



<b>FEMA Reviewer:</b> Larry Gaston Michelle Wolfe	<b>Title:</b> Plan Reviewer Plan Reviewer	<b>Date:</b> September 22, 2009 28 September 2009
<b>Date Received in FEMA Region VII</b>	August 31, 2009	
<b>Plan Not Approved</b>	29 September 2009	
<b>Plan Approved</b>		
<b>Date Approved</b>		

Jurisdiction:	DFIRM		NFIP Status*			
	In Plan	NOT in Plan	Y	N	N/A	CRS Class
1. Atchison County		X	X			
2. Fairfax, City of		X	X			
3. Rock Port, City of		X	X			
4. Tarkio, City of		X	X			
5. Watson, Village of		X	X			
6. Westboro, Village of (Sanctioned 7/11/1976)		X		X		
7. Fairfax R-III School District						
8. Rock Port R-II School District						
9. Tarkio R-I School District						

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

**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.

**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.

**Prerequisite(s) (Check Applicable Box)**

	NOT MET	MET
1. Adoption by the Local Governing Body: §201.6(c)(5) OR	NA	NA
2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5) AND	X	
3. Multi-Jurisdictional Planning Participation: §201.6(a)(3)	X	

**Planning Process**

	NOT MET	MET
4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)		X

**Risk Assessment**

	NOT MET	MET
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	

**Mitigation Strategy**

	NOT MET	MET
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

**Plan Maintenance Process**

	NOT MET	MET
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

**Additional State Requirements\***

	NOT MET	MET
Insert State Requirement		
Insert State Requirement		
Insert State Requirement		

**LOCAL MITIGATION PLAN APPROVAL STATUS**

PLAN NOT APPROVED

See Reviewer's Comments

PLAN APPROVED

**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 the new or updated plan?				
B. Is supporting documentation, such as a resolution, included?				
<b>SUMMARY SCORE</b>			NA	NA

**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 new or updated plan indicate the specific jurisdictions represented in the plan?	Introduction Section pp vi-vii	The plan provides the necessary information to fulfill the required elements of this section.		X
B. For each jurisdiction, has the local governing body adopted the new or updated plan?		<p>The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. The following guidance is provided:</p> <ul style="list-style-type: none"> <li>The new or updated plan <b>must</b> include a copy of the completed adoption resolution, signed by the appropriate officials of each participating jurisdiction.</li> <li>This copy is generally an attachment to the plan that is referenced in the Executive Summary, Planning Process Section, or Individual Jurisdictions' Sections.</li> </ul> <p><b>Required Revision:</b>                      Plan <b>must</b> include documentation demonstrating that each governing body, prior to submission to FEMA for final approval, has formally adopted the plan. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 19 - 20.</i></p>	X	

C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?		The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. The following guidance is provided: <ul style="list-style-type: none"> <li>• This copy is generally an attachment to the plan that is referenced in the Executive Summary, Planning Process, or Individual Jurisdictions' Sections.</li> <li>• Colleges, Institutions of Higher Learning, and school districts should demonstrate formal adoption of the plan and an intention to adhere to and implement the actions identified. This can be accomplished with a document indicating a formal vote, a statement of support from a recognized governing body, a letter from the institution president or board of directors, or a memorandum of understanding.</li> <li>• The new or updated plan <b>must</b> include a copy of a completed adoption resolution signed by the appropriate officials from each jurisdiction.</li> </ul> <p><b>Required Revision:</b>                  The plan <b>must</b> include documentation demonstrating that <b>each governing body</b> has adopted the plan prior to submission to FEMA for final approval. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 19 - 20.</i></p>	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.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			NOT MET	MET
A. Does the new or updated plan describe how each jurisdiction participated in the plan's development?	Introduction Section pp v-xv	The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. <ul style="list-style-type: none"> <li>• There is confusion regarding plan participation requirements. Page vii implies attending meetings is a requirement for jurisdictions to meet plan participation, however Table A indicates three jurisdictions did not attend meetings and one (Westboro) did not attend alternately meeting with NWMORCOG staff.</li> <li>• The meeting sign-in sheets (Appendix B) should provide the agency/organization each attendee represents to help clarify participation requirements. Also the Non-Federal Match form (Appendix B) should also identify the agency/organization each individual represents.</li> </ul> <p><b>Required Revision:</b>                      The plan <b>must</b> clearly state the minimal requirements for plan participation.</p> <p><b>Recommended Revision:</b>                      The plan should provide the agency/organization representation for each attendee for the sign-in sheets and non-federal match form.</p>		X

