburnalabama.org/pw/>

**Auburn, City of, Risk Management**

130 Tichenor Avenue, Auburn, AL 36830  
334.501.7243 Office Phone: 334.501.7296 Office Fax  
Contact: D'Arcy Wernette, Risk Manager [dwernette@auburnalabama.org](mailto:dwernette@auburnalabama.org)  
Municipality: City of Auburn  
Category: A  
Website: <http://www.auburnalabama.org/hr/>

**Auburn, City of, Water Resource Management**

1501 W. Samford Avenue, Auburn, AL 36830  
334.501.3061 Office Phone 334.826.1083 Office Fax  
Contact: Laura Koon, Director of Water Resource Management [lkoon@auburnalabama.org](mailto:lkoon@auburnalabama.org)  
Municipality: City of Auburn  
Category: A/C/U  
Website: <http://www.auburnalabama.org/pw/>

**Auburn University, Department of Public Safety and Security**

543 West Magnolia Avenue, Auburn University, AL 36949-5325

**AU Department of Public Safety & Security / Emergency Management**

334.844.8888 Phone

334.844.4808 Phone 334.844.2081 Fax 334.329.1158 Cell  
Contact: Chance Corbett – Associate Director, Emergency Management [cdc0009@auburn.edu](mailto:cdc0009@auburn.edu)  
Municipality: Auburn University  
Category: A/C/ES/I  
Website: <http://www.auburn.edu/> or [www.auburn.edu/emergency](http://www.auburn.edu/emergency)

334.844.4876 Phone 334.703.7255 Cell 334.844.2081 Fax  
Contact: Susan McCallister, Associate Director / PS Information & Education [mccalsm@auburn.edu](mailto:mccalsm@auburn.edu)  
Municipality: Auburn University  
Category: A/C/ES/I  
Website: <http://www.auburn.edu/> or <http://www.auburn.edu/administration/rms/staff.html>

**Please use contact information for the Auburn Police Department for Law Enforcement questions regarding Auburn University**

**Auburn University, Public Safety & Security**

543 W. Magnolia Avenue, Auburn University, AL 36949-5325  
334.844.2262 Phone 334.844.2801 Fax  
Contact: Melvin Owens, Executive Director [owensme@auburn.edu](mailto:owensme@auburn.edu)  
Municipality: Auburn University  
Website: <http://www.auburn.edu/publicsafety>

**Auburn University Fire**

334.844.4805 Phone 334.703.7504 Cell Kenny  
Contact: Kenny Harrison, Fire Safety Program Manager [harrik7@auburn.edu](mailto:harrik7@auburn.edu)  
Municipality: Auburn University  
Category: C/F/HA/HI/I/M/O  
Website: <http://www.auburn.edu/> or <http://www.auburn.edu/administration/rms/staff.html>

**Beauregard Water Authority**

P.O. Box 271, Opelika, AL 36803-7430  
334.749.4900 Phone      334.749.4994 Fax  
Contact: Beverly Bishop [beauregardwater@earthlink.net](mailto:beauregardwater@earthlink.net)  
Municipality: Located in Lee County  
Category: A/C/U

**Cable TV of East Alabama**

2400 Sportsman Drive, Phenix City, AL 36867  
334.298.7000 Phone  
Municipality:, Smiths Station  
Category: C/I  
Website: <http://www.ctvea.net/>

**Charter Cable**

334.887.8171  
Contact: John Duran, Plant Manager x419  
Contact: Donna Grissett, Office Manager x400  
Contact: Shey Lynn, Technical Operations Supervisor X409 [shey.lynn@chartercom.com](mailto:shey.lynn@chartercom.com)  
Municipality: Lee County  
Website: <http://www.charter.com/Visitors/Home.aspx>

**Dixie Electric Cooperative**

9100 Atlanta Highway, Montgomery, AL 36117  
334.288.1163 Phone or 334.387.1545 Direct line for Brandon  
Contact: Brandon Johnson [brandon.johnson@dixieec.com](mailto:brandon.johnson@dixieec.com)  
Serving: Lee County  
Category: A/C/U  
Website: <http://www.dixieec.com/>

**Forestry Commission / County Office (State of Alabama)**

651 Lee Road 113, Opelika, AL 36804  
334.742.0320 Phone  
Contact: Andy Cotney, Forestry Specialist & County Fire Specialist  
Contact: Andy Guy, County Supervisor [Lee.County@forestry.alabama.gov](mailto:Lee.County@forestry.alabama.gov)  
Municipality: State of Alabama, Lee County  
Category: F/HI/I/L/M/W  
Website: <http://www.forestry.state.al.us/>

**Lee-Chambers Utilities District**

Note: Services Beulah Water  
P.O. Box 37, Valley, AL 36854  
334.756.7150 Phone      334.756.7163 Fax  
Contact: Tony Segrest [tsegrest@knology.net](mailto:tsegrest@knology.net)  
Municipality: Located in Lee County  
Category: A/C/U

**Lee County Board Of Education**

215 S. 9<sup>th</sup> Street, Opelika, AL 36801  
334.745.9770 Phone  
Contact: Kimberly Dwyer [Dwyer.Kimberly@lee.k12.al.us](mailto:Dwyer.Kimberly@lee.k12.al.us)  
Contact: Dr. Stephen Nowlin, Superintendent [nowlin.stephen@lee.k12.al.us](mailto:nowlin.stephen@lee.k12.al.us)  
Municipality: Lee County  
Category: A/C/EP

**Lee County Commission**

P.O. Box 666, Opelika, AL 36803-0666  
334.737.3660 Phone      334.742.9478 Fax  
Contact: Roger Rendleman, County Administrator [rrendleman@leeco.us](mailto:rrendleman@leeco.us)  
Website: <http://www.leeco.us/co/index.html>

Contact: Alice Hodge, Deputy Administrator [ahodge@leeco.us](mailto:ahodge@leeco.us)  
Website: <http://www.leeco.us/co/index.html>  
Contact: Wendy Swann, Governmental Relations Coordinator [wswann@leeco.us](mailto:wswann@leeco.us)  
Contact: Judge Bill English, Probate Judge [probatejudge@mindspring.com](mailto:probatejudge@mindspring.com)  
Website: <http://www.leeco.us/probate/index.html>  
Municipality: Lee County  
Category: A/C  
Website: <http://www.leeco.us/>

PO Box 2526, Opelika, AL 36803-2526  
334.749.4142 Phone 334.749.4131 Fax  
Law office of Stan Martin (County Attorney of Record)  
Contact: F.B. Henderson, Paralegal [fbhenderson@stanmartinlaw.com](mailto:fbhenderson@stanmartinlaw.com)

**Lee County Emergency Management Agency**

P.O. Box 2769, Opelika, AL 36803-2769  
334.749.8161 Phone  
Contact: Kathy Russell, Director [krussell@leecoema-al.org](mailto:krussell@leecoema-al.org)  
Contact: Johnny Langley, Deputy Director [jlangley@leecoema-al.org](mailto:jlangley@leecoema-al.org)  
Contact: Rita Smith [rsmith@leecoema-al.org](mailto:rsmith@leecoema-al.org) or Mary Moore [mmoore@leecoema-al.org](mailto:mmoore@leecoema-al.org) or Chris Tate [ctate@leecoema-al.org](mailto:ctate@leecoema-al.org)  
Municipality: City of Auburn, Auburn University, Lee County, Town of Loachapoka, City of Opelika, City of Smiths Station  
Category: C/F/H/Hi/I/M/U/W  
Website: <http://www.leecoema-al.org/>

**Lee County Environmental Services Department**

P.O. Box 4187, Opelika, AL 36803  
1111 Auburn Street, Opelika, AL 36801  
334.745.9835 Phone  
Contact: Jack Marshall [leesolidwaste@mindspring.com](mailto:leesolidwaste@mindspring.com)  
Category: I/O  
Website: <http://www.leeco.us/es/index.html>

**Lee County Highway Department**

1111 Auburn Street  
P.O. Box 1007, Opelika, AL 36801  
334.745.9792 Phone  
Contact: Neal Hall, County Engineer [lchd@earthlink.net](mailto:lchd@earthlink.net)  
Contact: Justin Hardy, Asst. County Engineer [cjhardee@charterinternet.com](mailto:cjhardee@charterinternet.com)  
Municipality: Lee County  
Category: I  
Website: <http://www.leeco.us/hd/index.html>

**Lee County Revenue Commissioner**

P.O. Box 999, Opelika, AL 36803-0999  
334.745.9786 Phone  
Contact: Oline Price, Revenue Commissioner [oprice@leeco.us](mailto:oprice@leeco.us)  
Municipality: City of Auburn, Lee County, Loachapoka, City of Opelika, and Smiths Station  
Category: A/I  
Website: <http://www.leecountyrevenuecommissioner.com/>

**Lee County Sheriff's Office**

Sheriff W.S. Jones Center  
1900 Frederick Road, Opelika, AL 36801  
334.749.5651 Phone  
Contact: Sheriff Jay Jones [jjones@leecountysheriff.org](mailto:jjones@leecountysheriff.org)  
Municipality: Lee county, City of Smiths Station, Loachapoka, Salem, Beulah, Beauregard, Waverly  
Category: L  
Website: <http://www.leecountysheriff.org/>

**Lee County Volunteer Firefighter's Association**

Contact: Pete Idsall

Contact #'s: [pidsall@charter.net](mailto:pidsall@charter.net)

Municipality: Lee County, Loachapoka, Smiths Station

Category: A/C/F/Hi/M/W

There are six Lee County Divisions of Volunteer Fire Departments

**Lee-Russell Council of Governments**

2207 Gateway Drive, Opelika, AL 36801

334.749.5264 Phone 334.749.6582 Fax

Contact: Lisa Sandt, Director of Planning and Economic Development (ext.205) [Lisa.Sandt@adss.alabama.gov](mailto:Lisa.Sandt@adss.alabama.gov)

Contact: Erin Stephens, Planning and Economic Development Specialist (ext.204) [Erin.Stephens@adss.alabama.gov](mailto:Erin.Stephens@adss.alabama.gov)

Contact: Barbara Scott, Planning and Economic Development Specialist (ext.) [Barbara.Scott@adss.alabama.gov](mailto:Barbara.Scott@adss.alabama.gov)

Municipality: City of Auburn, Lee County, City of Opelika, City of Phenix city, Russell County, Smiths Station, Town of Hurtsboro

Category: I

Website: <http://www.lrcog.com/>

**Lee-Scott Academy**

1601 Academy Drive, Auburn, AL 36830

334.821.2430 Phone 334.821.0876 Fax

Contact: Dr. Don Roberts, Headmaster [droberts@lee-scott.org](mailto:droberts@lee-scott.org)

Municipality: Located in City of Auburn

Category: A/C/EP

Website: <http://www.lee-scott.org/>

**Loachapoka, Town of, Administration**

6454 Stage Road (Town Hall), Loachapoka, AL 36865

334.887.7683 Phone (Mayor's #)

Contact: Mayor Larry Justice

Municipality: Town of Loachapoka

Category: A

**Loachapoka Water Authority**

4742 Lee Road 188 or P.O. Box 129, Loachapoka, AL 36865

334.887.3329 Phone 334.821.6822 Fax

Contact: Shay Newman, Office Manager or Dr. Richard Baker 334.887.6348

Municipality: Located in Town of Loachapoka in Lee County

Category: A/C/U

Website: <http://64.176.86.118/lwa/p1.html>

**Opelika Chamber of Commerce**

601 Avenue A, Opelika, AL 36801

334.745.4861 Phone

Contact: Wendy Routhier, President [wrouthier@opelika.com](mailto:wrouthier@opelika.com)

Municipality: Serves City of Opelika

Category: I (Lee County Industry Guide)

Website: <http://www.opelika.com/>

**Opelika, City of, Administration**

P.O. Box 390, Opelika, AL 36803-0390

207 South 7<sup>th</sup> Street, Opelika, AL 36803

334.705.5132 Phone 334.705.5135 Fax

Contact: Rusty Abernathy, Risk Manager [ravernathy@ci.opelika.al.us](mailto:ravernathy@ci.opelika.al.us)

334.705.5115 Phone 334.705.5113 Fax

Contact: Alfred F. Cook, Jr., Director of Economic Development [acook@ci.opelika.al.us](mailto:acook@ci.opelika.al.us)

Website: <http://www.opelika.org/Default.asp?ID=311&pg=Economic+Development>

Contact: Lori Huguley, Economic Development Project Manager [lhuguley@ci.opelika.al.us](mailto:lhuguley@ci.opelika.al.us)

Website: <http://www.opelika.org/Default.asp?ID=311&pg=Economic+Development>

Contact: Mayor Gary Fuller [gfuller@ci.opelika.al.us](mailto:gfuller@ci.opelika.al.us)

Website: <http://www.opelika.org/Default.asp?ID=315&pg=Mayor>

Contact: John Seymour, City Administrator [jseymour@ci.opelika.al.us](mailto:jseymour@ci.opelika.al.us)  
Website: <http://www.opelika.org/Default.asp?ID=572&pg=City+Administrator>  
Contact: R.G. "Bob" Shuman, City Clerk [rshuman@ci.opelika.al.us](mailto:rshuman@ci.opelika.al.us)  
Website: <http://www.opelika.org/Default.asp?ID=600&pg=City+Clerk>  
Contact: Gerald "Jerry" Kelley, Director of Planning [gkelley@ci.opelika.al.us](mailto:gkelley@ci.opelika.al.us)  
Website: <http://www.opelika.org/Default.asp?ID=508&pg=Planning>  
Municipality: City of Opelika  
Category: A/C  
Website: <http://www.opelika.org/>

**Opelika, City of, Engineering**

P.O. Box 390, Opelika, AL 36803-0390  
334.705.5451 Phone  
Contact: Walter Dorsey [wdorsey@ci.opelika.al.us](mailto:wdorsey@ci.opelika.al.us)  
Municipality: City of Opelika, Engineering  
Category: A/I/O/S/U  
Website: <http://www.opelika.org/Default.asp?ID=395&pg=Engineering>

**Opelika, City of, Fire Department**

1015 Avenue B, Opelika, AL 36801  
334.705.5300 Phone  
Contact: Chief Terry Adkins [tadkins@ci.opelika.al.us](mailto:tadkins@ci.opelika.al.us)  
Contact: Asst. Chief James "Junior" C. Morgan [jmorgan@ci.opelika.al.us](mailto:jmorgan@ci.opelika.al.us)  
Municipality: City of Opelika for Fire  
Municipality: Entire Lee County for HazMat Response  
Category: C/F/HA/HI/I/M/W  
Website: <http://www.opelika.org/Default.asp?ID=404&pg=Fire+Department>

**Opelika, City of, Light & Power**

1010 Avenue C, Opelika, AL 36801  
334.705.5570 Phone  
Contact: Derek Lee, Director [Dlee@ci.opelika.al.us](mailto:Dlee@ci.opelika.al.us)  
Municipality: City of Opelika  
Category: A/C/U  
Website: <http://www.opelika.org/Default.asp?ID=444>

Utility Customer Service Center  
334.705.5170 Phone  
Contact: Scarlett Mann [smann@ci.opelika.al.us](mailto:smann@ci.opelika.al.us)  
204 South 7<sup>th</sup> Street  
Opelika, AL 36874  
Website: <http://www.opelika.org/Default.asp?ID=444>

**Opelika, City of, Police Department**

501 South 10<sup>th</sup> Street, Opelika, AL 36801  
334.705.5200 Phone  
Contact: Chief Tommy Mangham [Tmangham@ci.opelika.al.us](mailto:Tmangham@ci.opelika.al.us)  
Municipality: City of Opelika  
Category: C/I/L/O  
Website: <http://www.opelika.org/Default.asp?ID=521&pg=Police>

**Opelika, City of, Public Schools**

P.O. Box 828, Opelika, AL 36803  
334.749.3401 Phone 334.745.8785 Fax  
Contact: Dr. Mark Neighbors, Superintendent [mark.neighbors@opelikaschools.org](mailto:mark.neighbors@opelikaschools.org)  
Contact: Ken Burton, Assistant Superintendent [ken.burton@opelikaschools.org](mailto:ken.burton@opelikaschools.org)  
Municipality: City of Opelika  
Category: A/C/EP  
Website: <http://www.opelikaschools.org/>

**Opelika, City of, Solid Waste Division**

334.705.5480

Contact: Michael Dowdell [Mdowdell@ci.opelika.al.us](mailto:Mdowdell@ci.opelika.al.us)

Municipality: City of Opelika / portions of Lee County

Website: <http://www.opelika.org/Default.asp?ID=741&pg=Solid+Waste+Division>

**Opelika, City of, Water Works**

502 Geneva Street, Opelika, AL 36801

334.705.5500 Phone

Contact: Dan Hilyer [dhilyer@owwb.com](mailto:dhilyer@owwb.com)

Contact: Eddie Owen [eowen@owwb.com](mailto:eowen@owwb.com)

Municipality: City of Opelika

Category: A/C/U

Website: <http://owwb.com/>

**National Weather Service Forecast Office**

465 Weathervane Road, Calera, AL 35040-5427

205.621.5645 ext.223 Phone

Contact: John DeBlock [John.DeBlock@noaa.gov](mailto:John.DeBlock@noaa.gov)

Website: [www.srh.noaa.gov/bmx/](http://www.srh.noaa.gov/bmx/)

Category: HI/I/W

**Smiths Station, City of, Administration**

P.O. Box 250, Smiths Station, AL 36877

2336 Lee Road 430, Smiths Station, AL 36877

334.297.8771 Phone 334.448.8422 Fax

Contact: Jerry Bentley, City Clerk [ssfirstclerk@ctvea.net](mailto:ssfirstclerk@ctvea.net)

Contact: Mayor LaFaye Dellinger [ssfirstmayor@ctvea.net](mailto:ssfirstmayor@ctvea.net)

Municipality: City of Smiths Station

Category: A

Website: <http://www.smithsstation.us/sites/smithsstation/Default.aspx>

**Smiths Water and Sewer Authority**

P.O. Box 727, Smiths Station, AL 36877

800.298.6342 Phone 334.298.6412 Fax

Contact: Eric Lansdon [erlansdon@smithswater.com](mailto:erlansdon@smithswater.com)

Municipality: Located in Smiths Station in Lee County

Category: A/C/U

Website: <http://www.smithswater.com/>

**Southeast Alabama Gas District**

334.678.3410 Phone

**Southern Union State Community College**

1701 Lafayette Parkway, Opelika, AL 36801

256.395.2211 ext 5310 Phone (Ben) 334.745.6437 General Phone 334.395.2215 Fax (Ben)

Contact: Ben Jordan, Business Manager

Municipality: Located in Opelika

Category: A/C/ES

Website: <http://www.suscc.cc.al.us/>

**State Troopers, Alabama**

1220 Fox Run Parkway Bldg A-3, Opelika, AL 36801

334.745.4651 Phone 334.749.0452 Fax

Contact: Lt. James Patterson [james.patterson@dps.alabama.gov](mailto:james.patterson@dps.alabama.gov)

Municipality: Lee County, Russell County

Montgomery: 334.242.4128

Category: C/L/O

Website: <http://dps.alabama.gov/>

**Tallapoosa River Electric Cooperative**

P.O. Box 675 or 15163 U.S. Highway 431 South, Lafayette, AL 36862

334.864.9331 ext. 712 Phone 334.864.0817 Fax

Contact: Terry Morgan [tmorgan@trec.coop](mailto:tmorgan@trec.coop)

