

# County of Los Angeles 2025 Floodplain Management Plan Revision

1<sup>st</sup> Floodplain Management Plan (FMP) Meeting Tuesday, May 28, 2024, 1:00 p.m. to 3:00 p.m. Virtual Meeting



#### Introductions

- Group Introductions
- Review Agenda

### **Overview of Floodplain Management Plan**

- Work plan
- Timeline
- Important milestones

### The Floodplain Management Plan (FMP) Committee's Role

- FMP Committee's Purpose
- FMP Committee's Expectations
- FMP Committee's Organization
- FMP Committee's Charter

# Join the Meeting

# **Microsoft Teams Meeting**

Meeting ID: 276 533 174 967 Passcode: AwuRcs

# or Dial in by phone

+1 213-519-6402 United States, Los Angeles Phone conference ID: 912 581 088#

#### **Plan Review**

- Review Existing Floodplain Management Plan and other plans
- Discuss and Update Current Mission Statement:
  - Protect life, property, the economy and the environment of unincorporated Los Angeles
    County by identifying and communicating risks and sustainable actions to reduce flood
    hazards and thus enhance community resilience.
- Discuss and Update Current Plan Goals and Objectives (Page 2)

### **Public Outreach**

- Survey Questionnaire and Approach (see attached)
- Discussion of Survey Questionnaire FMP Committee Input
- Planning for Public Engagement Meetings
- Additional Outreach Capabilities (suggestions welcomed)
  - Websites
  - o Press/media
  - o Social Media

### **Next Committee Meeting**

- Flood Management Plan Part 1 Draft
- Repetitive Loss Area Analysis (RLAA) Part 1 Draft
- Confirm Next Meeting Date (anticipated July)

### **Action Items and Next Steps**

- Confirm Goals and Public Involvement Strategy
- Confirm FMP Committee Charter

### **Adjourn**

# 2025 Los Angeles County Comprehensive Floodplain Management Plan

These planning components all directly support one another. Goals were selected that support the mission statement, and objectives were identified that fulfill multiple goals.

### Goals

- 1. Enhance community resilience from the impacts of flood hazards.
- 2. Protect life, safety, property and economy.
- 3. Communicate to residents and stakeholders flood risk based on best available data and science.
- 4. Increase resilience of infrastructure and critical facilities from flood hazards.
- 5. Account for flood risk in land use and planning.
- 6. Preserve, enhance or restore the natural environment's floodplain functions.
- 7. Encourage the development and implementation of long-term, cost-effective and environmentally sound flood hazard mitigation projects.

### **Objectives**

- 1. Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.
- 2. Utilize best available data, science, and technologies to improve understanding of the location and potential impacts of flood hazards.
- 3. Provide state, County and local agencies and stakeholders with updated information about flood hazards, vulnerabilities, and mitigation measures.
- 4. Create a public outreach strategy.
- 5. Discourage new development in known flood hazard areas or ensure that, if development occurs in those areas, it is done in a way to minimize flood risk.
- 6. Consider open space land uses within known flood hazard areas.
- 7. Provide the highest degree of flood hazard protection at the least cost by working with environmentally friendly natural systems and by using prevention as the first priority.
- 8. Promote the retrofit, purchase and relocation of structures in known flood hazard areas, especially those known to be repetitively damaged.
- 9. Provide flood protection by maintaining flood control systems.
- 10. Sustain reliable local emergency operations and facilities during and after a flood event.
- 11. Consider climate change implications in managing flood risk.
- 12. Promote community resilience through education on flood risks, insurance and mitigation, and effective floodplain management regulation.

# Los Angeles County Floodplain Management Plan Update

## Flood Preparedness Questionnaire

This document lays out a proposed structure for the 2024 LA County FMP Flood Preparedness Questionnaire, including an introduction and closing, and question sections organized by the types of information the County is looking to gather from residents and business owners in unincorporated areas regarding their preparedness related to flood hazards, and the level of knowledge and use of tools and techniques to reduce risk and loss from flooding. The topics and questions included below are built from the previous City and County FMP surveys and will be revised based upon feedback from the project team.