B. Does the updated plan identify all participating jurisdictions, including new, continuing, and the jurisdictions that no longer participate in the plan?	Introduction Section pp vi	The plan provides the necessary information to fulfill the required elements of this section.		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	
			NOT MET	MET
A. Does the new or updated plan provide a narrative description of the process followed to prepare the new or updated plan?	Introduction Section pp v-xv	The plan provides the necessary information to fulfill the required elements of this section.		X
B. Does the new or updated plan indicate who was involved in the current planning process? (For 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.?)	Introduction Section pp vi-ix Appendix B	The plan provides the necessary information to fulfill the required elements of this section.		X

C. Does the new or updated 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?)	Introduction Section pp vi-ix & xiii-xv Appendix B	The plan provides the necessary information to fulfill the required elements of this section.		X
D. Does the new or updated plan discuss the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?	Introduction Section pp vi-ix & xiii-xv Appendix B	The plan provides the necessary information to fulfill the required elements of this section.		X
E. Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?	Introduction Section pp xiii-xv Section 3 pp 81-86	The plan provides the necessary information to fulfill the required elements of this section.		X
F. Does the updated plan document how the planning team reviewed and analyzed each section of the plan and whether each section was revised as part of the update process?	Introduction Section pp vii-ix	The plan provides the necessary information to fulfill the required elements of this section.		X
<b>SUMMARY SCORE</b>				X

**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	
			NOT MET	MET
A. Does the new or updated plan include a description of the types of all natural hazards that affect the jurisdiction?	Section 2 pp 24-63	<p>The plan does not provide the necessary information to fulfill the required elements of this section.</p> <ul style="list-style-type: none"> <li>The plan does not address levee failure. Page 34, Section 2 states during the floods of 1993 the existing levee system received a significant amount of damage. Since levees exist and have failed in the past then levee failure needs to be addressed as an identified hazard.</li> <li>Also, the plan must indicate if any new hazards were added or old hazards removed from the previous plan.</li> </ul> <p>The following guidance is provided:</p> <ul style="list-style-type: none"> <li>The new or updated plan <b>must</b> include a narrative description of each natural hazard threatening the jurisdiction. <b>In Region VII, natural hazards include dam and levee failure.</b></li> <li>The Risk Assessment Process <b>should</b> begin with a review of those hazards identified in the State Hazard Mitigation Plan. Local plans should provide a discussion of those hazards found in the State Plan that were not included in the local plan.</li> <li>The Risk Assessment could be structured to assess only those hazards posing the most significant threat. If this methodology is used, the plan must document the reason for elimination or omission.</li> <li>The description of the hazards <b>should</b> provide complete information on data sources.</li> <li><b>The local risk assessment update shall address any newly identified hazards that have been determined to pose a more significant threat than was apparent when the previously approved plan was prepared.</b> If improved descriptions of hazards are available, they <b>should</b> be incorporated into this section.</li> </ul> <p><b>Required Revisions:</b>                      The local risk assessment <b>must</b> identify and describe the hazards likely to affect the area. It is critical that the plan identify all the natural hazards that can affect the jurisdiction, because the hazard identification is the foundation for the plan's risk assessment, which in turn is the factual basis for the mitigation strategy. The plan must address any hazards that have been eliminated as a threat. <b>The updated plan must include levee failure as a hazard and address any changes in the identified hazards from the previous plan. See Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 30 – 31.</b></p>	X	