Municipality: Lee County

Category: A/U

Website: <http://www.trec.coop/>

# APPENDIX C

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN





## Lee County Natural Hazards Mitigation Plan – Appendix C

Type of Asset	Name
Essential/Medical	East Alabama Medical Center
Essential/Medical	East Alabama Mental Health
Essential/Medical	Emergency Management System
Essential/Medical	Lee County Health Department
Essential/Medical	Auburn University Medical Clinic
Essential/Law Enforcement	City of Auburn Police Department
Essential/Law Enforcement	Lee County Justice & Detention Center
Essential/Law Enforcement	Lee County Sheriff's Office
Essential/Law Enforcement	Lee County Sheriff's Office - Annex Smiths Station
Essential/Law Enforcement	Lee County Youth Development Center
Essential/Law Enforcement	Town of Notasulga Police Division
Essential/Law Enforcement	Federal Courthouse located in City of Opelika
Essential/Law Enforcement	State Troopers Division for Lee County
Essential/Fire	Alabama Forestry Commission
Essential/Fire	City of Auburn Fire Division
Essential/Fire	City of Auburn Fire Station #1
Essential/Fire	City of Auburn Fire Station #2
Essential/Fire	City of Auburn Fire Station #3
Essential/Fire	City of Auburn Fire Station #4
Essential/Fire	City of Auburn Fire Station #5
Essential/Fire	City of Auburn Fire Station #6
Essential/Fire	Beauregard Volunteer Fire Department
Essential/Fire	Farmville Volunteer Fire Department
Essential/Fire	Lee-Chambers Volunteer Fire Department
Essential/Fire	Notasulga Volunteer Fire Department
Essential/Fire	City of Opelika Fire Department
Essential/Fire	City of Opelika Fire Station #1
Essential/Fire	City of Opelika Fire Station #2
Essential/Fire	City of Opelika Fire Station #3
Essential/Fire	City of Opelika Fire Station #4
Essential/Fire	City of Opelika Fire Station #5
Essential/Fire	Salem Volunteer Fire Department
Essential/Fire	Smiths Station, Freindship Volunteer Fire Department (7 Locations)
Essential/Fire	Southwest Lee County Volunteer Fire Department
Essential/Emer. Operation Centers	Lee County Emergency Management Agency
Essential/Governmental	City of Auburn City Hall
Essential/Governmental	City of Opelika City Hall
Essential/Governmental	Lee County Courthouse
Essential/Governmental	Lee County Courthouse (Smiths Station Annex)
Essential/Governmental	Lee County Courthouse (Auburn Annex)

Essential/Governmental	Loachapoka Town Hall (Auburn Annex)
Essential/Governmental	Smiths Station City Hall
Essential/Governmental	T.K. Davis Justice Center, Lee County
Essential/Governmental	Sheriff W.S. Jones Detention Center
Essential/Evacuation Shelters	Auburn First Baptist Church
Essential/Evacuation Shelters	Auburn United Methodist Church
Essential/Evacuation Shelters	Auburn Univ. Eaves Memorial Coliseum
Essential/Evacuation Shelters	Auburn Univ. Student Activities Center
Essential/Evacuation Shelters	Farmville Baptist Church / Auburn
Essential/Evacuation Shelters	Samford Middle School / Auburn
Essential/Evacuation Shelters	Loachapoka High School / Lee County
Essential/Evacuation Shelters	Covington Recreation Center / Opelika
Essential/Evacuation Shelters	Opelika First Baptist Church
Essential/Evacuation Shelters	Opelika First Presbyterian Church
Essential/Evacuation Shelters	Opelika First United Methodist Church
Essential/Evacuation Shelters	Opelika Recreation Center
Essential/Evacuation Shelters	Opelika Middle School
Essential/Evacuation Shelters	Pepperell Baptist Church / Opelika
Essential/Evacuation Shelters	Trinity United Methodist Center / Opelika
Essential/Evacuation Shelters	Sanford Middle School / Opelika
Essential/Evacuation Shelters	Southern Union; Health Sciences Building / Opelika
Essential/Evacuation Shelters	Southern Union; Cafeteria / Opelika
Essential/Evacuation Shelters	Wacoossee Junior High / Lee County
Essential/Evacuation Shelters	Smiths Station High School / Lee County
Essential/Evacuation Shelters	Smiths Station Primary School Lee County
Essential/Evacuation Shelters	St. Stephens Episcopal Church / Lee County
Essential/Evacuation Shelters	Smiths Station Elementary / Lee County
Essential/Evacuation Shelters	Beulah Baptist Church / Lee County
Essential/Evacuation Shelters	Beulah High School / Lee County
Essential/Evacuation	Evacuation Shelters
Essential/Education	Auburn University Main Campus Buildings
Essential/Education	Southern Union Community College Opelika Campus
Essential/Education	Auburn City Schools Board of Education Building
Essential/Education	Auburn Early Education Center
Essential/Education	Auburn High School
Essential/Education	Auburn Junior High School
Essential/Education	Cary Woods Elementary School / Auburn
Essential/Education	Dean Road Elementary School / Auburn
Essential/Education	Drake Middle School / Auburn
Essential/Education	Ogletree Elementary School / Auburn
Essential/Education	Richland Road Elementary School
Essential/Education	Wrights Mill Road Elementary School / Auburn
Essential/Education	Yarborough Elementary School / Auburn
Essential/Education	Lee County Board of Education Building

Essential/Education	Beauregard High School / Lee County
Essential/Education	Beauregard Elementary School / Lee County
Essential/Education	Beulah High School / Lee County
Essential/Education	Beulah Elementary School / Lee County
Essential/Education	Loachapoka High school & Elementary School / Lee County
Essential/Education	Sanford Middle School / Lee County
Essential/Education	Smiths Primary School / Lee County
Essential/Education	Smiths High School / Lee County
Essential/Education	Smiths Elementary School / Lee County
Essential/Education	Smiths Intermediate School / Lee County
Essential/Education	Wachoochee Jr. High School / Lee County
Essential/Education	Instructional Center - Salem / Lee County
Essential/Education	Technology Center - Salem / Lee County
Essential/Education	Maintenance Facility / Lee County
Essential/Education	Lee-Scott Academy Campus & Administration Buildings
Essential/Education	City of Opelika Board of Education Building
Essential/Education	Northside Elementary School / Opelika
Essential/Education	Jeter Primary School / Opelika
Essential/Education	Opelika Middle School
Essential/Education	Carver primary School / Opelika
Essential/Education	Opelika High School
Essential/Education	Morris Avenue Intermediate School / Opelika
Essential/Education	Southview Primary School / Opelika
Essential/Education	West Forest Intermediate / Opelika
Transportation/Airways	Auburn University Airport
Transportation/Highways	Interstate 85
Transportation/Highways	State Highway 280/431
Transportation/Highways	State Highway 14
Transportation/Highways	State Highway 29
Transportation/Railways	CSX
Transportation/Railways	Northfolk-Southern Railways
Transportation/Motor Frieght and Air Carriers	Federal Express
Transportation/Motor Frieght and Air Carriers	UPS
Transportation/Motor Frieght and Air Carriers	Airborne
Infrastructure/Communications	AT&T / Opelika
Infrastructure/Communications	Charter Communications
Infrastructure/Communications	Cellular Phone Carriers
Infrastructure Systems/Electricity	Alabama Power
Infrastructure Systems/Electricity	City of Opelika Light and Power
Infrastructure Systems/Electricity	Dixie Electric
Infrastructure Systems/Electricity	Tallapoosa River Electric Cooperative
Infrastructure Systems/Public Works	City of Auburn Public Works Building

Infrastructure Systems/Public Works	City of Auburn Public Works Pumping Stations (2)
Infrastructure Systems/Public Works	City of Auburn Public Works Water Treatment Plant
Infrastructure Systems/Public Works	City of Auburn Public Works Water Storage Tanks (8)
Infrastructure Systems/Public Works	City of Auburn Public Works Dam and Spillway
Infrastructure Systems/Public Works	Beauregard Water Authority Building
Infrastructure Systems/Public Works	Beauregard Water Authority Pumping Station (1)
Infrastructure Systems/Public Works	Beauregard Water Authority Storage Tanks (4)
Infrastructure Systems/Public Works	Beauregard Water Authority Well (1)
Infrastructure Systems/Public Works	Lee-Chambers Utilities District Pumping Station (1)
Infrastructure Systems/Public Works	Lee-Chambers Utilities District Storage Tank (1)
Infrastructure Systems/Public Works	Loachapoka Water Authority Office Building
Infrastructure Systems/Public Works	Loachapoka Water Authority Pumping Stations (4)
Infrastructure Systems/Public Works	Loachapoka Water Authority Storage Tanks (5)
Infrastructure Systems/Public Works	Opelika Water Works Building
Infrastructure Systems/Public Works	Opelika Water Works Pumping Stations (3)
Infrastructure Systems/Public Works	Opelika water Works Water Treatment Plant
Infrastructure Systems/Public Works	Opelika Water Work Storage Tanks (8)
Infrastructure Systems/Public Works	Smiths Water Authority Office Building
Infrastructure Systems/Public Works	Smiths Water Authority Water Treatment Plant
Infrastructure Systems/Public Works	Smiths Water Authority Pumping Stations (4)
Infrastructure Systems/Public Works	Smiths Station Water Authority Storage Tanks (8)
Infrastructure Systems/Utility	Alabama Gas / Alagasco
High Potential Loss / Infrastructure	Goats Rock Dam / Lee County
High Potential Loss / Infrastructure	Bartlett's Ferry Dam / Lee County
Hazardous Material Facilities	Alabama Dept. of Trans. / Opelika
Hazardous Material Facilities	Alabama Power (Auburn Crew HQ)
Hazardous Material Facilities	APAC-Alabama Inc. Couch Division / Opelika
Hazardous Material Facilities	AT&T / Opelika
Hazardous Material Facilities	Auburn Asphalt Plant
Hazardous Material Facilities	Auburn Compressor Station
Hazardous Material Facilities	BellSouth - 12703 (Auburn)
Hazardous Material Facilities	BelSouth - 12752 (Opelika)
Hazardous Material Facilities	Blossman Gas (Opelika Bulk Plant)
Hazardous Material Facilities	Blue Circle Materials (Auburn Concrete Plant)
Hazardous Material Facilities	Briggs & Stratton Corporation / Auburn
Hazardous Material Facilities	Bullock Propane / Opelika
Hazardous Material Facilities	Distribution Center #6095 / Opelika
Hazardous Material Facilities	Dowdle Gas Company Opelika
Hazardous Material Facilities	Ferrellgas Auburn
Hazardous Material Facilities	Georgia Power Company - Goat Rock Combined Cycle / Lee County
Hazardous Material Facilities	Georgia Power Co. Bartlett's Ferry / Lee County
Hazardous Material Facilities	Green's Propane Gas Co. Inc. (Smith's Plant)
Hazardous Material Facilities	Hanson Aggregates Southeast Inc. - Opelika Quarry

Hazardous Material Facilities	H.C. Morgan Pollution Control Facility / Auburn
Hazardous Material Facilities	International Paper- Opelika Sawmill
Hazardous Material Facilities	Northside Pollution Control Facility / Auburn
Hazardous Material Facilities	NuCo,2,Inc / Opelika
Hazardous Material Facilities	Opelika Bulk Plant (Closed)
Hazardous Material Facilities	Opelika Divison Service Center
Hazardous Material Facilities	Ryder Transportation Services / Opelika
Hazardous Material Facilities	Sage Technologies / Opelika
Hazardous Material Facilities	Salem Waste Disposal Center/ Lee County
Hazardous Material Facilities	Smiths Water Treatment Plant / Lee County
Hazardous Material Facilities	Sungas, Inc. / Opelika
Hazardous Material Facilities	Superior Gas (Smiths Bulk Plant) / Lee County
Hazardous Material Facilities	The Opelika-Auburn News / Opelika
Hazardous Material Facilities	Tiger Lawn Care d/b/a Trugreen - Chemlawn / Opelika
Hazardous Material Facilities	Twiss Associates, Inc. / Opelika
Hazardous Material Facilities	Uniroyal Goodrich Tire Manufacturing / Opelika - through Fall 2009
Hazardous Material Facilities	United Parcel Service Inc. / Opelika
Hazardous Material Facilities	Waste Management of Alabama East / Opelika
Hazardous Material Facilities	Westpoint Stevens-GriffTex Chemicals / Opelika (Closed)
Hazardous Material Facilities	Westpoint Stevens-Opelika Finishing (Closed)
Hazardous Material Facilities	Westpoint Stevens-Opelika Plant (Closed)

## Lee County Population

Annual Estimates of the Population for Places of Alabama									
	As of April 1, 2000:		Estimates for July 1:						
	Census 2000	Estimates Base 2000*	2000	2001	2002	2003	2004	2005	2006
<b>Alabama</b>	4,447,100	4,447,351	4,452,375	4,466,618	4,477,571	4,495,089	4,517,442	4,548,327	4,599,030
<b>Lee County</b>	115,092	115,092	115,426	116,419	117,500	118,873	120,326	123,122	125,781
Auburn city	42,987	43,736	43,938	44,596	45,900	47,299	48,725	50,277	51,906
Loachapoka town	165	165	165	165	165	163	162	162	162
Notasulga town (pt.)	27	27	27	27	27	27	27	27	27
Opelika city	23,498	24,288	24,310	24,308	24,235	24,207	24,062	24,413	24,563
Phenix City city (pt.)	1,980	1,974	1,993	2,057	2,102	2,126	2,180	2,282	2,357
Smiths Station city	X	4,508	4,513	4,517	4,497	4,446	4,430	4,471	4,504
Waverly town (pt.)	47	47	47	47	47	46	46	46	46
Balance of Lee County	46,388	40,347	40,433	40,702	40,527	40,559	40,694	41,444	42,216
<b>Russell County</b>	49,756	49,756	49,696	49,447	49,216	48,844	49,075	49,371	50,085
Hurtsboro town	592	589	587	578	572	564	563	559	560
Phenix City city (pt.)	26,285	26,441	26,443	26,405	26,425	26,354	26,751	27,170	27,710
Balance of Russell County	22,879	22,726	22,666	22,464	22,219	21,926	21,761	21,642	21,815

## Lee County population variance by season or events

Auburn University Athletic Events (From Susan McCallister, AU Risk Management 334.844.4876)  
 Jordan Hare Stadium Capacity – 87,451  
 Estimated others on Campus during Football Games 25,000+  
 Beard Eves Coliseum – 10,500  
 Plainsman Park – 4,096  
 Standard Population on Campus during class hours – 24,137 Students & 5,855 Faculty & Staff  
 Auburn High or Opelika High School Events – Possible 5,000  
 Others around county could include but not limited to (Taken from historical knowledge and Opelika, Auburn and CVB Websites):  
 Conventions at The Lodge in Opelika  
 Conventions at The Dixon Hotel and Conference Center  
 Auburn University Sorority Dorms during Rush  
 City of Auburn Christmas Parade  
 City of Opelika Christmas Parade  
 City of Auburn Easter Egg Hunt at Keisel Park  
 City of Opelika Easter Egg Hunt in Downtown Opelika  
 Christmas in a Railroad Town in Downtown Opelika  
 Dixie Youth World Series  
 Opelika Miracle Field (Special Needs Population)  
 New City of Auburn Tennis Complex (Tennis Tournaments)  
 Auburn CityFest at Keisel Park  
 Summer Swing Concerts in Downtown Opelika  
 Jule Collins Smith Museum  
 Variuos Concerts and Community enhancement programs  
 Auburn University Events focusing on children (Cheerleading camps, swim meets, Science Olympiad, etc)  
 Large church events at some of the larger churches  
     Auburn United Methodist - Auburn  
     Trinity United Methodist – Opelika  
     First Baptist of Auburn  
     First Methodist of Opelika  
     First Baptist of Opelika  
     Victory World Prayer Center  
 Political Rallies  
 WynSong 16 Movie Theater (Especially on Movie Premier nights)  
 Colonial Mall University Village (Especially during the Christmas Season)  
 Walmart – Opelika  
 Walmart – Auburn  
 Target - Opelika  
 Tiger Town – Opelika (~~When Built~~)  
 AU Parades (Homecoming & Rec Tec)  
 AU Homecoming Games  
 A-Day Game in the Spring at Auburn  
 AU Summer incoming Freshmen Orientations  
 AU Graduations  
 Southern Union Graduation  
 Alpha Psi Annual Rodeo  
 Loachapoka Annual Syrup Sopping

### **Special needs facilities**

Early Learning Center & Leaps and Bounds (Autism)  
 East Alabama Medical Center (From Carol McCorory 334.528.2013)  
     273 In Patient Beds

28 Bassinets – Newborn & Infant  
38 Skilled Nursing Beds  
10 Hospice (Bethany House) beds  
36 Infusion Chairs (For blood, oncology, etc. infusions) at EAMC  
8 Infusion Chairs at Bethany House

Daycares (Chamber Websites & Phonebook):

ABC Child Development Center – Opelika  
Almost Angels – Auburn  
Auburn Christian Academy  
Auburn Daycare Centers (3)  
Auburn United Methodist Church - Auburn  
Bonnie’s Kids – Opelika  
Bright Futures – Auburn  
Child Development Center of Providence - Auburn  
Childcare Network – Opelika  
Creative Discovery Child Care Center - Auburn  
First Baptist of Auburn  
First Methodist Church of Opelika  
God’s Little Angels – Opelika  
Grace United Methodist Church – Auburn  
Greater Peace Child Development Center - Opelika  
Growing Room - Auburn  
Hardy’s Creative Childcare – Auburn  
Jacob’s Ladder – Auburn  
Joyland – Auburn  
Jump Start Learning Center – Opelika  
Kings Kids Child Care and Development Center - Opelika  
Learning Zone - Auburn  
Little Miss Muffets – Opelika  
Little Ones – Opelika  
Living Way Ministries – Opelika  
Miss Deanna’s – Opelika  
Primary Colors – Auburn  
Small World – Opelika  
Southside Church of Christ – Opelika  
The Little Tree Learning Center - Auburn  
Tiger Tots – Auburn  
University Daycare – Auburn  
Wee Care – Auburn

Hospitals:

East Alabama Medical Center – Opelika

Mental Health:

East Alabama Mental Health  
East Alabama Mental Health Residential Facilities (11 across the county)

Nursing Homes, Assisted Living Facilities, Senior Housing, Group Homes, Youth detention, specialty medical (Phonebook, LRCOG Aging Staff, EAMC Staff, etc):

Aids Outreach of E.A.M.C.  
Auburn Urgent Care (2 in Auburn – 1 in Opelika)  
Azalea Place - Auburn  
Cambridge Place – Opelika  
Camellia Place – Auburn

Arbor Suites and Rehab Center – Opelika  
Crooked Creek Apartments  
Domestic Violence Intervention Center – Opelika (Group Home address not disclosed – office in Opelika)  
Easehouse – Auburn  
East Alabama Medical Center skilled nursing ward – Opelika (38 beds)  
His Place – Men’s Home (20 + beds)  
J&M Manor Group Home - Opelika  
Lee County Youth Development Center - Opelika  
Living Southside Assisted - Opelika  
Magnolia Place – Auburn  
Monarch Estates – Auburn  
Morningside Assisted Living – Auburn  
Northridge Assisted Living – Opelika  
Oak Park Assisted Living – Auburn  
Pinehurst Villa Apartments – Opelika  
Rose Garden Apartments - Auburn  
Savannah Courts – Smiths Station  
Sav-A-Life / Women’s Hope Medical Clinic - Auburn  
Summer Brooke Apartments – Auburn  
Tall Oaks Apartments – Opelika  
Timothy Manor Apartments - Opelika  
Village at Lakeside – Auburn  
Village West - Auburn  
Oak Park of E.A.M.C.- Auburn

Hospice:

Bethany House – Auburn (10 Beds)

Senior Centers:

Opelika – Downtown Opelika  
Smiths Senior Center – Smiths Station  
Auburn Senior Center – Boykin Community Center  
Beulah Senior Center – Beulah

Senior Day Care Centers:

EASE – has 2  
EAMC – has 1

Kidney Dialysis Patients:

EAMC  
Dialysis Center - Opelika

Mental Health:

East Alabama Mental Health – Opelika  
East Alabama Medical Center Psychiatric Ward – Opelika

Detention Facilities:

Sheriff SW Jones Detention Center  
Lee County Youth Development Center (Some youth are in lockup)

Special Education Facilities:

Achievement Center (Easter Seals Division) – Opelika

Meals on Wheels / Homebound:



Lee County Meals on Wheels currently services 266 people with a continual list of people on the waiting list. These would be considered a LMI (Low Moderate Income) homebound population. It would probably be wise to use a multiplier of 2.5 on this number to include those who have not asked for services either because they are unaware that such a service exists or because they or their family have the available income to satisfy their needs.