After a brief introduction, each section of the survey will include some context setting language to help participants connect to and understand the questions we are asking.

The matrix below includes an explanation of the research question that each survey question seeks to answer. We also propose a survey question, format type (such as long form answer, multiple choice, rating) and response options, listed alphabetically when not a rating.

## Legend

Logic – modifies the content of the survey based on responses to indicated questions

[] - refers to text that will include a link

< > – refers to descriptive text that provides context for the project team and will be used to aid the building of the survey

### **Introduction and Closing**

The survey will include an introduction which will inform people about the Floodplain Management Plan Update and RLAA process and the purpose of the questionnaire.

## <Proposed opening text>

Los Angeles County is updating its Floodplain Management Plan, which includes projects, programs and actions the County uses to inform residents about their flood risks and to reduce future flooding to properties in unincorporated communities (areas not governed by a city, but instead by the Los Angeles County Board of Supervisors). This plan is updated every five years to make sure that residents and business owners in unincorporated communities receive the resources and services needed in the event of a flood hazard in their community.

Your thoughts will help the County better understand the types of information and resources needed in communities like yours that might be affected by flooding, and the tools and messaging that might work best to communicate with you and your neighbors in the event of a flood emergency.

This questionnaire will take about 10 minutes and you can complete it at your own pace. Please answer all the questions as best you can—responses will remain anonymous. Your input and time are greatly appreciated!

### <Proposed closing text>

Thank you for your participation! Visit the Los Angeles County Public Works website to learn more about the Plan update, [click here] < Online includes link to the public works website>

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>					
Backgroun	d				
This first set of questions will help Los Angeles County better understand how flood risks may impact you.					
	Understand whether	1. Do you live or own	Select one	□ Yes	
	respondent is a resident or	a business in a		□ No	
	business owner in a floodplain	known floodplain		□ Not Sure	
	area.	or an area that has			
		been subject to			
		flooding?			

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Determine the primary use of the property.	Is this property your residence or business?	Select one  Logic: If answered "Do you live or own" with Yes or Not Sure	<ul> <li>□ Business only</li> <li>□ Residence only</li> <li>□ Business and</li> <li>Residence/Telework</li> </ul>
	Understand whether respondent is a renter or owner.	3. Do you own or rent this property?	Select one  Logic: If answered "Do you live or own" with Yes or Unsure	□ Own □ Rent
	Understand if respondent would likely have flood insurance because they have a mortgage.	4. Do you have a mortgage on this property?	Select one  Logic: If answered "Do you own or rent this" with Own	□ Yes □ No
	Understand how long residents have lived and/or have been in the community.	5. How long have you lived or done business at this property?	Select one	<ul> <li>□ Less than 1 year</li> <li>□ 1 to 5 years</li> <li>□ 6 to 10 years</li> <li>□ 11 to 20 years</li> <li>□ More than 20 years</li> </ul>
	Determine if respondent has flood insurance.	6. Do you have flood insurance?	Select one	<ul><li>☐ Yes</li><li>☐ No</li><li>☐ Not Sure</li></ul>

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Understand why respondent has flood insurance.	7. Why did you purchase flood insurance?	Text box  Logic: If answered "Do you have flood insurance" with Yes	Write-in (limit to 25 words)
	Understand why respondents may not have flood insurance.	8. Why don't you have flood insurance?	Select all that apply  Logic: If answered "Do you have flood insurance" with No	Flood insurance does not provide enough coverage  I believe it may affect the value of my property  I don't have a mortgage; my home is paid off  I don't need it  I don't know about it/ I am not familiar with it  I have flooded before, unsure if I qualify for coverage  Insurance company will not provide coverage  It is not worth it  It is too expensive  My existing homeowners insurance provides coverage  My existing renters insurance provides coverage  My property has never flooded  My property is located on high ground