6. Profiling Hazards

SUMMARY SCORE X

**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	
			NOT MET	MET
A. Does the risk assessment identify the location (i.e., geographic area affected) of each natural hazard addressed in the new or updated plan?	Section 2 pp 24-72	<p>The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. The following issues must be addressed.</p> <ul style="list-style-type: none"> <li>• Refer to Element A above regarding the addition of levee failure as a hazard.</li> <li>• All hazards are assessed as County wide, however hazards such as flooding, dam and levee failure boundaries would be jurisdiction(s) specific.</li> <li>• For flooding, FIRM maps were provided for the County, however <b>should</b> also be provided for the remaining Cities. If maps are not going to be used to identify the hazard location then a description of the hazard area must be provided.</li> <li>• The plan also <b>must</b> address if flooding, dam or levee failure will affect the School Districts identified as jurisdictions. If impacted then provide a map or narrative description of the area affected.</li> <li>• The location (geographic area affected) <b>must</b> also be provided for dam and levee failure. The map for dams (Appendix C) does not indicate the location of the high hazard dam, or the legend is so small the location can not be determined.</li> <li>• The HAZUS map in Appendix C provides minimal if any usable information.</li> </ul> <p>The following guidance is provided:</p> <ul style="list-style-type: none"> <li>• The new or updated plan <b>must</b> provide either a narrative description or a geographical depiction (map) of the area or "hazard boundary" that is affected by <b>each</b> of the identified hazards.</li> <li>• The hazard boundaries <b>must</b> be depicted with enough detail to convey the hazard's impact on the jurisdiction.</li> <li>• The risks of hazards such as Winter Storms generally are the same throughout the jurisdiction – therefore the hazard boundary can be depicted as jurisdiction-wide.</li> <li>• The risk of hazards such as Flooding or Dam / Levee Failure should be depicted as smaller than jurisdiction-wide, and should include enough information to show how the impact differs in each jurisdiction participating in the plan.</li> <li>• If the new or updated plan depicts hazard boundaries with a map, then the appropriate references to the map <b>must</b> be located in the body of the plan. In addition, these maps <b>must</b> have the appropriate amount of "Legend" information to adequately interpret the information presented.</li> <li>• The new or updated plan <b>should</b> note any data limitations and include in the "Mitigation Strategy" actions for obtaining the data necessary to improve future risk assessments.</li> </ul>	X	

		<ul style="list-style-type: none"> <li>• When reviewing an updated plan, the reviewer should also review the previously approved plan. In those cases where the original plan included references to data limitations preventing a full hazard profile, the updated plan <b>must</b> reference those deficiencies. Continued failure to obtain the data must be explained.</li> <li>• Dam and Levee Failure Hazard Boundaries <b>must</b> be described using either a narrative or a detailed map illustrating the area below the dam that would be inundated with flood waters in the event of the dam failure. The following approaches are acceptable.</li> <li>• The narrative describing or map illustrating the area impacted by all "High Hazard" dams (as defined by state or federal regulatory agencies) <b>must</b> use the best available data. If the information is not available, a statement must be provided in the Hazard Analysis Section reflecting the lack of information. In addition, the Mitigation Strategy should include an action or project for the development of this data before the next 5-year update.</li> <li>• Some dams that are not regulated by federal or state agencies pose a significant threat based on proximity to significant population areas or critical facilities. The plan must state the name of the population area or critical facility impacted and a general understanding of the level of impact. If the information is not available, the plan must indicate a lack of data to accomplish this requirement in the Hazard Analysis section and include a Mitigation Strategy that provides for the development of this data during the next 5-year update.</li> <li>• The use of HAZUS is strongly recommended for hazard boundary depiction. <b>Missouri has performed HAZUS analyses of the counties, and the data is available to local jurisdictions.</b> If the information is not included in the plan, a recommendation for future plan updates should be in the crosswalk.</li> </ul> <p><b>Required Revision:</b> The plan <b>must</b> be revised to include the location or hazard boundary of <b>each</b> hazard impacting the jurisdiction(s). <i>See Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 32 – 35.</i></p>		
<p>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 plan</b>?</p>	<p>Section 2 pp 24-72</p>	<p>The plan provides the necessary information to information to fulfill the required elements of this section. <b>Refer to Section 5, Identifying Hazards, Element A. This element will require reevaluation once levee failure is addressed.</b></p>		<p>X</p>
<p>C. Does the plan provide information on <b>previous occurrences</b> of each hazard addressed in the <b>new or updated plan</b>?</p>	<p>Section 2 pp 24-72</p>	<p>The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. Although most hazard profiles include adequate information on previous occurrences, it appears that truncated information is provided for tornados. According to NCDC data, the county experienced four additional tornadoes between 2007 and 2008; these are not noted on page 29. Sources of information should be noted as well.</p> <p><b>Required Revisions:</b></p>	<p>X</p>	

