

Local Mitigation Plan Review and Approval Status

Jurisdiction: Houston-Galveston Area Council		Title of Plan: Houston-Galveston Area Council Regional Hazard Mitigation Plan-2011 Update		Date of Plan: April 15 2011			
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State Reviewer: Maureen Donnelley		Title: Mitigation Specialist		Date: March 12, 2012			
FEMA Reviewer: David Reiff		Title: HM Community Planner		Date: September 4, 2012			
Date Received in FEMA Region VI							
Plan Not Approved		September 5, 2012 (Approvable Pending Adoption)					
Plan Approved							
Jurisdiction:		DFIRM		NFIP Status*			
		In Plan	NOT in Plan	Y	N	N/A	CRS Class
1. Houston-Galveston Area Council						X	
2. Austin County				X			
3. City of Bellville				X			
4. Brazos Country				X			
5. City of Industry				X			
6. Town of San Felipe				X			
7. City of Sealy				X			
8. City of Wallis				X			
9. Brazoria County				X			

LOCAL HAZARD MITIGATION PLAN REVIEW CROSSWALK

FEMA REGION VI

Jurisdiction: Houston-Galveston Area Council, Texas

10. City of Alvin			X			
11. City of Angelton					X	
12. City of Bailey's Prairie			X			
13. Village of Bonney				X		
14. City of Brazoria			X			
15. City of Brookside Village			X			
16. City of Clute			X			
17. City of Danbury			X			
18. City of Freeport			X			
19. City of Hillcrest Village			X			
20. Town of Holiday Lakes			X			
21. City of Iowa Colony			X			
22. City of Jones Creek			X			
23. City of Lake Jackson			X			
24. City of Liverpool			X			
25. City of Manvel			X			
26. City of Oyster Creek			X			
27. City of Quintana			X			
28. City of Richwood					X	
29. Village of Surfside Beach			X			
30. City of Sweeney			X			
31. Velasco Drainage District						
32. Chambers County						

33. Chambers-Liberty Counties Navigation District						
34. City of Anahuac						
35. City of Beach City						
36. City of Cove						
37. City of Mont Belvieu						
38. City of Old River-Winfree						
39. Trinity Bay Conservation District						
40. Liberty County						
41. City of Ames						
42. City of Cleveland						
43. City of Daisetta						
44. City of Dayton						
45. City of Dayton Lakes						
46. City of Devers						
47. City of Hardin						
48. City of Kenefick						
49. City of Liberty						
50. City of North Cleveland						
51. City of Plum Grove						
52. Montgomery County						
53. City of Conroe						
54. City of Cut and Shoot						
55. City of Magnolia						

56. City of Montgomery						
57. City of Oak Ridge North						
58. City of Panorama Village						
59. City of Patton Village						
60. Town of Roman forest						
61. City of Shenandoah						
62. City of Splendora						
63. City of Stagecoach						
64. City of Willis						
65. City of Woodbranch Village						
66. The Woodlands Township						
67. Town of Woodloch						
68. Walker County						
69. City of Huntsville						
70. City of New Waverly						
71. City of Riverside						

72. Waller County						
73. City of Brookshire						
74. City of Hempstead						
75. City of Pattison						
76. Town of Pine Island						
77. City of Prairie View						
78. City of Walker						

* 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.

Prerequisite(s) (Check Applicable Box)	NOT MET	MET
1. Adoption by the Local Governing Body: §201.6(c)(5) OR		NA
2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5) AND	X	
3. Multi-Jurisdictional Planning Participation: §201.6(a)(3)		X
Planning Process	N	S
4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)		X
Risk Assessment	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
Plan Maintenance Process	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
Additional State Requirements*	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

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 new or updated plan?				N/A
B. Is supporting documentation, such as a resolution, included?				N/A
SUMMARY SCORE				N/A

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?	P 1:2, 3, 4, 2:1, 2	P 1-3 and 2-2 specific the plan includes the 78 Jurisdictions. P 1-2 specific 70 municipalities while P 1-4 and 2-1 specific 7 counties and 70 municipalities. Required Revision: Clarify discrepancy	X	
B. For each jurisdiction, has the local governing body adopted the new or updated plan?	P 1-4, 2-5	The plan has not been adopted by the local governing bodies of the participating jurisdictions. All participating jurisdictions will adopt the Plan upon FEMA's notification of final approval. Required Revision: When the mitigation planning process is completed, the local governing body for each jurisdiction must formally adopt the Plan before FEMA approval.	X	