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Determine if respondents have	9. Have you had	Select one	□ Yes
	had trouble getting insurance	problems getting		□ No
	due to their flood risk.	homeowner's or		□ Not Sure
	Note: on LA City Survey, not	renter's insurance		
,	LA County Survey	due to flood risk?		
	ection introductory text>			
	and Priorities		4. 4	er e e e e e e e e e e e e e e e e e e
	tion will help the County better und	ierstand what you curren	tly know and idei	ntity your priorities regarding
11000s and the	eir associated risks.	10 When you mayed	Select one	□ Yes
	Gauge consideration of potential hazards at	10. When you moved	Select one	
	property.	into your property, did you consider		□ No □ Not Sure
	property.	the impact a		□ Not Sule
		potential flood		
		could have on that		
		property?		
	Determine if potential	11. Was the presence	Select one	□ Yes
	hazards were shared prior	of a flood hazard		□ No
	to purchase of property.	disclosed to you		□ Not Sure
		before you		
		purchased or		
		moved into your		
		property?		
	Determine if prior	12. Would the	Select one	□ Yes
	knowledge of hazards	disclosure of a		□ No
	would have impacted	flood hazard have		□ Not Sure
	respondents' decision on	influenced your		
	property.	decision to buy or		
		rent the property?		

Topic	Purpose/ Research	Questions	Questions	Response options
	Question/Information Needed	40 Hannaanaana	Format	Only many translations
	Gauge concerns about	13. How concerned	Radio button	Column headers:
	flood related hazards as	are you about the	grid – Select	□ Not concerned
	they might affect	following flood	level of	□ Somewhat concerned
	respondents' community	related hazards in	concern for	□ Concerned
	and/or property.	your community or	each hazard	□ Very concerned
		to your property?		□ Extremely concerned
				□ Not Sure
				Row headers:
				□ Climate change impacts
				□ Coastal erosion
				□ Coastal flooding
				☐ Tsunami (i.e. big sea waves
				caused by earthquakes or
				other disturbances)
				☐ Flooding from groundwater seepage
				☐ Failure of infrastructure (e.g.
				water/sewer main pipes,
				water storage tanks)
				☐ Land subsidence (i.e.
				sinking)
				☐ Mud-flow hazards
				□ Post-fire mud/debris flow
				□ River/stream/channel
				overflow
				☐ River/stream migration (i.e.
				changes in the path of
				flows)
				☐ Stream bank erosion
				☐ Urban stormwater
				flooding/Drainage issues
				☐ Other

Topic	Purpose/Research Question/Information Needed	Questions	Questions Format	Response options			
<pre><pre>cproposed se</pre></pre>	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>						
Preparednes	s, Action, and Responsibility						
The following	The following questions will be used to identify the actions you may have taken to prepare for a flood event, determine						
responsibility	and willingness to act against floods	and their associated risk					
	Gauge flood preparedness	14. How prepared is	Select one	□ Not at all prepared			
		your residence or		□ Somewhat prepared			
		business to deal		□ Adequately prepared			
		with a flood event?		□ Well prepared			
				□ Very well prepared			
				□ Not Sure			
	Understand what steps	15. Which of the	Check all	□ Identified at least 2 methods			
	respondents have taken to	following steps has	that apply	for receiving emergency			
	prepare for floods	your residence or		notifications and information			
		business taken to		during emergencies			
		prepare for a flood		□ Identified evacuation routes			
		event?		□ Identified utility shutoffs			
				□ Obtained sandbags			
				□ Prepared a disaster supply kit			
				□ Purchased flood insurance			
				☐ Stored a battery-powered radio			
				☐ Stored flashlights and			
				batteries			
				☐ Stored food and water above			
				potential flood levels			
				□ Stored medical supplies (first			
				aid kit, medications)			
				□ None			
				☐ Other (please specify)			