		The plan must describe past events for <b>each identified hazard</b> in or near the jurisdiction. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 32 – 35.</i>		
		<b>Refer to Section 5, Identifying Hazards, Element A. This element will require reevaluation once levee failure is addressed.</b>		
D. Does the plan include the <b>probability of future events (i.e., chance of occurrence)</b> for each hazard addressed in the <b>new or updated plan?</b>	Section 2 pp 24-72	The plan provides the necessary information to fulfill the required elements of this section.		X
		<b>Refer to Section 5, Identifying Hazards, Element A. This element will require reevaluation once levee failure is addressed.</b>		
<b>SUMMARY SCORE</b>			X	

**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	
			NOT MET	MET
A. Does the new or updated plan include an overall summary description of the jurisdiction's vulnerability to each hazard?	Section 2 pp 64-78	<p>The plan does not provide the necessary information to fulfill the required elements of this section. The plan <b>should</b> describe any changes that have occurred regarding vulnerability from the previously approved plan. For example have homes, critical facilities, etc been removed from flood prone areas? Do communities have fewer mobile homes which are more vulnerable to high winds and tornadoes? The following guidance is provided:</p> <ul style="list-style-type: none"> <li>The plan <b>must</b> include a general discussion, by type of hazard, of each jurisdiction's vulnerability to each hazard. This is a description of each hazard's impact on the community and its vulnerable structures. Vulnerable structures are those located within hazard boundaries, such as flood prone areas.</li> <li>The narrative discussion should be in a summary format and must describe the types of structures, including but not limited to buildings, infrastructure, critical facilities, structures that house the elderly, and low- to moderate-income housing.</li> <li><b>This description is a general discussion and not meant to be applied in detail regarding individual buildings. Examples are older homes not built to code are more vulnerable to certain hazards, young and elderly populations are more vulnerable to extreme temperatures.</b></li> <li>The summary can be presented in terms of dollar value or percentages of damage.</li> <li>The plan should note data limitations and include in the "mitigation strategy" actions for obtaining the data necessary to complete and improve future vulnerability assessments.</li> <li><b>The updated plan should describe any changes that have occurred from the previously approved plan. The plan should include updates to structural inventories, building development, jurisdictional annexes, shifts in high-risk populations, and completed</b></li> </ul>	X	

		<p>mitigation actions from the previously approved plan that have reduced vulnerability.</p> <ul style="list-style-type: none"> <li>If the previously approved plan noted data deficiencies, the updated plan <i>must</i> discuss whether the data was obtained. Unresolved data deficiencies must be explained.</li> </ul> <p><b>Required Revisions:</b> The plan must describe any changes that have occurred regarding vulnerability from the previously approved plan. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 36 – 38.</i></p>		
B. Does the new or updated plan address the impact of each hazard on the jurisdiction?	Section 2 pp 24-78	The plan provides the necessary information to information to fulfill the required elements of this section. Refer to Section 5, Identifying Hazards, Element A. This element will require reevaluation once levee failure is addressed.		X
			X	