C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?	Not found	The plan does not include sample resolutions for each jurisdiction. All participating jurisdictions must adopt the Plan upon FEMA's notification of final approval. Required Revision: Include a signed and dated copy of supporting documentation of adoption for each jurisdiction.	X	
SUMMARY SCORE			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?	P 2:4-5	The plan described how each jurisdictions participated in the planning process by performing specific tasks and developed locally specific mitigation actions for their jurisdictions Each team member is also responsible for ensuring their jurisdiction formally adopts the plan upon FEMA approval.		X
B. Does the updated plan identify all participating jurisdictions, including new, continuing, and the jurisdictions that no longer participate in the plan?	P 1-3, 2-1	The plan includes all original jurisdictions from the 2006 plan except Galveston County and cities there in. Galveston County elected to complete an independent plan.		X
SUMMARY SCORE				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 new or updated plan?	P 2:1-12	The plan provided a narrative description of the process followed to prepare the plan.		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.?)	P 2:2-3, 2:5-12	The plan identifies who was involved in the planning process. This includes members of the planning team and stakeholders. The meetings were led by HGAC, Disaster Recovery Coordinator.		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?)	P 2-5 Appendix D	The public input was sought through an open meeting held for a period of 15 days. Meetings were advertised through region and local newspapers, County emergency Management Coordinators were contacted to distributed public notices to their respective cities, towns and villages and placement at county courthouses. Recommended Revision: Provide a copy of newspaper ads.		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?	P 2-5	The plan discussed the opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process.		X
E. Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?	P 2:13-14	The plan describes the review and incorporation of existing plans, studies, reports, and technical information where appropriate.		X

LOCAL HAZARD MITIGATION PLAN REVIEW CROSSWALK

FEMA REGION VI

Jurisdiction: Houston-Galveston Area Council, Texas

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?	P 2:2, Appendix E	The plan document how the planning team reviewed and analyzed each section of the plan.		X
SUMMARY SCORE				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	
			N	S
A. Does the new or updated plan include a description of the types of all natural hazards that affect the jurisdiction?	P 4:1-16	The plan profiles 11 natural hazards and 2 man-made hazards that affect the participating jurisdictions		X
SUMMARY SCORE				X

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 location (i.e., geographic area affected) of each natural hazard addressed in the new or updated plan?	P 4:13, 29-34, 36, 40, 42, 56, 58, 60, 63, 66-82, 109-116, 119-123	Recommended Revision: Include more detail for the incorporated jurisdictions included in the planning area.		X
B. Does the risk assessment identify the extent (i.e., magnitude or severity) of each hazard addressed in the new or updated plan?	P 4:25, 35-36, 40-41, 56,58, 61, 63, 78, 84, 88	Recommended Revision: Include more detailed information regarding the extent of dam/levee failure.		X
C. Does the plan provide information on previous occurrences of each hazard addressed in the new or updated plan?	P 4:19-26, 35, 37-39, 31, 41,44-45, 57-59, 63-64, 83			X
D. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the new or updated plan?	P 4:6, 27, 44, 55-56, 58, 60, 63, 84, 108			X
SUMMARY SCORE				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	
			N	S
A. Does the new or updated plan include an overall summary description of the jurisdiction’s vulnerability to each hazard?	P 4: 83, 84, 345, 248, 263, 264, 274-276	The revisions provide Table 4.3-28 which demonstrate vulnerability for the counties but it does not reflect the participating incorporated jurisdictions within the counties. 5-Yr Revision:: Provide vulnerability for expansive soil for the entire planning area.		X
B. Does the new or updated plan address the impact of each hazard on the jurisdiction?	P 4:5, 62-82, 84, 263, 264, 267, 278-281	The plan includes an overall impact summary description for each hazard identified. Recommend Revision: Provide more discussion on the impact of buildings, special population, areas of high concentration of wooden home and agriculture to each jurisdiction.		X
SUMMARY SCORE				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	
			N	S
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?	P 4:134-244	Table 4.3-16 includes a list of repetitive loss properties in the participating jurisdictions.		X
SUMMARY SCORE				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 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?	P 4:94-95, 124-133, 247	The plan includes an extensive evaluation of the vulnerability of each jurisdiction's existing structures, infrastructure, and critical facilities. Recommended Revisions: Describe vulnerability to include the types and number of existing structures vulnerable to expansive soil.	X	
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?	4-273	The plan addressed vulnerability in terms of future development. However, the plan did not describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas. Recommended Revisions: Expand the discussion of vulnerability to include the types and number of future structures vulnerable to each identified hazard in the Plan.	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	
			N	S
A. Does the new or updated plan estimate potential dollar losses to vulnerable structures?	P 4:117-118, 124-132, 4:124 Appendix D	The plan includes an annualized loss estimate for each hazard except wildfire, extreme heat, winter storm, coastal erosion and expansive soil. Recommended Revision: Provide potential dollar losses to vulnerable structures for wildfire, extreme heat, winter storm, coastal erosion and expansive soil.	X	
B. Does the new or updated plan describe the methodology used to prepare the estimate?	P 4:89-96 Appendix D, P 9-10	The planning team used the three methodology assessment: both HAZUS Multi-Hazard Models, and the Southern Fire Risk Assessment System (SFRAS). The recent release of HAZUS was not available for analysis at the time of the plan update. Recommended Revision: Describe the methodology used to prepare an estimate for expansive soil.	X	
SUMMARY SCORE			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 new or updated plan describe land uses and development trends?	P 4:97-108	The plan describes describe land uses and development trends of each jurisdiction.		X
SUMMARY SCORE				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	
			N	S
A. Does the new or updated plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?	P 108-274			X
SUMMARY SCORE				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 new or updated plan include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards?	P 6:1	The plan lists five mitigation goals.		X
SUMMARY SCORE				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	
			N	S
A. Does the new or updated plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?	Appendix A, P 1-28, 1	The plan identifies a comprehensive range of mitigation actions and projects for each hazard.		X
B. Do the identified actions and projects address reducing the effects of hazards on new buildings and infrastructure?	Appendix A, P 2	The plan identifies actions and projects that address reducing the effects of hazards on new buildings and infrastructure.		X
C. Do the identified actions and projects address reducing the effects of hazards on existing buildings and infrastructure?	Appendix A, P 2, 9, 14 (City of Alvin)	The plan identifies actions and projects that address reducing the effects of hazards on existing buildings and infrastructure.		X
SUMMARY SCORE				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?	P 5:15, 17-19	All counties and 86% of municipalities in the H-GAC participate in the NFIP.		X
B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?	Appendix A, P 1 (Brazoria), 9, 12 (City of Alvin)	The plan identifies actions related to continued compliance with the NFIP		X
SUMMARY SCORE				X