### **Healthcare Providers**

East Alabama Medical Center – Opelika  
East Alabama Medical Center EMS (Emergency Medical Services)  
Lee County Health Department - Opelika  
East Alabama Mental Health - Opelika  
The Hughston Clinic – Auburn.  
The Pediatric Clinic – Opelika  
Harrelson Family Medicine – Auburn  
Auburn Urgent Care – Auburn (2) & Opelika (1)  
Auburn University Student Medical Clinic – Auburn University  
Heart Center Cardiology, P.C. – Opelika  
Internal Medicine Associates – Opelika  
Auburn Orthopaedic Clinic – Auburn  
The Orthopaedic Clinic – Opelika & Auburn  
Surgical Clinic, P.C. – Opelika  
East Alabama Women’s Clinic – Opelika  
Lee Obstetric’s & Gynecology – Auburn & Opelika  
East Alabama Cardiovascular Associates – Opelika  
East Alabama Family Practice – Auburn  
East Alabama Neurology – Opelika  
RehabWorks Physical Rehabilitation – Auburn & Opelika  
Hollis Eye Surgery Center – Auburn  
Aids Outreach of E.A.M.C.

#### EMS Services:

Through EAMC  
9 fully equipped ambulances  
Responding from three locations  
80 Paramedics

#### East Alabama Medical Center:

135+ Physicians on staff  
Nurses  
Therapists  
Radiation / Clinical Technicians  
LPN’s  
Administrative  
Etc.

# APPENDIX D

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN



**LEE COUNTY NATURAL HAZARDS MITIGATION  
PROJECT LISTINGS – Appendix D**

<b>Buyout Locations</b>	<b>Municipality</b>	<b>Address</b>
Grady Carroll's House	City of Opelika	1909 Jollet Avenue
Other sites to be added at Lee County EMA or municipality discretion.		

<b>HAM Radio Locations</b>	<b>Municipality</b>	<b>Address</b>
Red Cross Headquarters	City of Opelika	206 26th Street
Red Cross Shelters (7)	City of Opelika, City of Auburn, Smiths Station & Lee County	
East Alabama Medical Center	City of Opelika	2000 Pepperell Parkway
Lee County EMA	City of Opelika	908 Avenue B
Public Service Agencies (12)	City of Opelika, City of Auburn, Smiths Station & Lee County	
Other sites to be added at Lee County EMA or municipality discretion.		

<b>Siren Locations</b>	<b>Municipality</b>	<b>Address</b>
<b>Kiesel Park</b>	City of Auburn	Chadwick Lane Road
Hamilton Road	City of Auburn	Bent Creek Road
Southwest VFD	City of Auburn	Wire Road
Grand National Golf Course	City of Opelika	3000 block of Sunbelt Parkway
West Point Parkway	City of	Highway 29N at Andrews Road

	Opelika	
Lafayette Parkway	City of Opelika	West Point Parkway at Southern Union Comm. College
Lee Road 201	Lee County	Collier Road
Lee Road 941	Lee County	Lee Road 561
Lee Road 340	Lee County	Lee Road 743 @ Bartlett's Ferry Road Intersection
Lee Road 279	Lee County	Murphys Road
Highway 280	Lee County	Mott's Road
Landmark Subdivision	Smiths Station	600 block of Lee Road 454
Lee Road 248	Smiths Station	St. Andrews Way
Other sites to be added at Lee County EMA or municipality discretion.		

<b>Generator Locations</b>	<b>Municipality</b>	<b>Address</b>
Sewer Lift Stations (6) Community Shelters (2)	City of Opelika City of Opelika	City of Opelika City of Opelika
Back-up Generators to support Northside Sanitary Sewer Project	City of Auburn	City of Auburn
Back-up Generators to support Sanitary Lift Stations	City of Auburn	City of Auburn
Other sites to be added at Lee County EMA or municipality discretion.		

<b>Safe Room Locations</b>	<b>Municipality</b>	<b>Address</b>
Open Waiting list maintained at Lee Co EMA		

<b>Dredging, Drainage &amp; Water Projects</b>	<b>Municipality</b>	<b>Body of Water</b>	<b>Issue</b>	
Construct Retention Pond	City of Opelika	NW of tennis complex towards McClure Ave.	Help with water flow / drainage issues	
Cook St Detention Pond	City of Auburn		Drainage Issues	<b>COMPLETE</b>
Country Circle	City of Auburn		Drainage Issues	<b>COMPLETE</b>
Create Stomacher Retention Basins	City of Opelika	EAMC Complex	Repetitive Flooding / EMS Access to and from hospital	
Dam rebuild & Storage Capacity Improvements	City of Opelika	Rocky Brook Road & Lake Forest Estates	Repetitive Flooding & Road disintegration	
Drain and Repair Lake	City of Opelika	West Ridge Lake adjacent to baseball complex	Repetitive Flooding / Water drainage issues	
Drainage Study	City of Auburn		Drainage Issues	<b>COMPLETE</b>
Dredge & Repair along with storage capacity improvements	City of Opelika	Jackson's Lake	Silt Buildup	
Dredge drainage way	City of Opelika	Apartments by EAMC / drainage way	Repetitive Flooding / Water drainage issues	
East University Dr/Green Street	City of Auburn		Drainage Issues	<b>Open</b>
Magnolia Ave. Drainage	City of Auburn		Drainage Issues	<b>Open</b>
North of EAMC - Build Retention Pond 7 Drainage Channel Improvements	City of Opelika	Pepperell Creek Parkway	Repetitive Flooding	
Opelika Rd @ Guthrie's	City of Auburn		Drainage Issues	<b>OPEN</b>
Other sites to be added at Lee County EMA or municipality discretion.				
South Donahue Street (Red Oak)	City of Auburn		Drainage Issues	<b>COMPLETE</b>
W. Glenn @ Toomer Street	City of Auburn		Drainage Issues	<b>COMPLETE</b>

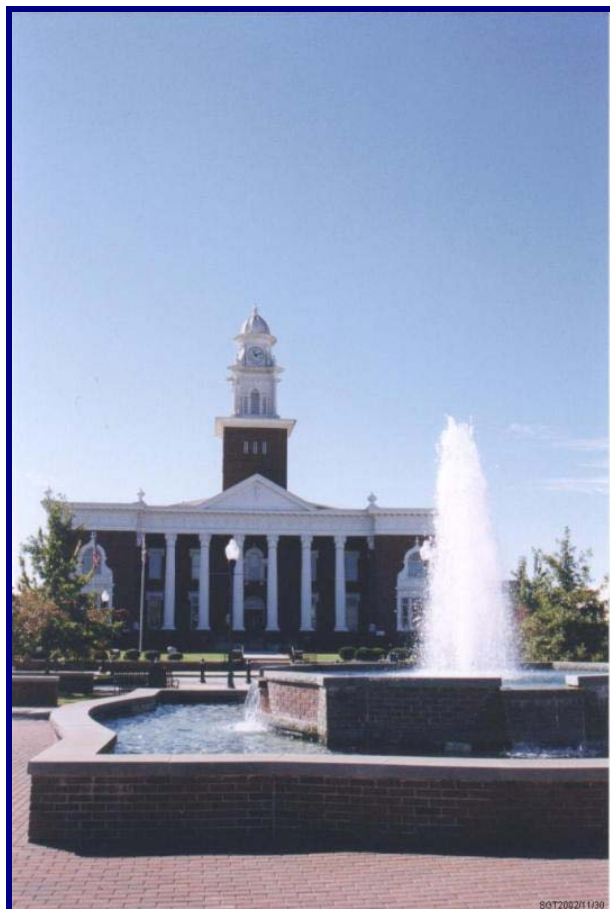
<b>Bridge Project</b>	<b>Municipality</b>
Bridge Replacement of bridge on Saughatachee Lake Road	City of Opelika
Wire Road Bridge Placement	City of Auburn
Bent Creek @ Moores Mill Creek	City of Auburn
WMR @ Town Creek-culvert	City of Auburn
Samford @ Brookwood Dr- culvert	City of Auburn
Heard @ Town Creek - Culvert	City of Auburn
N Donahue: Bridge to Farmville	City of Auburn
Other sites to be added at Lee County EMA or municipality discretion.	

# APPENDIX E

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN



**COMPREHENSIVE  
ECONOMIC DEVELOPMENT STRATEGY  
UPDATE  
LEE AND RUSSELL COUNTIES  
SEPTEMBER 2008**

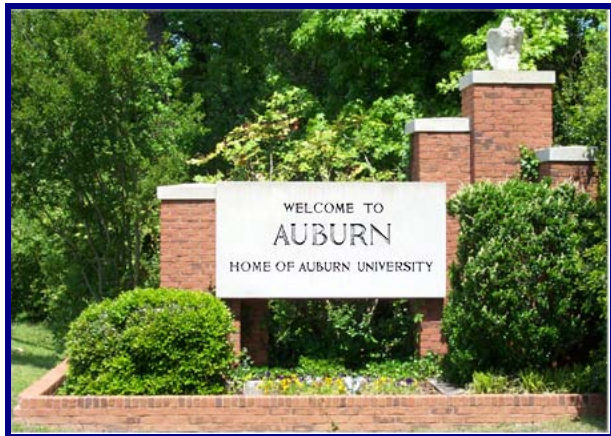


**Prepared By:  
Lee-Russell Council of Governments  
2207 Gateway Drive  
Opelika, Alabama 36801  
334-749-5264**



**REGIONAL VISION STATEMENT:**

“To promote and maintain a healthy environment for growth and development in Lee and Russell Counties.”



## **ORGANIZING AND STAFFING FOR ECONOMIC DEVELOPMENT**

The Comprehensive Economic Development Strategy (CEDS) serves as a framework for future economic development activities in Lee and Russell counties that will help create jobs, foster a more stable and diversified economy and improve the quality of life in the region. Regional planning provides an opportunity to take a broader planning perspective and focus on issues that may be beyond the abilities of individual local governments to address.

In preparing this annual CEDS Update, planning staff at Lee-Russell Council of Governments utilized the expertise of planners at Auburn University, Fort Benning, the cities of Auburn, Opelika and Phenix City and Lee and Russell County. Strategic plans from member governments were reviewed.

Additionally, updated information from the Alabama Department of Economic and Community Affairs, Alabama Department of Education, Alabama Rural Action Commission, Alabama State Data Center, US Department of Commerce and US Department of Labor was examined.

Information was also gathered through the development of the Regional Growth Management Plan, and through meetings of the Lee and Russell County Rural Planning Organization, Lee County Metropolitan Planning Organization, Joint Land Use Planning Committee and United We Ride Coordinated Human Service Transportation Project.

Lee Russell Council of Governments is not an Economic Development District (EDA) but prepares and updates CEDS according to EDA guidelines in the event that one of our member governments wishes to apply for future EDA funding.

## **WHERE ARE WE NOW? A REGIONAL PROFILE**

### **Location**

Region 10 is comprised of 2 counties, Lee and Russell, located in East Central Alabama, along the Chattahoochee River. The land area is 1,250 square miles. In 2000, the population density per square mile in Lee County was 189. In Russell County it was 77.6.

At the region's eastern border is the State of Georgia. To the north, south and west of the region are the Alabama counties of Chambers, Tallapoosa, Macon, Bullock and Barbour. The region is along and near Interstate 85 and Interstate Spur 185 which provide easy access and proximity to Atlanta, and Montgomery. This location is seen as a continuing source of opportunity for both Lee and Russell Counties.

### **Geography, Environment, and Natural Resource Characteristics**

The terrain in the northern portion of the region is Piedmont Plateau characterized by hilly topography with gentle to steep slopes. The terrain for the southern portion is Coastal Plain which is level to gently rolling. Types of soil follow the same line across the region as does terrain with rocky, clay soil to the north and sandy soil to the south.

Many large creek systems form watersheds in the region. The western areas are drained by the Saugahatchee and Chewacla creeks as they flow to the Tallapoosa River. The creeks in the eastern areas, Little Uchee, Halawakee, and Wacoochee, flow to the Chattahoochee River.

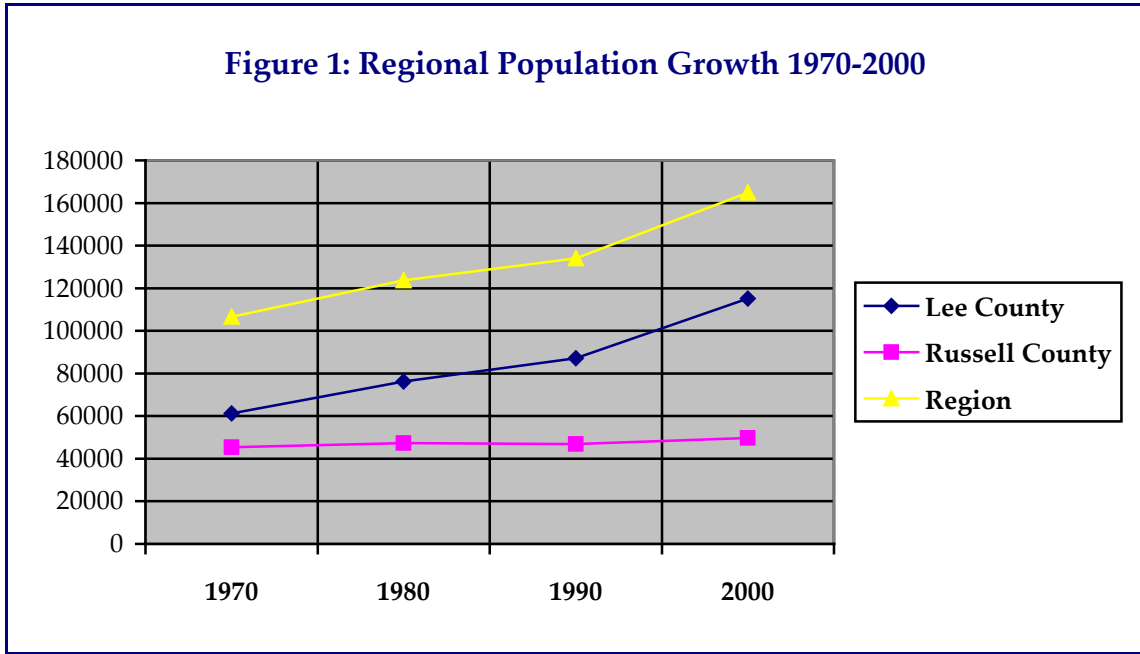
The climate is characterized by short, mild winters and long, moderately warm summers. The growing season is 230 to 240 days long. The annual mean temperature is near 65 degrees. The region rises from 250 feet above sea level in Russell County to approximately 700 feet above sea level in Lee County. The average annual precipitation is about 55 inches.

The natural resources of the region include water, forestry, clays, and sand and gravel. The network of creeks, the many lakes, and the Chattahoochee River make the area desirable for both industry and tourism.

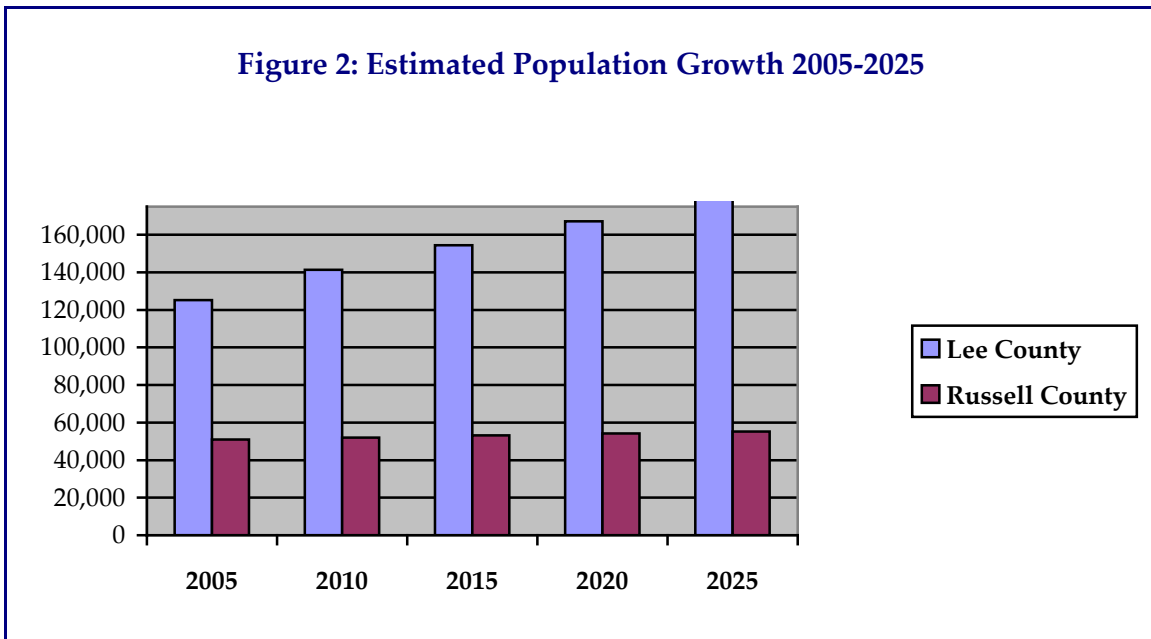
### **Population**

Lee County has been among the fastest growing counties in Alabama for many years. Russell County's rate of growth has been much slower. Back in 1970, fifty-seven percent of the region's population resided in Lee County. Thirty years later, seventy percent of the region's population resides in Lee County. From 1990 to 2000, Lee County experienced a 32% increase in population. During the same time period, Russell County's population growth was 6.18%.

Estimates for future growth are based on past growth. The Alabama State Data Center projects that by 2025 the population of Lee County will be nearly 180,000 and the population of Russell County will be 55,000.



Source: US Census



Source: Alabama State Data Center

### **Lee County Population Data**

According to the Alabama State Data Center, in 2007 the population of Lee County was estimated to be 130,516. Lee County ranks as the 8<sup>th</sup> most populous county in Alabama. Between 1990 and 2000, the population of Lee County increased by 32.1%. Over the next 10 years the rate of growth is projected to be 19%. By 2010, the population in Lee County is projected to reach 141,303. By 2015, the population is projected at 154,474. By 2025 the population should be nearly 180,000. Migration data from 2000-2006 shows a gain in Lee County of 10,689 due to in-migration and natural increases.