**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	
			NOT MET	MET
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of repetitive loss properties located in the identified hazard areas?	Appendix D	<p>The plan provides the necessary information to fulfill the required elements of this section.</p> <p><b>Note:</b> Appendix D and Table 2.5 page 34 indicates two properties (one in Co., one in Tarkio) have repetitive loss, however reviewer researched Bureaunet which indicates three properties (non-residential) with Tarkio addresses have rep. loss. The information in Bureaunet was dated 7/31/09 while the data in provided in the plan was dated 1/1/09.</p> <p><b>Recommended Revision:</b> The State Emergency Management Agency should be contacted regarding rep. loss and the latest data available should be used for plan development.</p>		X
				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	
			NOT MET	MET
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?	Section 2 pp 73-78	<p>The plan does not provide the necessary information to fulfill the required elements of this section.</p> <ul style="list-style-type: none"> <li>The vulnerability for the total county inventory of types and numbers structures is provided which is appropriate for all hazards identified as countywide (drought, severe winter weather, heat wave, etc).. However, for hazards which have hazard boundaries (flooding, dam failure and levee failure) the plan must provide the <b>types and numbers of existing buildings, infrastructure, and critical facilities</b> located in those identified hazard areas for <b>each jurisdiction</b> impacted. HAZUS analysis for each jurisdiction including building stock would help meet this requirement.</li> <li>Appendix C, HAZUS map and building stock information is only for the County and the legend is so small little information is obtainable from the analysis.</li> <li>Critical facilities information must be provided for <b>all</b> jurisdictions. Appendix C only provides information only for the County.</li> </ul> <p>The following guidance is provided:</p> <ul style="list-style-type: none"> <li>The vulnerability of <b>each</b> participating jurisdiction <b>must</b> be described, by hazard, in terms of the types and numbers of existing structures.</li> <li>This information list <b>should</b> be based on an inventory of buildings, infrastructure, transportation systems, hazardous materials facilities, historic/cultural areas, and critical facilities located within identified hazard boundaries.</li> <li>Buildings can be discussed in terms of their broad usage categories, such as residential, commercial, industrial, recreational, educational, governmental, etc.</li> <li>The plan <b>should</b> document the process and sources of information used to identify structures.</li> <li>If a jurisdiction is just starting in the development of a Risk Assessment, this element should concentrate on the known resources, such as the Municipal Buildings and Infrastructures.</li> <li>The plan <b>should</b> note any data limitations and identify and include in the "mitigation strategy" actions for obtaining the data necessary to complete and improve future vulnerability assessments.</li> <li><b>An updated plan must include a current inventory of buildings, infrastructure, and critical facilities located within identified hazard boundaries.</b></li> </ul> <p><b>Required Revisions:</b>                      The plan <b>must</b> describe vulnerability by hazard, in terms of the types and numbers of <b>existing</b> buildings, infrastructure and critical facilities located in identified hazard areas.                      See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 42 – 44.</i></p>	X	