16. Implementation of Mitigation Actionsrequirement: §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 new or updated mitigation strategy include how the actions are prioritized ? (For example, is there a discussion of the process and criteria used?)	P 6:5-6, Appendix A	Team member selected and prioritized mitigation actions using an overall ranking of high, moderate, or low. In addition, the plan states these rankings were given to each action based on analysis of the five factors listed on P 6-5, Table 6.2.		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?	Appendix A P 7:1	The plan addresses how the actions will be implemented and administered, including the responsible department, existing and potential resources and the timeframe to complete each action.		X
C. Does the new or updated prioritization process include an emphasis on the use of a cost-benefit review to maximize benefits?	P 6-5	The plan addresses prioritization process include an emphasis on the use of a cost-benefit review to maximize benefits		X
D. Does the updated 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 6-2, Appendix A			X
SUMMARY SCORE				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	
			N	S
A Does the new or updated plan include identifiable action items for each jurisdiction requesting FEMA approval of the plan?	Appendix A			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>i.e.</i> , deferred), does the updated plan describe why no changes occurred?	P 6-2, Appendix A			X
SUMMARY SCORE				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 new or updated plan describe the method and schedule for monitoring the plan, including the responsible department?	P 7:1	The H-GAC will be responsible for monitoring the plan. Each jurisdiction will make yearly updates to the H-GAC on the progress of their mitigations actions.		X
B. Does the new or updated plan describe the method and schedule for evaluating the plan, including how, when and by whom (<i>i.e.</i> the responsible department)?	P 7:2	The plan described the method and schedule for evaluating the plan including the responsible department.		X
C. Does the new or updated plan describe the method and schedule for updating the plan within the five-year cycle?	P 7:2, Appendix E	The plan describes the method and schedule for updating the plan within the five-year cycle.		X
SUMMARY SCORE				X

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 new or updated plan identify other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan?	P 5:8-26	The plan identifies planning mechanisms available for incorporating the mitigation requirements of the mitigation plan for all jurisdictions in the H-GAC.		X

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FEMA REGION VI

Jurisdiction: Houston-Galveston Area Council, Texas

B. Does the new or updated 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?	P 7-1	The plan includes a process of incorporating the mitigation strategy and other information contained in the plan into other planning mechanisms.		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?	P 5:1-26, 7:1	The plan explains how the mitigation strategy and other information contained in the plan was incorporated into other planning mechanisms, when appropriate?		X
SUMMARY SCORE				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 obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)	P 7:5	Efforts to involve and update the public will utilized through local media, city and/or county websites and copies of the plan will be provided to the public libraries.		X
SUMMARY SCORE				X

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	<u>Hazards Identified Per Requirement §201.6(c)(2)(i)</u>	<u>A. Location</u>		<u>B. Extent</u>		<u>C. Previous Occurrences</u>		<u>D. Probability of Future Events</u>	
	Yes	N	S	N	S	N	S	N	S
Flood	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hurricane/Tropical Storms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Thunderstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tornado	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Drought	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Extreme Heat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Winterstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Costal Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dam/Levee Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Expansive Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?

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)	§201.6(c)(2)(ii) Assessing Vulnerability: Overview	A. Overall Summary Description of Vulnerability		B. Hazard Impact		§201.6(c)(2)(ii) Assessing Vulnerability: Identifying Structures	A. Types and Number of Existing Structures in Hazard Area (Estimate)		B. Types and Number of Future Structures in Hazard Area (Estimate)		§201.6(c)(2)(ii) Assessing Vulnerability: Estimating Potential Losses	A. Loss Estimate		B. Methodology	
	Yes		N	S	N	S		N	S	N	S		N	S	N	S
	Flood		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hurricane/Thunderstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Thunderstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Tornado	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Drought	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Extreme Heat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Winterstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Costal Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dam/Level Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Expansive Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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?

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	<u>Hazards Identified Per Requirement §201.6(c)(2)(i)</u>	<u>A. Comprehensive Range of Actions and Projects</u>	
	Yes	N	S
Flood	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hurricane/Tropical Storm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Thunderstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tornado	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Drought	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Extreme Heat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Winterstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coastal Erosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dam/Levee Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Expansive Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?