The major population areas of Lee County are in the cities of Auburn, Opelika and Smith's Station. Sixty-seven percent of the counties' population resides in these 3 cities. Thirty-three percent reside in the rural and/or unincorporated areas of the county. The population change between 2000 and 2007 for the City of Auburn ranked third among places in Alabama. Auburn gained 9,577 citizens. The County Seat, Opelika, gained 1,442 citizens and ranked thirtieth among Alabama places.

### **Russell County Population Data**

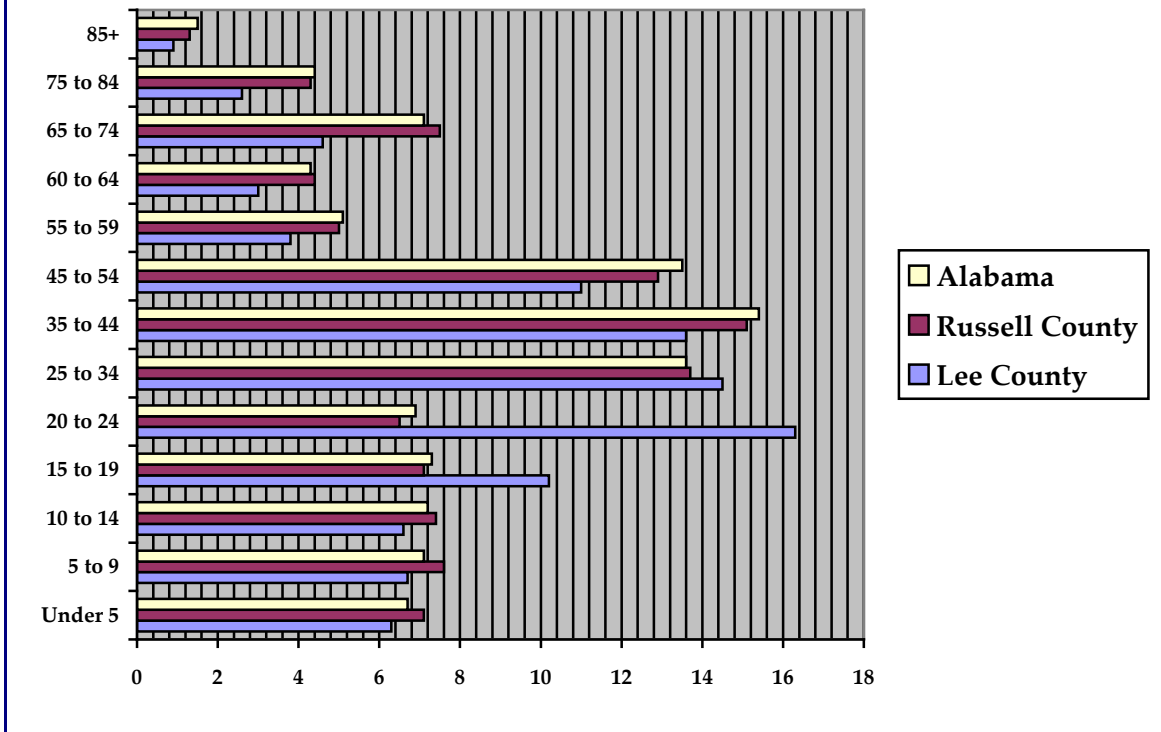
The 2007 population of Russell County was estimated to be 50,183. Russell County is the 25<sup>th</sup> most populous county in Alabama. Between 1990 and 2000, the population of Russell County increased by 6.2 %. Population growth between 2000 and 2010 is projected to climb 4.5%. By 2010, the population is expected to reach 52,066. In 2015 the population is projected to be 53,147. By 2025 the population of Russell County will exceed 55,000. (See Table 1) Migration data from 2000-2006 shows a gain of 329 in Russell County despite out-migration due to natural increases.

The major population areas of Russell County are in the northeastern area of the county, in and adjacent to the county seat, Phenix City. Sixty-four percent of the counties' population is located in this urban and suburban area of the county. The remaining 36% live in the more rural areas of the county. The City of Phenix City gained 2,227 citizens between 2000 and 2007, ranking twenty-fourth among places in Alabama.

### **Age Distribution**

Age distribution can be an indicator of a county with an increasing or declining population. In 2006, the median age in Lee County is estimated at 29.2. In Russell County the median age is significantly higher at 37.4. Age distribution within the region shows the highest percentage of the population (29%) falls into the 25-44 age range. Twenty-one percent of the population is between the ages of 45 and 64. The large student population of Auburn University has a significant effect on the 21% of the region's population between the ages of 15 and 24.

**Figure 3: Age Distribution**



Source: US Census

### Senior Citizens as a Percentage of the Population

In 2006, the US Census Bureau estimated there were 10,746 individuals over the age of 65 in Lee County and 6,541 individuals over the age of 65 in Russell County. Portions of the region, especially the cities of Auburn and Opelika, are increasingly seen as desirable locations for retirement. Projections from the Alabama State Data center show the elderly population of Lee County growing to 22,418 by 2025. The elderly population in Russell County is expected to increase to 9,135.

### Expected Impacts of Growth at Fort Benning and Expansion of Automotive Industry

Population growth estimates and projections from the Census Bureau and Alabama State Data Center are based on past growth. Since the 2000 Census, two important economic development situations have arisen in the region that could potentially affect population growth.

The I-85 corridor has become a hot spot for the location of automobile manufacturers and tier one automotive suppliers. Hyundai is located in Montgomery, Alabama, 50 miles west of the region. KIA is constructing a massive automotive plant in West Point, GA, 25 miles northeast of the region. KIA is expected to bring 2,500 new jobs to Georgia

and Alabama. The automotive suppliers are expected to bring in an additional 3,000 jobs.

Fort Benning, located in west Georgia and east Alabama, will be profoundly impacted by BRAC realignment. The projected population growth, of military personnel, DoD civilian and contract company personnel and their families assigned to Fort Benning will total nearly 30,000 when BRAC implementation is complete. Seventy-five percent of the population growth associated with BRAC is expected to occur in Muscogee County, Georgia. The other 25% will be spread across adjacent counties in Georgia and Alabama.

Lee and Russell Counties in East Central Alabama are adjacent to Muscogee County Georgia and Fort Benning. Statistics from Fort Benning tell us that historically 8% of military personnel live off post in Alabama and 19% of the civilian workers at Fort Benning reside in Alabama. Applying historical data to the projected BRAC growth statistics reveals that Lee and Russell Counties could reasonably expect growth of 1,030 family units between 2009 and 2011.

**Education**

Education is an important factor in both preparing a skilled workforce and attracting and retaining business and industry to the region. Education is considered an area of strength for both Lee and Russell Counties.

There are 3 public school systems in Lee County: Lee County, Auburn City and Opelika City. All 3 public school systems located in Lee County met No Child Left Behind Annual Yearly Progress (AYP) requirements in 2007. Access to technology, student attendance, percentage of highly qualified teachers, teachers with advanced degrees and fiscal management in these systems were well above state averages.

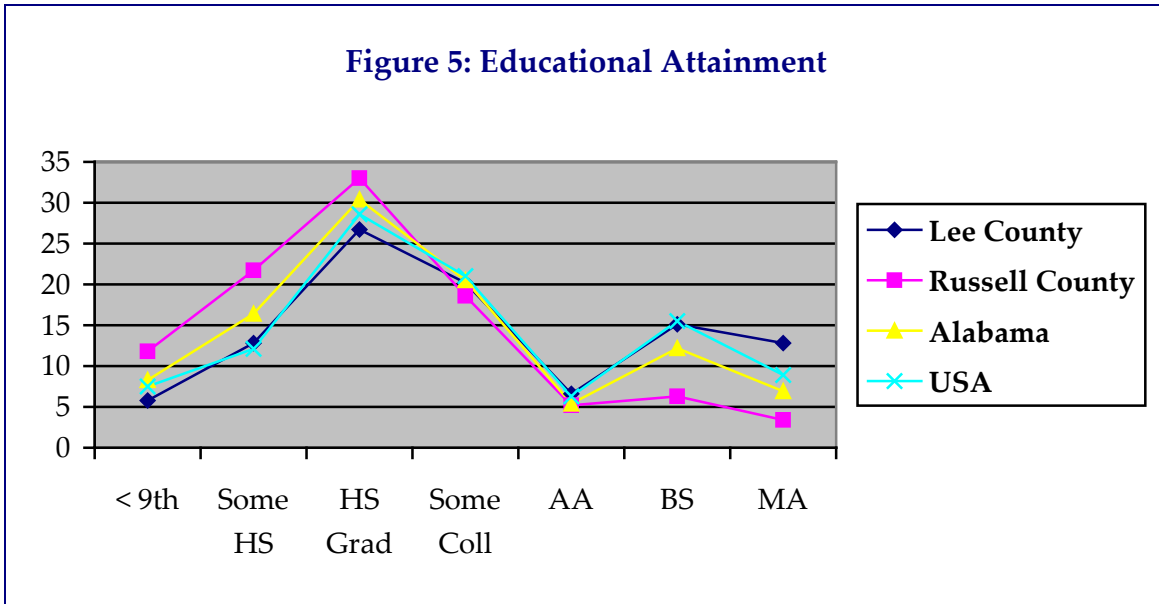
There are 2 public school systems in Russell County: Phenix City and Russell County. Both systems attained their AYP goals in 2007. This was a significant improvement for the Phenix City Schools which had been placed on School Improvement Status in 2005.

**Figure 4: Public School Graduation Rate and Dropout Rate**

School System	2008 Graduation Rate %	4 Year Projected Drop-Out Rate %
Auburn City	92%	1.88%
Lee County	88%	1.20%
Opelika City	78%	13.80%
Phenix City	91%	2.68%
Russell County	73%	17.79%

*Source: Alabama Department of Education*

The educational attainment of the region’s citizens mirrors national trends with the highest percentage of residents reporting having a high school diploma or equivalent. Russell County has a higher than expected percentage of residents reporting less than 9 years of schooling (11.8%) and attending high school without receiving a diploma (21.7%). Lee County’s percentage of citizens with a graduate or doctorate degree (12.8%) is well above national averages.



Source: US Census

**INFRASTRUCTURE**

In both Lee and Russell Counties, water and sewer services have been sited as areas of weakness for many years. An expanding population and rising construction costs have made these long standing weaknesses critical issues in the region.

**Water**

Water service in Lee County is presently provided by two municipal public water systems and four (4) rural public water authorities. The two city systems, Auburn City Water Works and the Opelika Water Board, serve approximately 57% of the county’s total population. The remaining water systems of Lee County include the Beauregard Water System, Lee-Chambers Utilities District, Loachapoka Water Authority, and Smiths Station Water System. The water systems collectively serve approximately 107,035 persons, leaving 8,056 persons or 7% in Lee County unserved by a public organized system.



Russell County has four organized water systems in the county that serve 85% of the occupied households in the area. These water systems include Russell County Water Authority, Fort Mitchell Water System, Phenix City Utilities, and Hurtsboro Water and Sewer Board. These systems serve approximately 14,874 residential customers throughout the County. The combined water supply capacity from these four organized water systems is approximately 18 million gallons per day. Approximately 15% of the residents in Russell County do not have access to the public water system and must rely on private wells for water.

### **Sewer**

Sewer services continue to be seen as an area concern throughout the region. Approximately 32% of households do not have access to sewer systems.

Public sewer service is available to 60%, or 27,621, of the households in Lee County, only in the Auburn and Opelika incorporated areas. Public sewer service is not available to the 18,081 households, in the unincorporated areas of Lee County.

Nearly one-half (47%) of the households in Russell County do not have access to public sanitary sewer service. These areas include Ladonia, Seale, Pittsview and Cottonton. Only Phenix City and Hurtsboro, with 9,350 residential customers, are served by a public sewer system while the remaining county residents must rely on other means of sewage disposal.

Russell County is currently experiencing a large amount of residential growth in the Fort Mitchell area of the county. Fort Mitchell is close to the back gate of Fort Benning and is projected to continue to be a high impact growth area. There is no sewer service in this part of the County. The cost of providing sewer to the area is prohibitive. Developers are building homes with septic tanks.

### **Transportation**

The region is bisected by Interstate 85 and lies midway between the capital cities of both Alabama and Georgia. Atlanta, Georgia is one hour northeast. Montgomery, Alabama is 45 minutes to the west. The region is also convenient to Birmingham, the largest metropolitan area in Alabama, which is located 90 minutes northwest via state Hwy 280. There are 984 miles of paved roads and 424 miles of unpaved roads in the region. Maintenance of unpaved roads is a concern for both county commissions. Both counties are also concerned with bridge maintenance.

The Robert J. Pitts airport in Auburn provides services to private planes and corporate jets. A new terminal is planned for Robert J. Pitts. The Columbus Metropolitan Airport has daily connector flights to Atlanta's Hartsfield-Jackson Airport. Rail freight service is provided by the Norfolk Southern and Seaboard Railroads.

Public transportation is seen as an area of weakness for the region. Public transportation is provided by 2 public transit systems, Lee-Russell Public Transit (LRPT) and Phenix

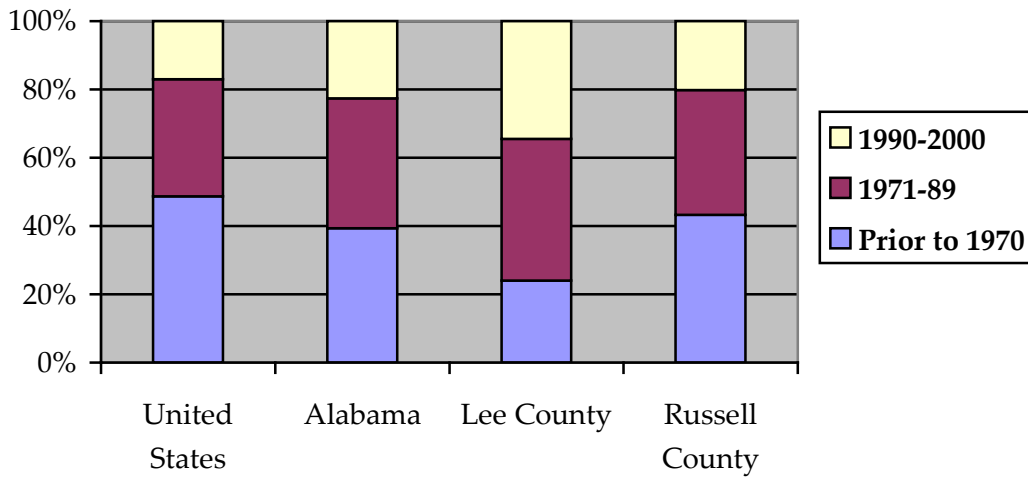
City Express (PEX), Auburn University operated Tiger Transit, taxi services, and a variety of not-for-profit agencies that shuttle their clients to and from their homes to appointments. Transportation is difficult or impossible to access in the highly populated urban areas of the region at night or on the week-ends. In rural areas of the region, demand-response services are available only on certain days of the week and require riders to wait as long as 2 hours for return trips.

**Housing**

Housing is a basic necessity of life. An adequate supply of affordable housing available for rent or purchase is necessary to attract and retain business.

The age of the housing stock in the region compares favorably to the age of housing stock across the country. Both Lee and Russell counties have a lower percentage of houses built prior to 1970 than the national percentage of 48.7%. Additionally, 20.2% of the housing in Russell County and 34.5% of the housing in Lee County has been built since 1990.

**Age of Housing Stock: Year Built**



In recent years the availability of affordable housing has been an area of concern for Lee County. The median price of single family homes in 2000 was \$115,989. By the fourth quarter of 2007, the median price had risen to \$185,400.

Housing has typically been more affordable in Russell County. Prices there also rose dramatically between 2000 and 2007. In 2000, the median price for a single family home in Phenix City was \$88,350. In the fourth quarter of 2007, the median price was \$142,872.

The housing downturn has impacted both house values and housing sales in Lee and Russell Counties during 2008. In Lee County year to date housing sales for 2008 were

down 16.14% over 2007 figures and the median sales price had dropped 3% to \$168,605. In Russell County housing sales declined 21.23% over 2007. However, the median sales price had actually increased 1.29% to \$143,904.

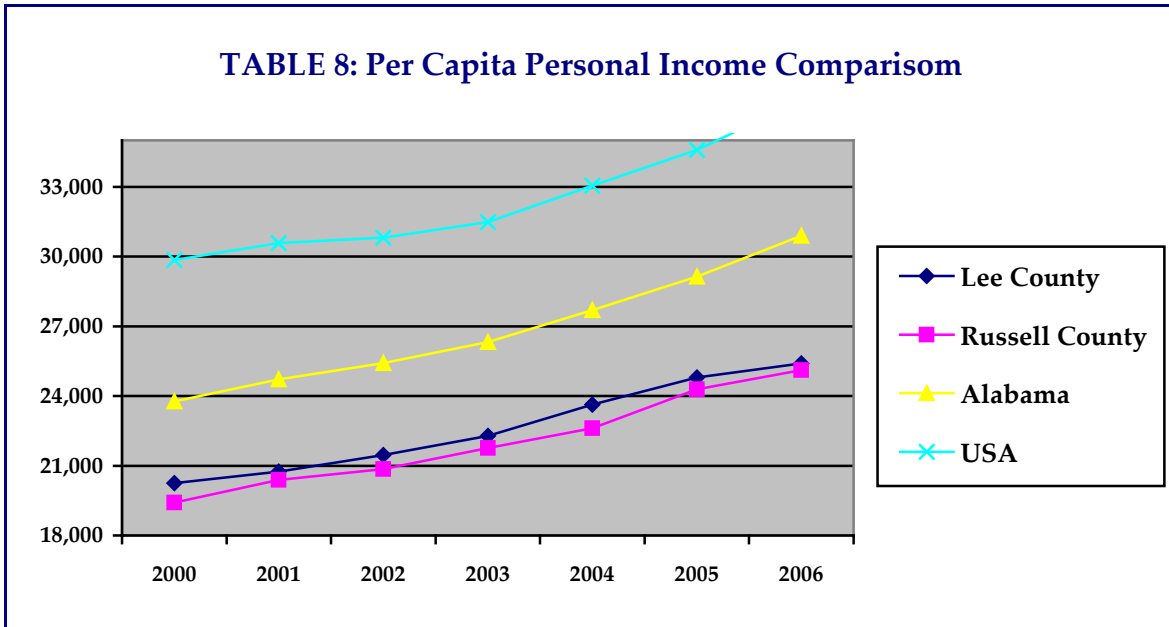
Lee County has a small number of subsidized housing units available to meet the needs of low income individuals. In 2006, 537 units were located at the Opelika Housing Authority, with 9 vacant units. Opelika has 480 Section 8 Vouchers. In the City of Auburn, the Auburn Housing Authority has 322 units, with only two vacant units.

To meet the needs of low income individuals, the Phenix City Housing Authority has 926 units in seven complexes. There are currently 236 vacant units; however, 96 of these are unavailable due to renovations in progress.