<p>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?</p>	<p><b>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</b></p> <p>The plan does not provide the necessary information to fulfill the required elements of this section. It is not required, at this time; to meet the requirements of this element to obtain approval of a plan. However, the following guidance is provided.</p> <ul style="list-style-type: none"> <li>• If the jurisdiction has or is undergoing a capital improvement program, a comprehensive plan initiative, or a growth study, this information should be captured in the hazard mitigation plan. The information should be discussed in terms of vulnerability to the identified hazard events.</li> <li>• This element should include consideration of the types and numbers of future buildings, infrastructure and critical facilities in the categories of residential, commercial, public and industrial construction.</li> </ul> <p><b>Recommended Revisions:</b>                  The plan should describe vulnerability in terms of the types and numbers of future buildings, infrastructure and critical facilities located in the identified hazard areas. The community should determine how best to indicate structures that are vulnerable to more than one hazard. The information on future structures may be based on their comprehensive plan or land use plan. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 42 – 44.</i></p>	X	
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	
			NOT MET	MET
<p>A. Does the new or updated plan estimate potential dollar losses to vulnerable structures?</p>	<p>Pp. 74 - 78</p>	<p><b>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</b></p> <p>The plan does not provide the necessary information to fulfill the required elements of this section. The plan provides the information for the total County however should be broken down for each jurisdiction. It is not required, at this time; to meet the requirements of this element to receive a plan approval. However, the following guidance is provided.</p> <ul style="list-style-type: none"> <li>• The plan should provide the potential dollar losses to vulnerable structures.</li> <li>• The planning team should determine the most likely event for each hazard, and estimate</li> </ul>	X	

		<p>the losses for that event. The team can identify those parts of the planning area that would suffer the greatest losses.</p> <ul style="list-style-type: none"> <li>• The plan could list potential losses by building categories. (i.e., residential, business, municipal.)</li> <li>• Dollar losses should include structural, contents, and functional losses.</li> <li>• Structural loss is a percentage of the Replacement Value multiplied by the Percentage of Damage.</li> </ul> <p><b>The updated plan should reflect changes that have occurred in the jurisdiction in the structural inventory. It should also include an explanation of any new methodology used in estimated potential dollar losses. Data deficiencies noted in the original plan should be resolved, or the reason for the continued lack of data should be explained.</b></p> <p><b>Recommended Revisions:</b>                  The plan should include an estimate of losses for the identified vulnerable structures. An estimate should be provided for each hazard and should include, when resources permit, structure contents and function losses to present a full picture of the total loss for each asset. Where data are limited, the planning team can select the most likely event for each hazard and estimate the losses for that event. In this way, the planning team can identify parts of the jurisdiction that could suffer the greatest losses. <i>See Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 45 – 47.</i></p>		
B. Does the new or updated plan describe the methodology used to prepare the estimate?	Section 2, pp 73-78	The plan provides the necessary information to fulfill the required elements of this section.		X
			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	
			NOT MET	MET
A. Does the new or updated plan describe land uses and development trends?	Section 2 pp 87-88	<p><b>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</b></p> <p>The plan does not provide the necessary information to fulfill the required elements of this section. It is not required, at this time; to meet this element to receive an approved plan. However, the following guidance is provided.</p>	X	

		<ul style="list-style-type: none"> <li>The plan should include discussion of future land uses and types of development occurring or likely to occur in the jurisdiction.</li> <li>The element should provide a discussion regarding the economic development issues for the community.</li> </ul> <p><b>Recommended Revisions:</b>                  The plan should provide vulnerability in terms of a general overview of land uses and development trends within the community so that mitigation options can be considered in future land use decisions. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 47 – 49.</i></p>		
			X	

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	
			NOT MET	MET
A. Does the new or updated plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?		The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. The plan must provide a risk assessment for each jurisdiction impact by hazards that are not countywide, such as flooding, dam and levee failure. This would include the City(s) and School Districts represented by the plan. A FIRM map for each City would meet this requirement for flooding. A HAZUS analysis or narrative discussion for dam and levee failure could meet this requirement for each jurisdiction. The following guidance is provided: <ul style="list-style-type: none"> <li>The multi-jurisdictional plan <b>must</b> present information for the planning area as a whole as described in the previous paragraphs of this guidance. However, where hazards and associated losses occur only in portions of the overall planning area, this information <b>must</b> be attributed to the particular jurisdictions in which they occur. For example, one jurisdiction might have levees and another might not. One jurisdiction might have a heavy concentration of mobile homes vulnerable to tornadoes, while another might not.</li> <li>Each jurisdiction participating in the plan <b>must</b> provide a discussion of unique conditions within the jurisdiction that differ from the overall area. Further, where unique construction characteristics or development trends occur, they <b>should</b> be indicated on the plan so that appropriate mitigation actions are considered. In those instances where no differences exist between the individual jurisdictions, this should be stated.</li> <li>For updated plans, if new hazards have been identified in the multi-jurisdictional risk assessment, the plan <b>must</b> attribute these new hazards to the appropriate jurisdiction or to the planning area as a whole.</li> </ul>	X	