## ECONOMIC CHARACTERISTICS

### Per Capita Income

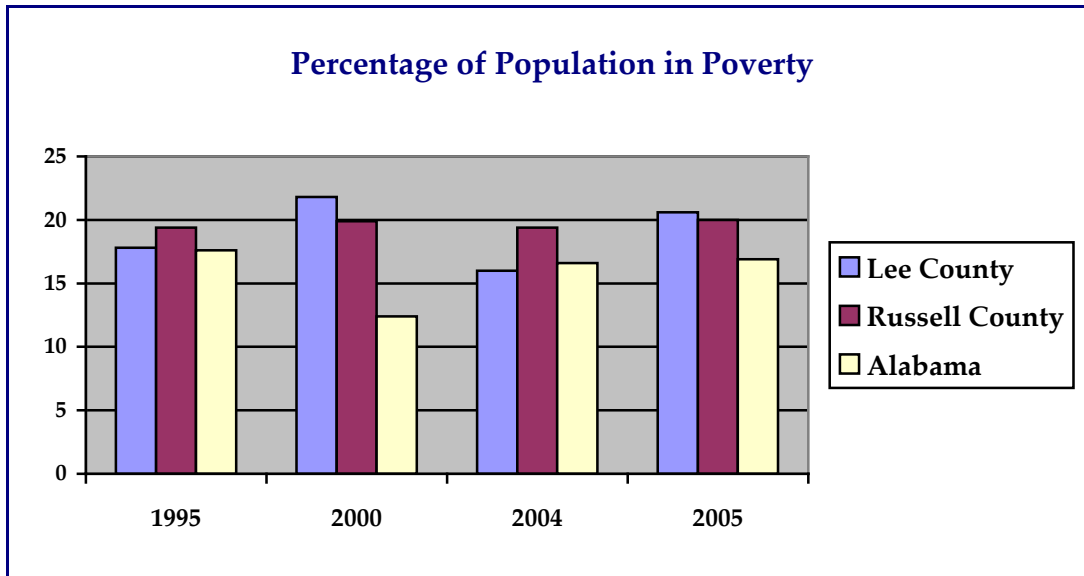
Per capita personal income continues to rise in the region but it also continues to remain below both the state and national per capita income averages. In Lee County, the 2006 per capita income was \$25,399. In Russell County 2006 per capita income was \$25,122. These numbers are respectively 82% and 81% of the Alabama state average \$30,894.



Source: US Department of Commerce, Bureau of Economic Analysis, 2007

### Percent of Population Below Poverty

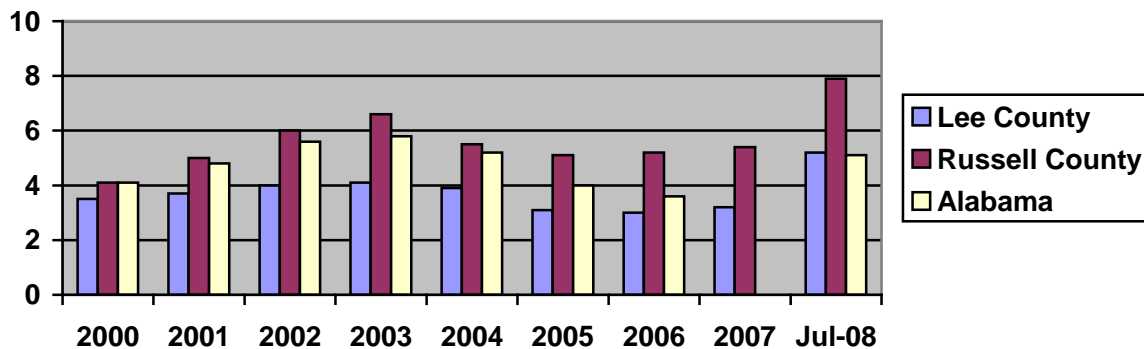
According to the US Census Bureau, 20.6% of the population in Lee County and 20% of the population in Russell County live in poverty. Statewide, 16.9 percent of Alabama citizens live in poverty.



### Employment

According to the Bureau of Economic Analysis, the regional labor force in July, 2008 was 86,758. Unemployment rates in Lee County were up substantially from the 3.5 rate of July of 2007 but were still among the lowest in the state at 5.2. Russell County's unemployment rate has been above the Alabama state average since 2001. In July of 2008 the unemployment rate in Russell County was reported at 7.9. The Russell County unemployment rate in July, 2007 was 6.3. (See Table 9 for annual rates)

**TABLE 9: Annual Unemployment Rates**



Source: US Department of Labor, Bureau of Labor Statistics, 2008

Total employment in Lee County increased by 12,100 between 2001 and 2006. The majority of job growth occurred in the transportation and warehousing, manufacturing, and local government sectors. The only sector that showed any decline in jobs in Lee County between 2001 and 2006 was Utilities and this reduction only involved 7 jobs. Between 2005 and 2006, manufacturing declined by 514 jobs but still accounted for 1,477 more jobs than in 2001.

In Russell County total employment of 17,192 in 2006 was still lagging slightly behind total employment levels of 17,440 in 2001. However Russell County continues to experience a slow but steady rebound in job growth. Non-farm proprietor's employment was up 643 over 2001 levels. Food Service and accommodation was up 280 and retail was up 203. The biggest declines in Russell County jobs since 2001 have been in manufacturing, which has slipped from 3,708 jobs to 2,488 jobs.

Tables 10 and 11 detail employment by industry trends in Lee and Russell Counties from 2001 to 2005. Table 12 shows combined regional employment trends for the same time period.

The largest employers in Lee County remain Auburn University and East Alabama Medical Center. However, 2 traditionally large Lee County employers, Uniroyal Goodrich, and West Point Stevens have fallen on hard times. Uniroyal Goodrich has reduced operations. West Point Stevens has closed all operations in Lee County.

In Russell County, the largest employers are the Phenix City Board of Education, and Mead Westvaco Coated Board. Russell County is beginning to recover from the loss of several manufacturing companies in 2003-2004. McLendon Trailers has moved to Russell County and AlaTrade, a chicken processing plant has also located in Russell County.

Both Lee and Russell County are actively pursuing automotive manufacturing firms associated with the new KIA plant currently under construction in west central Georgia. It is hoped that these firms will balance the loss of textile manufacturing the region has experienced.

**TABLE 10: Lee County Full and Part Time Employment by Industry**

ITEM	2001	2002	2003	2004	2005	2006
Total Employment	54,545	56,530	57,648	60,653	63,249	66,646
Wage and Salary Employment	46,047	47,830	48,575	51,210	53,060	55,073
Proprietors Employment (2)	8,498	8,700	9,073	9,443	10,189	11,573
Farm	374	372	363	355	353	348
Non Farm	8,124	8,328	8,710	9,088	9,836	11,225
Farm Employment	551	566	541	556	514	534
Non Farm Employment	53,994	55,964	57,107	60,097	62,735	66,112
Private Employment	40,570	41,784	42,267	44,473	46,818	50,099
Forestry, fishing	153	183	165	D	172	195
Mining	71	58	64	D	75	92
Utilities	172	186	190	182	160	165
Construction	3,482	3,401	3,311	3,575	3,775	4,218
Manufacturing	6,147	6,224	6,665	6,879	7,112	7,624
Wholesale trade	1,006	1,117	1,010	1,114	1,213	1,424
Retail trade	6,966	7,054	6,497	6,818	7,137	7,113
Transportation, warehousing	953	979	1,547	1,633	1,816	2,041
Information	621	627	631	632	663	711
Finance, insurance	1,272	1,282	1,251	1,240	1,273	1,425
Real estate, rental, leasing	1,803	1,725	1,782	1,898	2,088	2,152
Professional/technical services	D	D	D	2,223	2,471	2,743
Management	D	D	D	199	236	239
Administrative, waste services	3,247	3,849	3,704	4,025	4,235	4,511
Educational services	567	625	656	711	808	897
Health care, social assistance	3,328	3,393	3,398	3,296	3,420	3,663
Arts, entertainment, recreation	849	878	822	835	890	1,079
Accommodation, food service	4,790	4,883	5,180	5,586	5,693	5,935
Other services	3,170	3,300	3,290	3,411	3,581	3,872
Government and government enterprises	13,424	14,180	14,840	15,624	15,917	16,013
Federal, civilian	339	337	337	343	350	338
Military	750	728	726	827	797	832
State, local	12,335	13,115	13,777	14,454	14,770	14,843
State government	6,254	6,748	7,080	7,372	7,493	7,491
Local government	6,081	6,367	6,697	7,082	7,277	7,352

Source: US Department of Commerce, Bureau of Economic Analysis, 2008

(2)= Excludes limited partners

D= Not shown to avoid disclosure of confidential information, but estimates of this item are included in the totals

**TABLE 11: Russell County Full and Part Time Employment by Industry**

ITEM	2001	2002	2003	2004	2005	2006
Total Employment	17,440	16,206	15,997	16,768	16,911	17,192
Wage and Salary Employment	15,024	13,616	13,320	13,998	13,973	14,152
Proprietors Employment (2)	2,416	2,590	2,677	2,770	2,938	3,040
Farm	279	277	270	265	264	260
Non Farm	2,137	2,313	2,407	2,505	2,674	2,780
Farm Employment	326	328	317	318	307	309
Non Farm Employment	17,114	15,878	15,680	16,450	16,605	16,883
Private Employment	14,232	13,014	12,758	13,436	13,486	13,754
Forestry, fishing	D	D	D	D	D	D
Mining	D	D	D	D	D	D
Utilities	93	89	87	88	74	67
Construction	1,792	1,293	1,269	1,571	1,459	1,484
Manufacturing	3,708	3,059	2,791	2,817	2,683	2,488
Wholesale trade	162	189	241	224	214	213
Retail trade	2,316	2,270	2,298	2,366	2,447	2,519
Transportation, warehousing	314	308	339	351	360	371
Information	143	118	122	122	129	130
Finance, insurance	413	439	478	493	503	522
Real estate, rental, leasing	354	385	407	455	479	528
Professional/technical services	319	362	363	381	404	375
Management	12	42	D	20	37	50
Administrative, waste services	454	446	D	458	510	500
Educational services	40	45	45	D	D	D
Health care, social assistance	1,394	1,143	1,077	D	D	D
Arts, entertainment, recreation	155	137	127	144	155	149
Accommodation, food service	1,165	1,211	1,289	1,336	1,384	1,445
Other services	1,157	1,239	1,218	1,247	1,274	1,301
Government and government enterprises	2,882	2,864	2,922	3,014	3,118	3,129
Federal, civilian	97	90	87	92	99	96
Military	286	279	273	310	288	290
State, local	2,499	2,495	2,562	2,612	2,731	2,743
State government	464	515	538	578	653	663
Local government	2,035	1,980	2,024	2,034	2,078	2,080

Source: US Department of Commerce, Bureau of Economic Analysis, 2008

(2)= Excludes limited partners

D= Not shown to avoid disclosure of confidential information, but estimates of this item are included in the totals



**TABLE 12: Regional Total Full and Part Time Employment By Industry**

ITEM	2001	2002	2003	2004	2005	2006
Total Employment	71,985	72,733	73,645	77,421	80,160	83,838
Wage and Salary Employment	10,914	11,290	11,750	12,213	67,033	69,225
Proprietors Employment (2)	10,914	11,290	11,750	12,213	13,127	14,613
Farm	653	649	633	620	617	608
Non Farm	10,261	10,641	11,117	11,593	12,510	14,005
Farm Employment	877	894	858	874	821	843
Non Farm Employment	71,108	71,842	72,787	76,547	79,340	82,995
Private Employment	54,802	54,798	55,025	57,909	60,307	66,892
Forestry, fishing	153	183	165	D	172 D	195/D
Mining	71	58	64	D	75 D	92/D
Utilities	265	275	277	270	234	232
Construction	5,274	4,694	4,575	5,146	5,234	5,702
Manufacturing	9,855	9,283	9,456	9,696	9,795	10,112
Wholesale trade	1,168	1,306	1,251	1,338	1,427	1,637
Retail trade	9,285	9,326	8,794	9,184	9,584	9,632
Transportation, warehousing	1,267	1,287	1,886	1,984	2,176	2,412
Information	764	745	753	754	792	841
Finance, insurance	1,685	1,721	1,729	1,733	1,776	1,947
Real estate, rental, leasing	2,157	2,110	2,189	2,353	2,567	2,680
Professional/technical services	319	362	363	2,604	2,875	3,118
Management	12	42	D	219	273	289
Administrative, waste services	3,701	4,295	3,704	4,483	4,745	5,011
Educational services	607	670	701	711	808 D	897/D
Health care, social assistance	4,722	4,536	4,475	3,296	3,420	3,663/D
Arts, entertainment, recreation	1,004	1,015	949	979	1,045	1,228
Accommodation, food service	5,955	6,094	6,469	6,922	7,077	7,380
Other services	4,327	4,539	4,508	4,658	4,855	5,173
Government and government enterprises	16,306	17,044	17,762	18,638	19,035	19,142
Federal, civilian	436	427	424	435	449	434
Military	1,036	1,007	999	1,137	1,085	1,122
State, local	14,834	15,610	16,339	17,066	17,501	17,586
State government	6,718	7,263	7,618	7,950	8,146	8,154
Local government	8,116	8,347	8,721	9,116	9,355	9,432

Source: US Department of Commerce, Bureau of Economic Analysis, 2008

(2)= Excludes limited partners

D= Not shown to avoid disclosure of confidential information, but estimates of this item are included in the totals

### **Economic Development**

Both Lee and Russell County have strong leadership in economic development from elected officials, economic development departments, active Chambers of Commerce and Auburn University. In the Lee County public forum regional consolidation of efforts in economic development was listed as an opportunity for the region.

Auburn, Opelika and Lee County all have strategic plans which include economic development as priorities. Economic Development Departments actively recruit industrial and commercial businesses to the region offering incentives, tax abatement and assistance with grants, licenses and permits.

In Russell County the County Commission works in collaboration with the Phenix City-Russell County Chamber of Commerce to attract industry to the region. The City of Phenix City has its own Economic Development Department.

There are a total of 8 industrial and technical parks in Lee County. Four are located in Opelika and 4 are located in Auburn. Two industrial parks are located in Russell County, both in Phenix City. The City of Auburn is working in collaboration with Auburn University to develop a Research Park on the university campus.

### **Workforce Development**

There are several training and education programs in the region to assist in the development of a skilled workforce. The Alabama Technology Network (ATN), Alabama Industrial Development Training (AIDT), Columbus Technical College, and Industry Training Center of Southern Union Community College provide instruction in a variety of technical fields. AIDT also contracts with employers to recruit and train individuals to meet the employer's job needs. However, the availability of a skilled workforce was identified as an area of weakness in the region.

The Base Realignment and Closure (BRAC) impacts on Fort Benning and the new KIA plant will likely bring several new industries to the region. These industries will have new skill set requirements for employees that must be met. Existing industries in the region now face global competition and need increased workforce productivity to remain in business. The baby boom generation is nearing retirement and will significantly impact workforce size and availability as they begin to leave the workforce. All of these factors are causing concern at both a regional and statewide level.

There is real apprehension that the local skilled labor force will not be sufficient to fill the needs of both existing and new employers. Consequently, the region has embarked on the creation of an integrated workforce development plan in collaboration with the Alabama Office of Workforce Development. Development of this plan began in September 2006.

## **UPDATE OF ORIGINAL CEDS PRIORITIES AND ACTION STEPS**

### **Lee County**

#### **Priority: Infrastructure**

- Promote expansion of existing water and sewer systems.
- Promote new construction and expansion of wastewater treatment plants.
- Utilize federal grant sources to fund construction/expansion.

#### **Update:**

- Efforts have been made to plan for and expand water and sewer programs.
- Grant money has been received for construction and expansion of water lines.

#### **Priority: Planning/Zoning**

- Encourage support of planning and zoning throughout the county.
- Plan public facilities to support cluster commercial development.

#### **Update:**

- Strategic plans for Lee County, the City of Auburn, and the City of Opelika include land planning and zoning as priority issues.
- Lee County has drafted subdivision regulations which are in the process of being approved.

#### **Priority: Environment**

- Form a county-wide Environmental Department.
- Increase litter education efforts.
- Educate public on non-point source pollution.

#### **Update:**

- No substantial progress has been made on this priority.

#### **Priority: Growth**

- Increase county tax base.
- Maintain current level of public services.
- Protect current quality of life.
- Preserve the environment.

#### **Update:**

- Governments in Lee County continue their efforts to plan effectively for growth.

#### **Priority: Law Enforcement**

- Acquire funding and form a centralized jail

#### **Update:**

- The centralized jail has been completed.

#### **Priority: Regional Economic Development**

- Educate citizens to think regionally.
- Attract compatible industries to expand county employment opportunities.
- Diversify economy.

#### **Update:**

- New industry and retail development have been attracted to the county.
- Government remains the highest employment sector in the county.

## **Russell County**

### **Priority: Infrastructure**

- Pursue funding for sewer and water improvements.
- Promote regional tourism.
- Seek public/private partnerships for new projects.
- Make capital readily available for business and economic development.

### **Update:**

- Funding has been received for water system improvements
- Land donations have been received from private citizens and Russell County Schools to build a centrally located sports and recreational complex.

### **Priority: Education**

- Research grant opportunities for education.
- Encourage parental involvement in schools.
- Improve communication between schools and media.
- Promote positive achievements of schools.

### **Update:**

- Communications with media have improved.
- Phenix City Schools AYP goals for 2006 showed marked improvements.

### **Priority: Revenue**

- Investigate becoming an “Entitlement City” and accessing Columbus MSA funds.
- Apply for funding from Delta Commission.
- Attract new, compatible industry to the area.

### **Update:**

- Funding has been received from the Delta Commission.
- New compatible industry has been attracted to the area.

### **Priority: Visual Image**

- Maximize potential of the Riverwalk.
- Plant trees to improve green space.
- Improve gateways to Phenix City.
- Improve image of Highway 431 and 280.

### **Update:**

- Riverwalk has become a center of downtown activities.
- Phenix City is in the midst of renovating one of their major downtown routes.

### **Priority: Citizen Involvement**

- Form county-wide citizen advisory committees.
- Encourage wide-spread involvement in strategic planning process.

### **Update:**

- Russell County Recreation Committee has been formed to address need for improving recreational facilities in the rural areas of the county.
- The city of Phenix City and the Chamber of Commerce have websites.

**VISION: WHERE DO WE WANT TO BE?**

Throughout 2008, public forums and planning meetings were held in both Lee and Russell Counties as well as in adjacent Columbus, Georgia. The goal of these meetings was to determine how the region could cope with the expected impacts of the BRAC expansions at Fort Benning and the developing automotive industry along the I-85 corridor. Information from the Regional Hazard Mitigation Plan, State of Alabama Workforce Development Plan, Human Services Coordinated Transportation Plan, Jurisdictional Preliminary Project Report, Seven Rivers Coalition, and the Fort Benning Futures Land Use Study and Growth Management Initiative have been included in this section of the update.

Lee County Citizens believed the 3 greatest strengths were Auburn University, the public school systems and geographic location. The 3 weaknesses most often identified for Lee County were public transportation, availability of a skilled workforce, and traffic control. The growth of the automotive industry, access to I-85, and the Highway 280 corridors were seen as areas of great opportunity for Lee County. The cost of housing, citizen apathy and rural land use planning and zoning were identified as threats.

In Russell County, Troy University, Chattahoochie Community College, and Phenix City government were identified as strengths. Public education and the lack of sewer systems were seen as weaknesses. Affordable land and housing, revitalization of downtown Phenix City and the BRAC expansion of Fort Benning were seen as areas of opportunity for Russell County. Lack of retail development, environmental concerns and land use planning and zoning were listed as threats.