		<b>Required Revision:</b> Each jurisdiction <i>must</i> identify and assess all risks that are not common to the entire planning area. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 50 – 51.</i>		
<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	
			NOT MET	MET
A Does the new or updated plan include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards?	Section 4 pp 96-98	The plan provides the necessary information to fulfill the required elements of this section.		X
<b>SUMMARY SCORE</b>				X

**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	
			NOT MET	MET
A. Does the new or updated plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?	Section 4 pp 92 & 105-109	The plan provides the necessary information to fulfill the required element of this section. Refer to Section 5, Identifying Hazards, Element A. This element may require reevaluation once levee failure is addressed.		X

B. Do the identified actions and projects address reducing the effects of hazards on new buildings & infrastructure?	Section 4 pp 105-109	The plan provides the necessary information to fulfill the required elements of this section.		X
C. Do the identified actions and projects address reducing the effects of hazards on existing buildings and infrastructure?	Section 4 pp 105-109	The plan provides the necessary information to fulfill the required elements of this section.		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	
			NOT MET	MET
A. Does the new or updated plan describe the jurisdiction (s) participation in the NFIP?	Section 3 pp 88	The plan provides the necessary information to fulfill the required elements of this section.		X
B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?		<p>The plan <b>does not</b> provide the necessary information to fulfill the required elements of this section. The plan identifies several actions pertaining to flooding, however nothing addresses continued NFIP compliance. The following guidance is provided:</p> <ul style="list-style-type: none"> <li>• Each NFIP jurisdiction <b>must</b> identify, analyze, and prioritize actions related to continued compliance with the NFIP. Stating that the community will continue to comply with the NFIP is not enough. Compliance includes, but is not limited to, the following:</li> <li>• Adoption and enforcement of floodplain management requirements, including regulating all new construction and improvement of existing construction located in Special Flood Hazard Areas (SFHAs).</li> <li>• Floodplain identification and mapping, as well as requests for map updates, etc.</li> <li>• Description of floodplain monitoring activities.</li> </ul> <p>Communities that do not participate in the NFIP can meet this requirement by including in the plan a description of the reasons for non-participation.</p> <p>Jurisdictions are encouraged to consider additional activities going beyond NFIP participation, such as described in the Community Rating System Coordinator's Manual (FIA-15/2007) (see</p>	X	

	<p><a href="http://training.fema.gov/EMIWeb/CRS/">http://training.fema.gov/EMIWeb/CRS/</a>). Participation in FEMA's Cooperating Technical Partners (CTP) program to increase local involvement with floodplain mapping is also encouraged.</p> <p><b>Required Revision:</b>                  The plan <i>must</i> indicate the community(s) will continue to participate in the NFIP and also indicate if any changes have occurred in NFIP participation since the original plan. See <i>Local Multi-Hazard Mitigation Planning Guidance (July 2008) pages 61 - 62.</i></p>		
<b>SUMMARY SCORE</b>			X

**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	
			NOT MET	MET
A. Does the new or updated mitigation strategy include how the actions are prioritized? (For example, is there a discussion of the process and criteria used?)	Section 4 pp 90-95 & 105-109	The plan provides the necessary information to fulfill the required elements of this section.		X
B. Does the new or updated 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?	Section 4 pp 105-109	The plan provides the necessary information to fulfill the required elements of this section; however, Table 4.4 seems to indicate that all actions will be completed in 2009, regardless of high, medium or low priorities.  <b>Recommended Revision:</b> Please clarify priority/date or timeframe language.		X
C. Does the new or updated prioritization process include an emphasis on the use of a cost-benefit review to maximize benefits?	Section 4 pp 99	The plan provides the necessary information to fulfill the required elements of this section. The plan meets minimum requirements for this element, however for future updates the following guidance is provided:  An economic evaluation is essential for selecting one or more actions from among many competing ones. More is needed in the plan than a statement that the economic costs and		X

		benefits were considered. The requirement is met as long as the economic considerations are summarized in the plan as part of the community's analysis. Among ways to address this requirement are: <ul style="list-style-type: none"> <li>Assessing the economic impact of one action compared to another.</li> <li>Showing how one type of action costs more than another to achieve the same benefit.</li> <li>Showing that funding is available for one type of action but not another.</li> <li>Demonstrating that the economic goals of your community are better served by one action instead of another.</li> </ul>		
D. Does the updated plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (i.e., deferred), does the updated plan describe why no changes occurred?	Section 4 pp 93-94	The plan provides the necessary information to fulfill the required elements of this section.		X
<b>SUMMARY SCORE</b>				X

**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	
			NOT MET	MET
A Does the new or updated plan include identifiable action items for each jurisdiction requesting FEMA approval of the plan?	Section 4 pp 105-109	The plan provides the necessary information to fulfill the required element of this section. Refer to Section 5, Identifying Hazards, Element A. This element may require reevaluation once levee failure is addressed.		X
B. Does the updated plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (i.e., deferred), does the updated plan describe why no	Section 4 pp 94-95	The plan provides the necessary information to fulfill the required elements of this section.		X

changes occurred?				
<b>SUMMARY SCORE</b>				<b>X</b>

**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 new or updated plan describe the method and schedule for <b>monitoring</b> the plan, including the responsible department?	Section 4 pp 101-104	The plan provides the necessary information to fulfill the required elements of this section.		<b>X</b>
B. Does the new or updated plan describe the method and schedule for <b>evaluating</b> the plan, including how, when and by whom (i.e. the responsible department)?	Section 4 pp 101-104	The plan provides the necessary information to fulfill the required elements of this section.		<b>X</b>
C. Does the new or updated plan describe the method and schedule for <b>updating</b> the plan within the five-year cycle?	Section 4 pp 101-104	The plan provides the necessary information to fulfill the required elements of this section.		<b>X</b>
<b>SUMMARY SCORE</b>				<b>X</b>

**19. Incorporation into Existing Planning Mechanisms**

- **Multihazard 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 plan identify other local planning mechanisms available for incorporating the requirements of the mitigation plan?	Section 3 pp 80-88	The plan provides the necessary information to fulfill the required elements of this section.		X
B. Does the plan include a process by which the local government will incorporate the requirements in other plans, when appropriate?	Section 3 pp 80-88	The plan provides the necessary information to fulfill the required elements of this section. Minimal information is provided to meet this requirement; however at the next plan update additional information must be provided describing the process.		X
C. Does the updated 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?	Section 3 pp 80-88	The plan provides the necessary information to fulfill the required elements of this section.		X
<b>SUMMARY SCORE</b>				X

**20. 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 new or updated plan explain how continued public participation will be	Section 4 pp 103-104	The plan provides the necessary information to fulfill the required elements of this section.		X

**MULTI-JURISDICTION HAZARD MITIGATION PLAN REVIEW CROSSWALK**      **1st Review**      **FEMA Region VII**  
**Atchison County**      **MISSOURI**      **NOT APPROVED**

obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)				
<b>SUMMARY SCORE</b>				<b>X</b>