**Table 14: STENGTHS, WEAKNESSES, OPPORTUNITIES and THREATS**

<b>Lee County Strengths</b>	<b>Russell County Strengths</b>
Auburn University Public education systems Geographic location Cultural resources Southern Union Quality of life Diverse business & industry base I-85 East Alabama Medical Center	Troy University Chattahoochee Community College Phenix City government Faith-based community
<b>Lee County Weaknesses</b>	<b>Russell County Weaknesses</b>
Public transit Skilled workforce Traffic control Downtown parking Sewer systems	Sewer systems Chamber of Commerce
<b>Lee County Opportunities</b>	<b>Russell County Opportunities</b>
Growth of automotive industry Hwy 280 corridors Access to I-85 Projected population growth Workforce development	Affordable land/housing Downtown revitalization Expansion of Ft. Benning
<b>Lee County Threats</b>	<b>Russell County Threats</b>
Cost of housing	Lack of retail development

<p>Citizen apathy  <b>Lee County Threats (con't)</b></p> <p>Land use planning/zoning  Outgrowing infrastructure  Lack of rural planning</p>	<p>Environmental concerns  <b>Russell County Threats (con't)</b></p> <p>Land use planning/zoning  Lack of tourist attractions</p>
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**THREE AREAS OF REGIONAL CONCERN**

**Water**

Russell County has four organized water systems in the county. These systems serve approximately 14,874 residential customers throughout the County. Approximately 15% of current residents in Russell County do not have access to the public water system and must rely on private wells for water. Most of these households are in unincorporated areas of the county.

Water service in Lee County is presently provided by two municipal public water systems and four rural public water authorities. The water systems collectively serve approximately 107,035 persons, leaving 8,057 persons or 7% of current Lee County residents without public water. Many of the households with no access to potable water are in Smiths Station and unincorporated areas of southeast Lee County which are projected to experience much of the growth impact from BRAC.

**Sewer**

Presently, nearly one-half (47%) of the households in Russell County and 40% of the households in Lee County do not have access to public sanitary sewer service.

Russell and Lee County residents who do not have access to public sewer use on-site waste disposal systems. Approximately 30% of these households experience waste disposal problems often associated with the absence of a sanitary public sewer service in populated areas. The Smiths Station area in Lee County and Ladonia area in Russell County have a critical need for sanitary sewage collection and treatment facilities. Both of these areas are expected to experience high levels of growth over the next 3 years.

**Schools**

Projections from the Seven Rivers Coalition indicate that an additional 3,000 students will enter the school systems in Lee and Russell Counties just as a result of BRAC. Accommodating this growth has caused concern across the region.

A total of 4 new elementary schools and 1 new middle school will be needed to house the growing student population. Additionally, 1 existing elementary school and 2 existing high schools will need extensive renovations. The total cost of these construction projects is nearly \$90,000,000.

The annual cost of educating and transporting 3,000 additional students will reach \$24,860,258 by 2011.

## **PROJECT LISTINGS**

General county project lists for Lee and Russell Counties are included below. Specific project lists were received from the cities of Auburn, Loachapoka and Smiths Station and Lee and Russell County Commissions. The specific project lists detail some of the immediate priority needs of these jurisdictions. BRAC and the expending automotive industry are expected to have a profound and wide ranging impact on communities. This is reflected in the specific project lists which include improvements to streets, fire protection, police communication, and water and sewer systems.

### **GENERAL PROJECT IDENTIFICATION LIST**

#### **Lee County**

- Consolidated workforce development programs
- Education of public on workforce development
- Vocational training in high schools
- Centralized technical high school
- Affordable housing
- Improvement/expansion of public transit system
- Improve roads, especially Glenn Avenue and downtown Opelika
- Three-lane I-85 through Auburn-Opelika area
- Improve sewers, especially in the North Donahue area
- Expand existing sewage treatment plants in Opelika
- Construct a Northside Waste Water Treatment Plant in Opelika
- Improve garbage collection in the unincorporated areas of the county
- Construct courthouse annex
- Continue to attract new business to the area
- Construction of an on-campus Research Park at Auburn University

#### **Russell County**

- Improve school system
- Renovate Phenix City Library
- Expand, improve fire departments
- Upgrade water and sewer systems
- Attract retail business to Russell County
- Improve land use planning and zoning
- Better promotion of culture, technology and the arts
- Provide public transportation services in rural Russell County

### Specific Project Listing

**Jurisdiction:** City of Auburn, Alabama

**General Areas of Concern:** Street improvements, police communications, water infrastructure

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	West Veteran's Boulevard Extension	Extend West Veteran's Boulevard in Auburn's Technology Park.	Relieve already crowded city streets  Improve access into Technology park.	\$2,731,000
High	Police Technology Improvements	Equip all police cars and several fire vehicles with computers, digital recorders and wireless networking.	Improve communication and emergency response by providing mobile data systems to police and fire divisions.	\$1,300,000
High	Water Study	Commission a study to evaluate the best ways to meet the continued and growing demand for water services.	Provide additional water services to the area.  Effectively and efficiently evaluate the alternatives available for water service expansion.	\$1,000,000



### Specific Project Listing

**Jurisdiction:** City of Loachapoka, Alabama

**General Areas of Concern:** Fire protection, flood prevention, pedestrian pathways

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	Fire Hydrant Installation	Install fire hydrants in three residential locations: Corner of Starr and Forest Streets South end of Vincent Street Pecan Circle	Improve fire protection for the citizens of Loachapoka.  Reduce insurance costs for residents.	No cost estimate at this time.
High	Drain Pipe Installation	Install drainage pipes throughout Loachapoka.	Prevent erosion and flooding.	No cost estimate at this time.
High	Sidewalk Construction	Construct a sidewalk from Loachapoka Park along Stage Road to the Loachapoka Community Center.	Provide a safe pedestrian walkway for citizens between two popular destinations.	No cost estimate at this time.

### Specific Project Listing

**Jurisdiction: City of Smiths Station, Alabama**

**General Areas of Concern: Infrastructure, fire protection, road improvements; school overcrowding; emergency communications, recreational opportunities**

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	Sewer Improvements to Primary School	Extend sanitary sewer services to primary school.	Improve sewer system and allow for future growth	No estimate at this time
	Mill Creek Sewer Trunk Line	Install main trunk line in downtown Smiths Station.	Improve sewer system capacity for all Smiths Station area	\$2,000,000
High	Highway 280 Water Line Improvements	Extend water services along the east side of Highway 280.	Provide water services to new and developing residential subdivisions.  Provide opportunity for future business growth along the Highway 280 corridor.	\$2,500,000
High	County school capacity in Smiths Station area	Increase county school capacity in Smiths Station area.	Assure schools are prepared for increase in residential growth and number of school age children in Smiths Station area.  Continue to provide quality education to Smiths Station area.	No estimate at this time
High	Lee Road 248/ Summerville Road Fire Station	Build a new fire station, with needed fire fighting equipment and vehicles in the rapidly growing Lee Road 248/ Summerville Road area of the city.	Improve fire protection to increasing number of residents.  Improve fire insurance ratings and decrease fire insurance costs.	No estimate at this time

### Specific Project Listing

**Jurisdiction: Lee County, Alabama**

**General Areas of Concern: County road improvements in the southeast corner of Lee County**

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	Lee Road 236 Improvements	Three-lane Lee Road 236 from the county line to Lee Road 240.	Improve access into and out of Lee County in the Ladonia/Smiths area.	\$487,600
		Bridge replacement to widen the road.	Safely handle expected increase in traffic from Lee County residential areas into Fort Benning.	\$218,400
High	Lee Road 240 Improvements	Three-lane Lee Road 240 from the county line to Lee Road 235.	Improve access into and out of Lee County in the Ladonia/Smiths area.	\$1,828,500
		Bridge replacement to widen the road.	Safely handle expected increase in traffic from Lee County residential areas into Fort Benning.	\$218,400
		Two-lane Lee Road 240 from Lee Road 235 to AL Highway 169.		\$1,330,000
High	Lee Road 248 Improvements	Three-lane Lee Road 248 from US280/431 to the Phenix City city limits.	Improve access into and out of Lee County.  Safely handle expected increase in traffic from Lee County residential areas into Fort Benning.	\$1,584,700
High	Lee Road 427 Improvements	Three-lane Lee Road 427 from Lee Road 248 to US 280/431.	Improve access into and out of Lee County  Safely handle expected increase in traffic from Lee County residential areas into Fort Benning.	\$690,800

### Specific Project Listing

**Jurisdiction: Russell County, Alabama**

**General Areas of Concern: New Roads, existing road widening and resurfacing; water and sewer infrastructure**

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	US 80 Bypass	4 miles of new road in a heavily traveled area of the county.	Relieve congestion on already crowded commuter routes.	No estimate at this time.
High	US 80/AL 165 Connector	The US 80 / AL 165 Connector will provide an alternative commuter route.	Relieve congestion on already crowded commuter routes.	No estimate at this time.
High	Highway AL 165 Widening	Add additional lanes to AL 165 north and south of the Fort Benning Alabama entrance.	Relieve congestion on already crowded commuter routes.  Improve access into/out of Fort Benning.	No estimate at this time.
High	AL 169 Connector	Construct a new road from Fort Benning to Seale in central Russell County.	Provide an east-west traffic corridor from east central Russell County to the Seale area.	No estimate at this time.
High	Road Resurfacing	Resurface 26.5 miles of existing county roads, all in the east central part of the county in close proximity to Fort Benning's Alabama entrance.	Improve condition and safety of feeder roads used to access Fort Benning region of Russell County.	No estimate at this time.
High	Water Treatment Facility	Improve the Water Treatment Facility at Highway 165 and Uchee Creek.	Improved water service to existing residents/businesses.  Increase capacity to handle additional residential/commercial development.	No estimate at this time.

<b>Priority</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Benefits</b>	<b>Projected Cost</b>
High	Sewage Treatment Facility	Improve the Sewer Treatment facility in Fort Mitchell.	Improved sewer service to existing residents/businesses.  Increase capacity to handle additional residential and commercial development.	No estimate at this time.



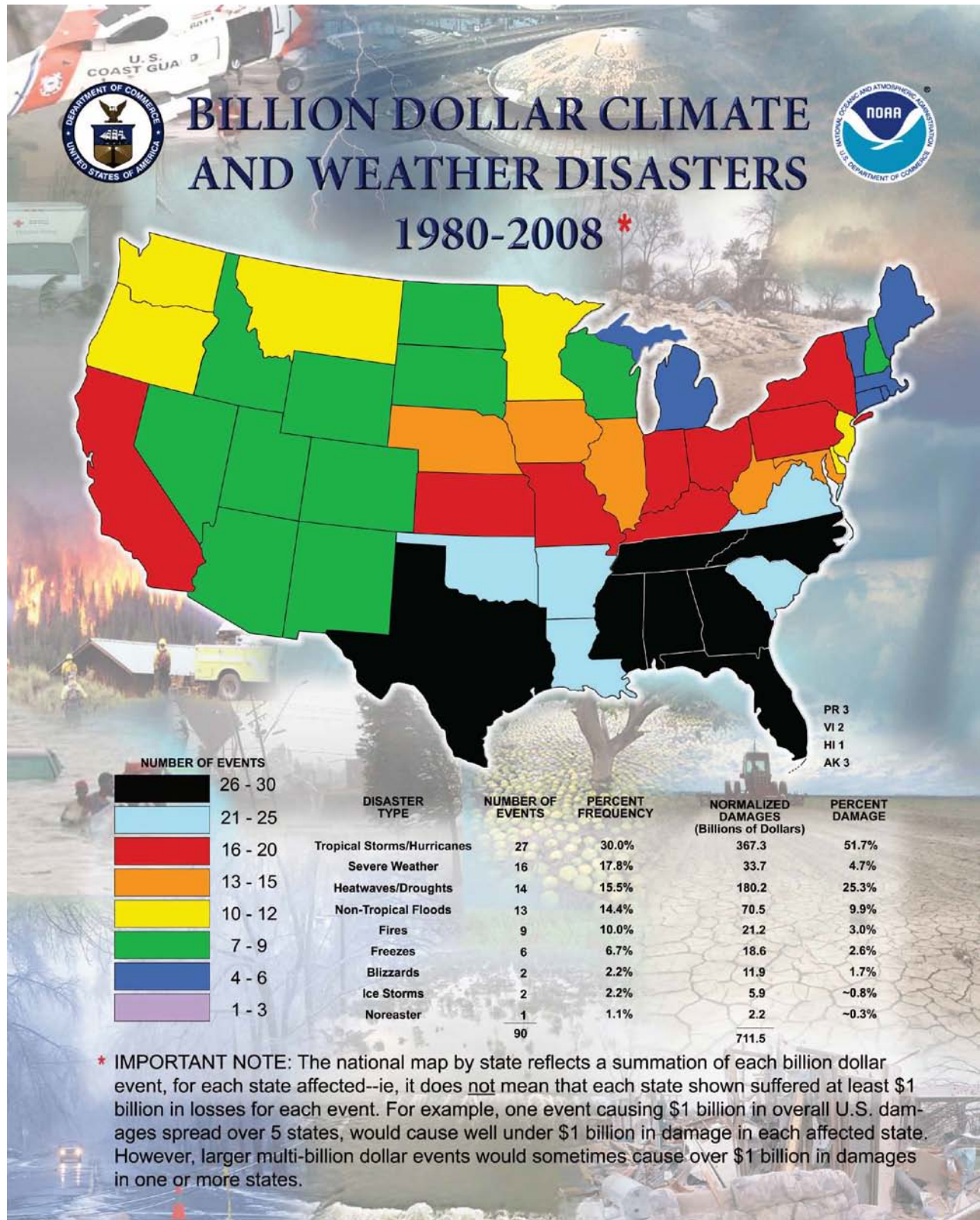
# APPENDIX F

## LEE COUNTY NATURAL HAZARDS MITIGATION PLAN



## Appendix F – Weather Support Documentation

### Billion Dollar Climate and Weather Disasters 1980-2008





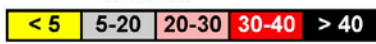
# 1980-2008 Billion Dollar U.S. Weather Disasters

(Damage Amounts in Billions of Dollars and Costs Normalized to 2007 Dollars Using GNP Inflation / Wealth Index)



1980	Drought / Heat Wave e \$55.4 ~10,000 Deaths				
1983	Hurricane Alicia \$6.3 21 Deaths	Florida Freeze ~\$4.2 No Deaths	Gulf Storms / Flooding ~ \$2.3 ~ 50 Deaths	W Storms / Flooding ~ \$2.3 ~ 45 Deaths	
1985	Florida Freeze ~ \$2.3 No Deaths	Hurricane Elena \$2.5 4 Deaths	Hurricane Juan \$2.9 63 Deaths		
1986	Drought / Heat Wave \$2.4 ~100 Deaths				
1988	Drought / Heat Wave e \$71.2 ~7,500 Deaths				
1989	Hurricane Hugo > \$15.3 86 Deaths	N Plains Drought > \$1.7 No Deaths			
1990	S Plains Flooding > \$1.6 13 Deaths	California Freeze \$5.5 No Deaths			
1991	Hurricane Bob \$2.3 18 Deaths	Oakland CA Firestorm ~ \$3.9 25 Deaths			
1992	Hurricane Andrew ~ \$40.0 61 Deaths	Hurricane Iniki ~ \$2.7 7 Deaths	Nor'easter \$2.3 19 Deaths		
1993	E Storm / Blizzard \$7.9 ~270 Deaths	SE Drought / Heat Wave ~ \$1.4 > 16 Deaths	Midwest Flooding ~ \$30.2 48 Deaths	CA Wildfires ~ \$1.4 4 Deaths	
1994	SE Ice Storm ~ \$4.2 9 Deaths	Tropical Storm Alberto ~ \$1.4 32 Deaths	Texas Flooding ~ \$1.4 19 Deaths	W Fire Season ~ \$1.4 No Deaths	
1995	CA Flooding > \$4.1 27 Deaths	SE / SW Severe Wx \$7.5 32 Deaths	Hurricane Marilyn e \$2.9 13 Deaths	Hurricane Opal > \$4.1 27 Deaths	
1996	Blizzard / Flooding ~ \$4.0 187 Deaths	Pacific NW Flooding ~ \$1.3 9 Deaths	S Plains Drought ~ \$6.8 No Deaths		
1997	Midwest Flood / Tornadoes e \$1.3 67 Deaths	N Plains Flooding ~ \$4.8 11 Deaths	W Coast Flooding ~ \$3.9 36 Deaths		
1998	New England Ice Storm > \$1.8 16 Deaths	SE Severe Wx > \$1.3 132 Deaths	MN Severe Storms / Hail > \$1.9 1 Death	S Drought / Heat Wave \$9.5 > 200 Deaths	Hurricane Bonnie ~ \$1.3 3 Deaths
	Hurricane Georges e \$7.4 16 Deaths	Texas Flooding ~ \$1.3 31 Deaths	California Freeze \$3.2 No Deaths		
1999	AR - TN Tornadoes ~ \$1.6 17 Deaths	OK - KS Tornadoes > \$2.0 55 Deaths	E Drought / Heat Wave > \$1.2 e 502 Deaths	Hurricane Floyd e > \$7.4 77 Deaths	
2000	Drought / Heat Wave e > \$4.8 ~ 140 Deaths	Western Fires > \$2.4 No Deaths			
2001	Tropical Storm Allison e ~ \$5.6 > 43 Deaths	Midwest / OH Valley Hail / Tornadoes > \$2.2 > 3 Deaths			
2002	30-State Drought e > \$11.4 No Deaths	Western Fires > \$2.3 ~21 Deaths	Severe Wx / Tornadoes > \$1.9 7 Deaths		
2003	Severe Wx / Hail > \$1.8 3 Deaths	Severe Wx / Tornadoes > \$3.8 51 Deaths	Hurricane Isabel ~ \$5.6 55 Deaths	S California Wildfires > \$2.8 22 Deaths	
2004	Hurricane Charley e ~ \$16.5 35 Deaths	Hurricane Frances e ~ \$9.9 48 Deaths	Hurricane Ivan e > \$15.4 57 Deaths	Hurricane Jeanne e > \$7.7 28 Deaths	
2005	Hurricane Dennis e > \$2.1 > 15 Deaths	Hurricane Katrina e ~ \$133.8 > 1833 Deaths	Hurricane Rita e ~ \$17.1 ~ 119 Deaths	Midwest Drought e > \$1.1 No Deaths	Hurricane Wilma e ~ \$17.1 35 Deaths
2006	Numerous Wildfires e > \$1.0 28 Deaths	Widespread Drought e > \$6.2 * Deaths	Severe Storms Tornadoes e > \$1.0 10 Deaths	Northeast Flooding > \$1.0 20 Deaths	MW / SE Tornadoes > \$1.5 10 Deaths
	MW / Ohio Valley Tornadoes ~ \$1.1 27 Deaths				
2007	Great Plains / East Drought > \$5.0 * Deaths	Western Wildfires > \$1.0 12 Deaths	Spring Freeze > \$2.0 No Deaths	East / South Severe Weather > \$1.5 9 Deaths	California Freeze > \$1.4 1 Deaths
2008	Southeast / Midwest Tornadoes > \$1.0 67 Deaths	MW / Ohio Valley Svr Wx / Tornadoes > \$2.4 13 Deaths	MW / Mid- Atl. Svr Wx Tornadoes > \$1.1 18 Deaths	Midwest Flood e > \$15.0 24 Deaths	U. S. Wild Fires > \$2.0 16 Deaths
	Hurricane Dolly > \$1.2 3 Deaths	Hurricane Gustav > \$5.0 43 Deaths	Hurricane Ike > \$27.0 > 100 Deaths	Widespread Drought > \$2.0 No Deaths	

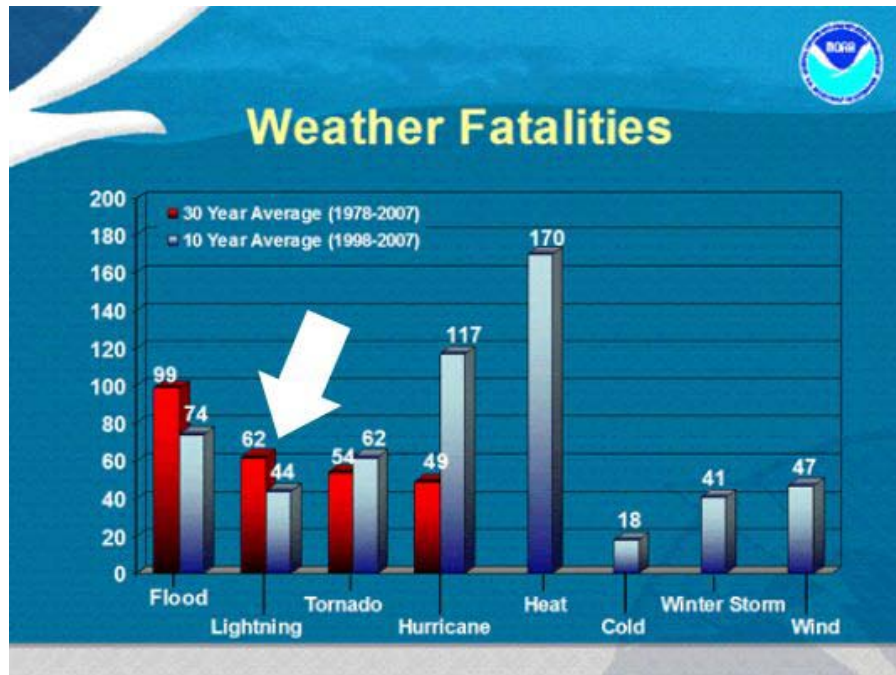
e = estimated > = greater than/at least ~ = approximately/about  
\* = undetermined



Amounts in Billions of Dollars

Source: NOAA's National Climatic Data Center Asheville, NC 28801-5001  
www.ncdc.noaa.gov/oa/reports/billionz.html

## Weather Fatalities in the United States



### List of Storm Events for Lee County (1953-2009)

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 <a href="#">LEE</a>	04/18/1953	1700	Tornado	F3	6	195	2.5M	0
2 <a href="#">LEE</a>	12/05/1954	1200	Tornado	F3	0	4	250K	0
3 <a href="#">LEE</a>	08/15/1957	1730	Tornado	F1	0	0	3K	0
4 <a href="#">LEE</a>	03/17/1965	1530	Hail	2.00 in.	0	0	0	0
5 <a href="#">LEE</a>	07/10/1966	1500	Tstm Wind	0 kts.	0	0	0	0
6 <a href="#">LEE</a>	08/23/1968	1930	Tstm Wind	0 kts.	0	0	0	0
7 <a href="#">LEE</a>	06/20/1969	1700	Tstm Wind	0 kts.	0	0	0	0
8 <a href="#">LEE</a>	07/16/1970	1630	Tstm Wind	0 kts.	0	0	0	0
9 <a href="#">LEE</a>	03/01/1971	2125	Tstm Wind	0	0	0	0	0

				kts.				
10 <a href="#">LEE</a>	04/23/1971	1346	Tstm Wind	0 kts.	0	0	0	0
11 <a href="#">LEE</a>	04/23/1971	1346	Tstm Wind	0 kts.	0	0	0	0
12 <a href="#">LEE</a>	05/12/1971	1345	Tstm Wind	0 kts.	0	0	0	0
13 <a href="#">LEE</a>	05/12/1971	1350	Tstm Wind	0 kts.	0	0	0	0
14 <a href="#">LEE</a>	05/23/1973	2330	Tstm Wind	0 kts.	0	0	0	0
15 <a href="#">LEE</a>	03/21/1974	0315	Tstm Wind	0 kts.	0	0	0	0
16 <a href="#">LEE</a>	03/21/1974	0320	Tstm Wind	0 kts.	0	0	0	0
17 <a href="#">LEE</a>	01/10/1975	1815	Tstm Wind	0 kts.	0	0	0	0
18 <a href="#">LEE</a>	01/10/1975	1830	Tornado	F2	0	0	2.5M	0
19 <a href="#">LEE</a>	05/14/1976	1420	Tstm Wind	0 kts.	0	0	0	0
20 <a href="#">LEE</a>	06/08/1978	1300	Tornado	F1	0	0	25K	0
21 <a href="#">LEE</a>	04/13/1979	0905	Tstm Wind	0 kts.	0	0	0	0
22 <a href="#">LEE</a>	04/03/1980	1815	Hail	1.75 in.	0	0	0	0
23 <a href="#">LEE</a>	04/13/1980	1430	Tornado	F2	0	13	2.5M	0
24 <a href="#">LEE</a>	04/13/1980	1450	Tstm Wind	0 kts.	0	0	0	0
25 <a href="#">LEE</a>	07/17/1980	1541	Tstm Wind	0 kts.	0	0	0	0
26 <a href="#">LEE</a>	07/17/1980	1845	Tstm Wind	0 kts.	0	0	0	0
27 <a href="#">LEE</a>	03/18/1981	1025	Tstm Wind	55 kts.	0	0	0	0
28 <a href="#">LEE</a>	03/30/1981	0435	Tstm Wind	0 kts.	0	0	0	0
29 <a href="#">LEE</a>	03/31/1981	2345	Tstm Wind	0	0	0	0	0

				kts.				
30 <a href="#">LEE</a>	03/21/1982	1550	Hail	1.75 in.	0	0	0	0
31 <a href="#">LEE</a>	04/23/1983	1416	Hail	2.75 in.	0	0	0	0
32 <a href="#">LEE</a>	04/23/1983	1456	Hail	1.50 in.	0	0	0	0
33 <a href="#">LEE</a>	05/16/1983	0300	Tstm Wind	0 kts.	0	0	0	0
34 <a href="#">LEE</a>	05/03/1984	1309	Tstm Wind	0 kts.	0	0	0	0
35 <a href="#">LEE</a>	05/03/1984	1330	Tornado	F2	0	1	250K	0
36 <a href="#">LEE</a>	05/03/1984	1330	Tstm Wind	0 kts.	0	0	0	0
37 <a href="#">LEE</a>	11/10/1984	1634	Tstm Wind	0 kts.	0	0	0	0
38 <a href="#">LEE</a>	04/05/1985	1910	Tstm Wind	53 kts.	0	0	0	0
39 <a href="#">LEE</a>	06/07/1985	2020	Tstm Wind	0 kts.	0	0	0	0
40 <a href="#">LEE</a>	03/19/1986	0550	Tstm Wind	0 kts.	0	0	0	0
41 <a href="#">LEE</a>	07/30/1986	1315	Tstm Wind	0 kts.	0	0	0	0
42 <a href="#">LEE</a>	07/31/1986	1545	Tstm Wind	0 kts.	0	0	0	0
43 <a href="#">LEE</a>	07/31/1986	1600	Tstm Wind	55 kts.	0	0	0	0
44 <a href="#">LEE</a>	07/31/1986	1720	Tstm Wind	0 kts.	0	0	0	0
45 <a href="#">LEE</a>	11/26/1986	0200	Tstm Wind	0 kts.	0	0	0	0
46 <a href="#">LEE</a>	08/20/1987	1500	Tstm Wind	0 kts.	0	0	0	0
47 <a href="#">LEE</a>	08/25/1987	1527	Tstm Wind	0 kts.	0	0	0	0
48 <a href="#">LEE</a>	01/19/1988	2335	Tstm Wind	0	0	0	0	0

				kts.				
49 <a href="#">LEE</a>	04/18/1988	2245	Tstm Wind	0 kts.	0	0	0	0
50 <a href="#">LEE</a>	04/19/1988	2310	Hail	1.75 in.	0	0	0	0
51 <a href="#">LEE</a>	04/25/1988	1741	Hail	1.75 in.	0	0	0	0
52 <a href="#">LEE</a>	11/04/1988	1545	Hail	2.75 in.	0	0	0	0
53 <a href="#">LEE</a>	04/04/1989	1420	Hail	0.75 in.	0	0	0	0
54 <a href="#">LEE</a>	04/04/1989	1435	Hail	0.75 in.	0	0	0	0
55 <a href="#">LEE</a>	04/04/1989	1515	Tstm Wind	0 kts.	0	0	0	0
56 <a href="#">LEE</a>	04/04/1989	1535	Hail	0.75 in.	0	0	0	0
57 <a href="#">LEE</a>	04/04/1989	1554	Hail	0.75 in.	0	0	0	0
58 <a href="#">LEE</a>	06/05/1989	1335	Tstm Wind	0 kts.	0	0	0	0
59 <a href="#">LEE</a>	06/12/1989	1900	Tstm Wind	0 kts.	0	0	0	0
60 <a href="#">LEE</a>	02/10/1990	0415	Tstm Wind	0 kts.	0	0	0	0
61 <a href="#">LEE</a>	02/22/1990	0815	Tstm Wind	0 kts.	0	1	0	0
62 <a href="#">LEE</a>	04/10/1990	1600	Tstm Wind	0 kts.	0	0	0	0
63 <a href="#">LEE</a>	04/10/1990	1630	Tstm Wind	0 kts.	0	0	0	0
64 <a href="#">LEE</a>	04/10/1990	1645	Tstm Wind	0 kts.	0	0	0	0
65 <a href="#">LEE</a>	05/21/1990	1335	Hail	1.75 in.	0	0	0	0
66 <a href="#">LEE</a>	07/23/1990	1628	Tstm Wind	61 kts.	0	0	0	0

67 <a href="#">LEE</a>	07/23/1990	1722	Tstm Wind	0 kts.	0	0	0	0
68 <a href="#">LEE</a>	03/01/1991	1515	Tstm Wind	0 kts.	0	0	0	0
69 <a href="#">LEE</a>	03/29/1991	0920	Tstm Wind	0 kts.	0	0	0	0
70 <a href="#">LEE</a>	05/05/1991	1450	Tstm Wind	0 kts.	0	0	0	0
71 <a href="#">LEE</a>	05/05/1991	1510	Tstm Wind	0 kts.	0	0	0	0
72 <a href="#">LEE</a>	05/05/1991	1630	Tstm Wind	0 kts.	0	0	0	0
73 <a href="#">LEE</a>	06/04/1991	1425	Tstm Wind	0 kts.	0	0	0	0
74 <a href="#">LEE</a>	04/20/1992	1600	Tstm Wind	0 kts.	0	0	0	0
75 <a href="#">LEE</a>	08/27/1992	1350	Tstm Wind	0 kts.	0	0	0	0
76 <a href="#">LEE</a>	08/27/1992	1515	Tstm Wind	0 kts.	0	0	0	0
77 <a href="#">LEE</a>	11/22/1992	1030	Tstm Wind	0 kts.	0	0	0	0
78 <a href="#">Auburn</a>	06/26/1994	1740	Thunderstorm Winds	50 kts.	0	0	50K	0
79 <a href="#">LEE</a>	07/07/1994	0600	Flash Flood	N/A	0	0	500K	50K
80 <a href="#">Auburn</a>	07/27/1994	1130	Thunderstorm Winds	0 kts.	0	0	50K	0
81 <a href="#">Opelika</a>	08/02/1994	1725	Tornado	F0	0	0	50K	0
82 <a href="#">Opelika</a>	09/08/1994	1110	Lightning	N/A	0	0	50K	0
83 <a href="#">Auburn</a>	10/11/1994	0000	Thunderstorm Wind	0 kts.	0	0	0K	0
84 <a href="#">Opelika</a>	03/18/1995	1315	Hail	0.75 in.	0	0	0	0
85 <a href="#">Gold Hill</a>	04/23/1995	1715	Hail	1.75 in.	0	0	0	0
86 <a href="#">LEE</a>	05/15/1995	1500	Thunderstorm Winds	0 kts.	0	0	15K	0

87 <a href="#">Opelika</a>	05/15/1995	1522	Thunderstorm Winds	50 kts.	0	0	0	0
88 <a href="#">Salem</a>	07/16/1995	1755	Thunderstorm Winds	0 kts.	0	0	2K	0
89 <a href="#">Montgomery</a>	07/17/1995	1255	Thunderstorm Winds	0 kts.	0	0	2K	0
90 <a href="#">Opelika</a>	07/29/1995	1700	Thunderstorm Winds	0 kts.	0	0	2K	0
91 <a href="#">Auburn</a>	08/19/1995	2045	Thunderstorm Winds	0 kts.	0	0	12K	0
92 <a href="#">ALZ001&gt;050</a>	10/04/1995	1200	Hurricane Opal/high Winds	N/A	2	0	0.1B	10.0M
93 <a href="#">Marvyn</a>	10/27/1995	1553	Hail	0.88 in.	0	0	0	0
94 <a href="#">ALZ001&gt;050</a>	12/10/1995	0000	Record Cold	N/A	0	0	0	0
95 <a href="#">Smiths</a>	12/18/1995	1953	Hail	0.75 in.	0	0	0	0
96 <a href="#">Opelika</a>	01/26/1996	10:20 PM	Tstm Wind	50 kts.	0	0	15K	0
97 <a href="#">ALZ001&gt;050</a>	02/03/1996	06:00 PM	Extreme Cold	N/A	0	0	0	0
98 <a href="#">ALZ001&gt;050</a>	02/23/1996	08:00 AM	Excessive Heat	N/A	0	0	0	0
99 <a href="#">Opelika</a>	03/06/1996	06:00 AM	Tstm Wind	50 kts.	0	0	80K	10K
100 <a href="#">Opelika</a>	03/06/1996	11:50 PM	Tstm Wind	70 kts.	1	0	50K	0
101 <a href="#">ALZ001&gt;050</a>	03/07/1996	08:00 AM	Extreme Cold	N/A	0	0	0	52.0M
102 <a href="#">Salem</a>	03/16/1996	12:38 PM	Hail	1.00 in.	0	0	12K	0
103 <a href="#">Smith Station</a>	03/18/1996	10:34 PM	Hail	0.75 in.	0	0	8K	5K
104 <a href="#">Beauregard</a>	04/14/1996	08:05 PM	Hail	0.75 in.	0	0	8K	2K
105 <a href="#">Auburn</a>	04/29/1996	02:35 PM	Funnel Cloud	N/A	0	0	0K	0K

106 <a href="#">Phenix City</a>	06/20/1996	04:00 PM	Tstm Wind	50 kts.	0	0	25K	0K
107 <a href="#">Auburn</a>	06/23/1996	01:18 PM	Lightning	N/A	0	0	15K	0K
108 <a href="#">Auburn</a>	06/23/1996	01:48 PM	Lightning	N/A	0	0	15K	0K
109 <a href="#">Smiths</a>	06/23/1996	11:38 AM	Hail	0.75 in.	0	0	10K	0K
110 <a href="#">Auburn</a>	07/05/1996	06:20 PM	Tstm Wind	50 kts.	0	0	5K	0K
111 <a href="#">Auburn</a>	09/09/1996	08:00 PM	Lightning	N/A	0	0	20K	0K
112 <a href="#">Opelika</a>	09/21/1996	02:00 PM	Tstm Wind	50 kts.	0	0	8K	1K
113 <a href="#">ALZ028&gt;029 - 035&gt;038 - 040&gt;049</a>	12/18/1996	02:00 PM	Winter Storm	N/A	0	0	240K	320K
114 <a href="#">Auburn</a>	01/24/1997	09:00 AM	Tstm Wind	50 kts.	0	0	7K	1K
115 <a href="#">Auburn</a>	04/27/1997	12:30 PM	Lightning	N/A	0	0	10K	0K
116 <a href="#">Auburn</a>	05/09/1997	03:00 PM	Hail	0.75 in.	0	0	4K	0K
117 <a href="#">Smiths Station</a>	05/09/1997	03:12 PM	Hail	1.25 in.	0	0	6K	0K
118 <a href="#">Opelika</a>	07/15/1997	04:02 PM	Hail	0.75 in.	0	0	3K	0K
119 <a href="#">Opelika</a>	07/22/1997	01:48 PM	Tornado	F0	0	0	12K	0K
120 <a href="#">Opelika</a>	11/01/1997	03:40 PM	Hail	1.75 in.	0	0	8K	0K
121 <a href="#">Smiths Station</a>	11/01/1997	08:15 AM	Hail	0.75 in.	0	0	2K	0K
122 <a href="#">ALZ001&gt;010 - 016 - 018&gt;021 - 028&gt;029 - 037&gt;038 - 047</a>	12/29/1997	01:00 AM	Winter Storm	N/A	0	0	0K	0K
123 <a href="#">Countywide</a>	01/07/1998	09:30	Flash Flood	N/A	0	0	25K	5K



		AM						
124 <a href="#">Marvyn</a>	03/20/1998	02:59 AM	Hail	0.75 in.	0	0	0K	0K
125 <a href="#">Auburn</a>	04/08/1998	02:30 PM	Hail	1.00 in.	0	0	2K	2K
126 <a href="#">Auburn</a>	04/08/1998	02:33 PM	Hail	1.00 in.	0	0	2K	2K
127 <a href="#">Opelika</a>	04/08/1998	02:37 PM	Hail	0.88 in.	0	0	0K	0K
128 <a href="#">Opelika</a>	04/08/1998	11:10 AM	Hail	0.75 in.	0	0	0K	0K
129 <a href="#">Opelika</a>	05/03/1998	04:30 PM	Hail	0.75 in.	0	0	0K	0K
130 <a href="#">Auburn</a>	06/05/1998	03:50 PM	Tstm Wind	55 kts.	1	0	10K	0K
131 <a href="#">Opelika</a>	06/05/1998	03:55 PM	Hail	0.75 in.	0	0	0K	0K
132 <a href="#">Auburn</a>	06/19/1998	01:35 PM	Tstm Wind	50 kts.	0	0	15K	0K
133 <a href="#">Auburn</a>	06/25/1998	12:48 PM	Hail	0.75 in.	0	0	0K	0K
134 <a href="#">Auburn</a>	07/11/1998	02:50 PM	Lightning	N/A	0	0	10K	0K
135 <a href="#">Auburn</a>	07/11/1998	02:50 PM	Tstm Wind	55 kts.	0	0	20K	0K
136 <a href="#">J C Meadows Xrds</a>	09/28/1998	04:28 PM	Tornado	F0	0	0	0K	0K
137 <a href="#">Smiths</a>	10/07/1998	04:00 PM	Hail	0.75 in.	0	0	0K	0K
138 <a href="#">Opelika</a>	10/07/1998	04:10 PM	Hail	0.88 in.	0	0	0K	0K
139 <a href="#">Opelika</a>	02/27/1999	09:45 PM	Hail	0.75 in.	0	0	0K	0K
140 <a href="#">Smiths</a>	05/06/1999	09:30 AM	Hail	0.75 in.	0	0	0K	0K
141 <a href="#">Hopewell</a>	05/07/1999	06:25 PM	Tstm Wind	50 kts.	0	0	0K	0K

142	<a href="#">Auburn</a>	05/13/1999	02:25 PM	Hail	0.75 in.	0	0	0K	0K
143	<a href="#">Opelika</a>	05/13/1999	02:40 PM	Hail	1.00 in.	0	0	0K	0K
144	<a href="#">Opelika</a>	06/04/1999	03:25 PM	Hail	0.75 in.	0	0	0K	0K
145	<a href="#">Opelika</a>	06/04/1999	03:40 PM	Hail	1.00 in.	0	0	0K	0K
146	<a href="#">Countywide</a>	06/28/1999	07:35 AM	Flash Flood	N/A	0	0	1.5M	0K
147	<a href="#">Loachapoka</a>	09/08/1999	05:55 PM	Tstm Wind	50 kts.	0	0	1K	0K
148	<a href="#">Opelika</a>	02/13/2000	04:40 PM	Hail	0.75 in.	0	0	0K	0K
149	<a href="#">Opelika</a>	02/13/2000	04:44 PM	Hail	0.88 in.	0	0	0K	0K
150	<a href="#">Opelika</a>	02/13/2000	04:48 PM	Hail	1.00 in.	0	0	0K	0K
151	<a href="#">Salem</a>	02/13/2000	04:56 PM	Hail	0.75 in.	0	0	0K	0K
152	<a href="#">Opelika</a>	03/10/2000	04:05 PM	Hail	0.75 in.	0	0	0K	0K
153	<a href="#">Countywide</a>	07/20/2000	06:55 PM	Tstm Wind	55 kts.	0	0	30K	0K
154	<a href="#">Auburn</a>	07/23/2000	01:00 PM	Tstm Wind	55 kts.	0	0	2K	0K
155	<a href="#">Smiths</a>	08/10/2000	03:30 PM	Hail	1.00 in.	0	0	1K	0K
156	<a href="#">Auburn</a>	08/10/2000	04:00 PM	Hail	0.75 in.	0	0	0K	0K
157	<a href="#">Opelika</a>	01/19/2001	10:40 AM	Tstm Wind	50 kts.	0	0	2K	0K
158	<a href="#">Loachapoka</a>	03/15/2001	02:10 AM	Tstm Wind	50 kts.	0	0	2K	0K
159	<a href="#">Auburn</a>	03/15/2001	02:15 AM	Tstm Wind	52 kts.	0	0	2K	0K
160	<a href="#">Smiths</a>	06/03/2001	12:38 PM	Hail	0.75 in.	0	0	0K	0K

161 <a href="#">Countywide</a>	07/05/2001	04:25 PM	Tstm Wind	55 kts.	0	0	2K	0K
162 <a href="#">Loachapoka</a>	07/10/2001	05:00 PM	Hail	1.00 in.	0	0	0K	0K
163 <a href="#">ALZ037&gt;038 - 040 - 042&gt;049</a>	01/02/2002	06:16 AM	Heavy Snow	N/A	0	0	0K	0K
164 <a href="#">ALZ021 - 029 - 038 - 047&gt;048</a>	01/03/2002	05:00 AM	Heavy Snow	N/A	0	0	0K	0K
165 <a href="#">Marvyn</a>	05/30/2002	03:18 PM	Hail	1.00 in.	0	0	2K	0K
166 <a href="#">Opelika</a>	05/30/2002	04:32 PM	Lightning	N/A	0	0	3K	0K
167 <a href="#">Salem</a>	06/04/2002	03:25 PM	Hail	1.00 in.	0	0	0K	0K
168 <a href="#">Opelika</a>	07/23/2002	08:45 PM	Lightning	N/A	0	0	75K	0K
169 <a href="#">Opelika</a>	08/20/2002	03:37 PM	Hail	0.75 in.	0	0	0K	0K
170 <a href="#">Auburn</a>	08/20/2002	04:10 PM	Hail	0.75 in.	0	0	0K	0K
171 <a href="#">Opelika</a>	12/24/2002	04:15 AM	Lightning	N/A	0	0	7K	0K
172 <a href="#">Opelika</a>	01/22/2003	05:45 AM	Tstm Wind	65 kts.	0	0	35K	0K
173 <a href="#">Auburn</a>	01/22/2003	06:15 AM	Hail	0.75 in.	0	0	0K	0K
174 <a href="#">ALZ011&gt;015 - 017&gt;050</a>	01/24/2003	12:00 AM	Extreme Cold	N/A	1	0	0K	0K
175 <a href="#">Auburn</a>	03/14/2003	06:30 PM	Hail	0.88 in.	0	0	0K	0K
176 <a href="#">Opelika</a>	03/19/2003	05:10 PM	Hail	0.75 in.	0	0	0K	0K
177 <a href="#">Loachapoka</a>	04/25/2003	03:56 PM	Hail	2.75 in.	0	0	250K	0K
178 <a href="#">ALZ038 - 047&gt;048</a>	05/07/2003	11:00 PM	Flood	N/A	0	0	4.5M	275K
179 <a href="#">Opelika</a>	05/18/2003	11:23	Tstm Wind	50	0	0	8K	0K

		AM		kts.				
180 <a href="#">Loachapoka</a>	06/13/2003	01:00 PM	Tstm Wind	50 kts.	0	0	4K	0K
181 <a href="#">Countywide</a>	07/01/2003	08:30 AM	Flash Flood	N/A	0	0	40K	0K
182 <a href="#">Mc Culloh</a>	08/15/2003	02:56 PM	Lightning	N/A	0	0	2K	0K
183 <a href="#">Auburn</a>	05/31/2004	06:00 AM	Tstm Wind	50 kts.	0	0	16K	0
184 <a href="#">Auburn</a>	07/26/2004	02:45 PM	Flash Flood	N/A	0	0	75K	0
185 <a href="#">ALZ021 - 036 - 045 - 047</a>	09/07/2004	12:15 AM	Strong Wind	33 kts.	0	0	4K	0
186 <a href="#">ALZ047</a>	09/16/2004	05:30 AM	High Wind	60 kts.	0	0	1.0M	0
187 <a href="#">Salem</a>	10/19/2004	01:07 PM	Funnel Cloud	N/A	0	0	0	0
188 <a href="#">Opelika</a>	10/19/2004	12:17 PM	Tstm Wind	50 kts.	0	0	8K	0
189 <a href="#">Loachapoka</a>	10/19/2004	12:27 PM	Tstm Wind	50 kts.	0	0	17K	0
190 <a href="#">Opelika</a>	10/19/2004	12:32 PM	Hail	1.75 in.	0	0	2K	0
191 <a href="#">Salem</a>	10/19/2004	12:47 PM	Funnel Cloud	N/A	0	0	0	0
192 <a href="#">Salem</a>	10/19/2004	12:56 PM	Tstm Wind	50 kts.	0	0	3K	0
193 <a href="#">Opelika</a>	11/24/2004	08:09 AM	Tornado	F0	0	0	28K	0
194 <a href="#">Countywide</a>	01/13/2005	02:55 PM	Tstm Wind	50 kts.	0	0	4K	0
195 <a href="#">ALZ020&gt;021 - 028&gt;029 - 037&gt;038 - 047</a>	01/28/2005	07:45 PM	Ice Storm	N/A	0	0	425K	0
196 <a href="#">Smiths</a>	03/22/2005	12:34 PM	Hail	1.75 in.	0	0	16K	0
197 <a href="#">Countywide</a>	03/27/2005	04:00 PM	Flash Flood	N/A	0	0	20K	0

198 <a href="#">Loachapoka</a>	03/27/2005	04:26 PM	Hail	0.75 in.	0	0	0	0
199 <a href="#">Countywide</a>	03/31/2005	01:08 AM	Flash Flood	N/A	0	0	80K	0
200 <a href="#">Loachapoka</a>	03/31/2005	12:00 AM	Hail	1.75 in.	0	0	23K	0
201 <a href="#">Countywide</a>	04/01/2005	07:00 AM	Flash Flood	N/A	0	0	300K	0
202 <a href="#">ALZ037 - 044 - 047 - 049</a>	04/02/2005	08:00 AM	Strong Wind	30 kts.	0	0	4K	0
203 <a href="#">Loachapoka</a>	04/22/2005	03:03 PM	Hail	1.00 in.	0	0	1K	0
204 <a href="#">Central Portion</a>	04/22/2005	03:22 PM	Tstm Wind	52 kts.	0	0	2K	0
205 <a href="#">Countywide</a>	04/30/2005	05:57 AM	Tstm Wind	52 kts.	0	0	4K	0
206 <a href="#">Auburn</a>	04/30/2005	07:23 AM	Tstm Wind	52 kts.	0	0	2K	0
207 <a href="#">Smiths</a>	05/20/2005	02:18 PM	Hail	1.00 in.	0	0	0	0
208 <a href="#">Smiths</a>	05/20/2005	02:18 PM	Tstm Wind	52 kts.	0	0	7K	0
209 <a href="#">Opelika</a>	07/06/2005	02:40 PM	Tornado	F0	0	0	34K	0
210 <a href="#">ALZ047</a>	07/10/2005	03:00 PM	Tropical Storm	N/A	0	0	35K	0
211 <a href="#">Auburn</a>	08/17/2005	03:05 PM	Hail	0.75 in.	0	0	0	0
212 <a href="#">ALZ011&gt;015 - 017&gt;050</a>	08/29/2005	04:00 PM	Tropical Storm	N/A	0	8	34.9M	0
213 <a href="#">Bleecker</a>	12/28/2005	12:30 PM	Hail	0.75 in.	0	0	0	0
214 <a href="#">Smiths</a>	12/28/2005	12:43 PM	Hail	0.75 in.	0	0	0	0
215 <a href="#">Auburn</a>	03/20/2006	07:05 PM	Tstm Wind	50 kts.	0	0	5K	0
216 <a href="#">Opelika</a>	03/20/2006	07:30 PM	Tstm Wind	50 kts.	0	0	5K	0

217 <a href="#">Opelika</a>	03/20/2006	07:42 PM	Hail	1.00 in.	0	0	0	0
218 <a href="#">Smiths</a>	03/20/2006	08:10 PM	Hail	1.00 in.	0	0	0	0
219 <a href="#">Opelika</a>	04/08/2006	07:05 AM	Hail	0.88 in.	0	0	0	0
220 <a href="#">Opelika</a>	05/10/2006	03:08 PM	Hail	1.00 in.	0	0	0	0
221 <a href="#">Opelika</a>	05/10/2006	03:08 PM	Tstm Wind	50 kts.	0	0	2K	0
222 <a href="#">Smiths</a>	05/10/2006	03:09 PM	Tstm Wind	50 kts.	0	0	2K	0
223 <a href="#">Opelika</a>	05/13/2006	08:02 PM	Hail	0.88 in.	0	0	0	0
224 <a href="#">ALZ039&gt;040 - 042 - 044&gt;050</a>	07/11/2006	07:00 AM	Drought	N/A	0	0	0	0
225 <a href="#">Smiths Station</a>	07/28/2006	10:01 PM	Tstm Wind	50 kts.	0	0	4K	0
226 <a href="#">ALZ011&gt;015 - 017&gt;050</a>	08/01/2006	12:00 AM	Drought	N/A	0	0	0	0
227 <a href="#">ALZ011&gt;015 - 017&gt;050</a>	09/01/2006	12:00 AM	Drought	N/A	0	0	0	0
228 <a href="#">Opelika</a>	10/11/2006	17:36 PM	Funnel Cloud	N/A	0	0	0K	0K
229 <a href="#">Pine Grove</a>	10/11/2006	17:40 PM	Thunderstorm Wind	50 kts.	0	0	1K	0K
230 <a href="#">Loachapoka</a>	10/11/2006	18:45 PM	Hail	0.88 in.	0	0	0K	0K
231 <a href="#">Auburn</a>	11/15/2006	13:05 PM	Funnel Cloud	N/A	0	0	0K	0K
232 <a href="#">Auburn</a>	11/15/2006	13:15 PM	Flash Flood	N/A	0	0	0K	0K
233 <a href="#">Smiths</a>	03/01/2007	17:27 PM	Tornado	F1	0	0	100K	0K
234 <a href="#">ALZ011&gt;015 - 017&gt;038 - 041 - 043 - 047</a>	04/07/2007	00:00 AM	Frost/freeze	N/A	0	0	0K	0K
235 <a href="#">ALZ011&gt;015</a>	04/08/2007	00:00	Frost/freeze	N/A	0	0	0K	0K

<a href="#">- 017&gt;038 - 041 - 043 - 047</a>		AM						
236 <a href="#">Smiths Station</a>	04/11/2007	17:58 PM	Funnel Cloud	N/A	0	0	0K	0K
237 <a href="#">Auburn</a>	04/14/2007	14:45 PM	Lightning	N/A	0	0	2K	0K
238 <a href="#">ALZ036&gt;038 - 040&gt;045 - 047</a>	05/22/2007	06:00 AM	Drought	N/A	0	0	0K	0K
239 <a href="#">ALZ011&gt;015 - 017&gt;045 - 047</a>	06/01/2007	00:00 AM	Drought	N/A	0	0	0K	0K
240 <a href="#">Opelika</a>	06/11/2007	21:00 PM	Hail	0.88 in.	0	0	0K	0K
241 <a href="#">Pepperell</a>	06/11/2007	21:08 PM	Thunderstorm Wind	55 kts.	0	0	20K	0K
242 <a href="#">Chewacla</a>	07/20/2007	13:30 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
243 <a href="#">Smiths</a>	07/20/2007	13:50 PM	Thunderstorm Wind	50 kts.	0	0	50K	0K
244 <a href="#">ALZ021 - 024 - 027&gt;029 - 031&gt;043 - 047</a>	01/19/2008	06:00 AM	Heavy Snow	N/A	0	0	0K	0K
245 <a href="#">ALZ021 - 024 - 027&gt;029 - 031&gt;043 - 047</a>	01/19/2008	06:00 AM	Winter Weather	N/A	0	0	0K	0K
246 <a href="#">(auo)auburn Opelika</a>	01/31/2008	21:10 PM	Thunderstorm Wind	51 kts.	0	0	5K	0K
247 <a href="#">ALZ047</a>	03/07/2008	05:24 AM	Strong Wind	40 kts.	0	0	5K	0K
248 <a href="#">ALZ011 - 013&gt;015 - 017&gt;021 - 023&gt;029 - 032&gt;038 - 040&gt;045 - 047</a>	04/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
249 <a href="#">Auburn</a>	04/04/2008	18:00 PM	Hail	0.75 in.	0	0	0K	0K
250 <a href="#">Opelika</a>	04/04/2008	18:10 PM	Hail	1.00 in.	0	0	0K	0K
251 <a href="#">Andrews</a>	04/04/2008	18:20	Hail	1.75	0	0	0K	0K

		PM		in.				
252 <a href="#">Pine Grove</a>	04/04/2008	18:30 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
253 <a href="#">ALZ011 - 013&gt;015 - 017&gt;021 - 023&gt;029 - 032&gt;038 - 040&gt;045 - 047</a>	05/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
254 <a href="#">ALZ017&gt;021 - 024&gt;029 - 036&gt;038 - 043 - 045 - 047</a>	06/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
255 <a href="#">Beulah</a>	06/11/2008	14:35 PM	Thunderstorm Wind	50 kts.	0	0	1K	0K
256 <a href="#">ALZ017&gt;021 - 024&gt;029 - 036&gt;038 - 043 - 045 - 047&gt;048 - 050</a>	07/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
257 <a href="#">Shotwell</a>	07/22/2008	13:12 PM	Thunderstorm Wind	50 kts.	0	0	1K	0K
258 <a href="#">Beehive</a>	07/22/2008	13:15 PM	Lightning	N/A	0	0	100K	0K
259 <a href="#">ALZ011 - 013&gt;015 - 017&gt;019 - 021 - 023&gt;029 - 034&gt;038 - 043 - 045&gt;048 - 050</a>	08/01/2008	00:00 AM	Drought	N/A	0	0	0K	0K
260 <a href="#">Auburn</a>	08/07/2008	16:07 PM	Thunderstorm Wind	45 kts.	0	0	10K	0K
261 <a href="#">Auburn</a>	08/07/2008	16:20 PM	Thunderstorm Wind	45 kts.	0	0	1K	0K
262 <a href="#">Mitchell Xrd</a>	08/07/2008	16:20 PM	Thunderstorm Wind	45 kts.	0	0	1K	0K
263 <a href="#">Motts</a>	08/07/2008	16:57 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
264 <a href="#">ALZ047</a>	12/11/2008	06:57 AM	Strong Wind	40 kts.	0	0	20K	0K



265 <a href="#">Ridge Grove</a>	02/28/2009	07:56 AM	Tornado	F1	0	0	65K	0K
266 <a href="#">Salem</a>	02/28/2009	08:25 AM	Tornado	F2	0	3	1.1M	0K
267 <a href="#">ALZ038 - 047 - 048</a>	03/01/2009	06:00 AM	Heavy Snow	N/A	0	0	0K	0K
268 <a href="#">Motts</a>	03/28/2009	11:57 AM	Hail	0.75 in.	0	0	0K	0K
269 <a href="#">Smiths Station</a>	03/28/2009	11:58 AM	Hail	0.88 in.	0	0	0K	0K
270 <a href="#">Motts</a>	03/28/2009	12:34 PM	Hail	0.75 in.	0	0	0K	0K
271 <a href="#">Shotwell</a>	03/28/2009	12:55 PM	Hail	0.75 in.	0	0	0K	0K
272 <a href="#">Roxana</a>	04/10/2009	18:22 PM	Hail	1.00 in.	0	0	0K	0K
273 <a href="#">Roxana</a>	04/10/2009	18:24 PM	Tornado	F0	0	0	2K	0K
274 <a href="#">Lochapoka</a>	04/10/2009	18:30 PM	Tornado	F1	0	0	150K	0K
275 <a href="#">Mitchell Xrd</a>	04/10/2009	18:51 PM	Tornado	F1	0	0	30K	0K
276 <a href="#">Smiths Station</a>	04/10/2009	19:12 PM	Hail	1.25 in.	0	0	0K	0K
277 <a href="#">Bupree</a>	04/10/2009	19:57 PM	Tornado	F1	0	0	5K	0K
278 <a href="#">Auburn</a>	05/03/2009	15:15 PM	Thunderstorm Wind	50 kts.	0	0	50K	0K
279 <a href="#">Opelika</a>	05/03/2009	15:21 PM	Thunderstorm Wind	53 kts.	0	0	0K	0K
280 <a href="#">Pine Grove</a>	05/10/2009	14:35 PM	Lightning	N/A	0	0	75K	0K
281 <a href="#">Pine Grove</a>	05/10/2009	14:35 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
282 <a href="#">Cawatchee</a>	05/23/2009	15:59 PM	Tornado	F0	0	0	100K	0K
283 <a href="#">Auburn</a>	05/28/2009	14:10 PM	Hail	0.75 in.	0	0	0K	0K

284 <a href="#">Auburn</a>	05/28/2009	14:21 PM	Hail	0.75 in.	0	0	0K	0K
285 <a href="#">Auburn</a>	06/02/2009	16:30 PM	Hail	0.88 in.	0	0	0K	0K
286 <a href="#">Auburn</a>	06/02/2009	17:30 PM	Heavy Rain	N/A	0	0	0K	0K
287 <a href="#">Auburn</a>	06/14/2009	12:55 PM	Thunderstorm Wind	50 kts.	0	0	3K	0K
288 <a href="#">Beehive</a>	06/14/2009	12:55 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
289 <a href="#">Beehive</a>	06/15/2009	23:36 PM	Thunderstorm Wind	50 kts.	0	0	1K	0K
290 <a href="#">Opelika</a>	06/15/2009	23:48 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
291 <a href="#">Opelika</a>	06/28/2009	16:07 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
292 <a href="#">Roxana</a>	06/28/2009	16:18 PM	Thunderstorm Wind	50 kts.	0	0	2K	0K
293 <a href="#">Auburn</a>	07/05/2009	12:20 PM	Hail	0.75 in.	0	0	0K	0K
294 <a href="#">Mitchell Xrd</a>	07/28/2009	14:24 PM	Thunderstorm Wind	43 kts.	0	0	2K	0K
295 <a href="#">Smiths Station</a>	08/05/2009	14:59 PM	Thunderstorm Wind	35 kts.	0	0	1K	0K
296 <a href="#">Salem</a>	09/19/2009	17:30 PM	Flash Flood	N/A	0	0	0K	0K
TOTALS:					11	225	154.759M	62.673M