Topic	Purpose/ Research	Questions	Questions	Response options
	Question/Information Needed		Format	
	Determine willingness to spend to reduce flood risk	16. How much money are you willing to spend to retrofit your property to reduce risks associated with floods (e.g., elevating a structure above flood level, floodproofing a nonresidential structure, building berms or flood walls)?	Select one	<ul> <li>□ \$10,000 or above</li> <li>□ \$5,000 to \$9,999</li> <li>□ \$1,000 to \$4,999</li> <li>□ Less than \$1,000</li> <li>□ Nothing</li> <li>□ Not Sure</li> <li>□ I do not own my property</li> </ul>
	Understand what incentives would encourage respondents to retrofit their property and reduce flood risk	17. Which of the following incentives would encourage you to spend money to retrofit your property to protect against risks associated with floods?	Check all that apply	<ul> <li>□ Grant funding</li> <li>□ Insurance premium discount</li> <li>□ Low interest rate, home improvement loan</li> <li>□ Mortgage discount</li> <li>□ None</li> <li>□ Other (please specify)</li> </ul>

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Indicate priority for flood mitigation projects government agencies should consider.	18. What types of projects do you believe the County, State or Federal government agencies should consider to reduce damage and disruption from flooding?	Radio button grid  Potential alternative: change question to "Check all that apply" response	Column headers:  ☐ High ☐ Medium ☐ Low  Row headers: ☐ Buy flood-vulnerable properties, remove any buildings, and maintain the land as open space. ☐ Assist vulnerable property owners with securing funding for mitigation (measures to lessen damage from floods). ☐ Capital projects such as dams, levees, flood walls and drainage improvements. ☐ Projects that will mitigate (lessen) future flood impacts caused by climate change. ☐ Provide better information about flood risk to the public. ☐ Retrofit (modify) infrastructure, such as improving culverts, bridges, and local drainage facilities to handle more stormwater flows. ☐ Strengthen codes and regulations to include higher regulatory standards for activities in flood hazard areas. ☐ Other

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Gauge interest in preserving natural land that contain flood hazards.	19. Do you support the preservation of natural land that contains a flood hazard?	Select one	<ul> <li>□ I support for all natural lands</li> <li>□ I support as long as it is not on my property</li> <li>□ I do not support</li> </ul>
<pre><introductor< pre=""></introductor<></pre>	y instructions for the following questic	ons> Please indicate how	you feel about	the following statements.
	Determine willingness to accept a buyout from a public agency if respondent lives in a high flood hazard area.	20. If my property were located in a designated "high flood hazard" area or had received repetitive damages from flood events, I would consider a "buyout" offered by a public agency.	Select one	□ Strongly Disagree □ Somewhat Disagree □ Neither Agree nor Disagree □ Somewhat Agree □ Strongly Agree
	Understand how respondents feel about the government's responsibility to provide education and awareness programs for flood risk mitigation.	21. It is the responsibility of government (local, state and federal) to provide education and awareness programs that promote actions by the community to reduce their exposure to the risks associated with flood hazards.	Select one	<ul> <li>□ Strongly Disagree</li> <li>□ Somewhat Disagree</li> <li>□ Neither Agree nor Disagree</li> <li>□ Somewhat Agree</li> <li>□ Strongly Agree</li> </ul>

Topic	Purpose/ Research	Questions	Questions	Response options
	Question/Information Needed		Format	
	Gauge respondents' personal responsibility for flood risk mitigation	22. It is my responsibility to educate myself and take actions that will reduce my exposure to the risks associated with flood hazards.	Select one	<ul> <li>□ Strongly Disagree</li> <li>□ Somewhat Disagree</li> <li>□ Neither Agree nor Disagree</li> <li>□ Somewhat Agree</li> <li>□ Strongly Agree</li> </ul>
<pre><pre><pre><pre>proposed s</pre></pre></pre></pre>	section introductory text>			
Communica				
The following	g questions will help us determine the	most efficient and effecti	ve way to com	municate with you.
	Understand which resources respondents have found useful to prepare for a flood event.	23. Which of the following has provided you with useful information to help you prepare for a flood event?	Check all that apply	<ul> <li>□ Government sponsored resources (e.g., federal, state, or local)</li> <li>□ Alert/Notification sign-ups</li> <li>□ Booths at fairs/events</li> <li>□ Mailers</li> <li>□ Websites</li> <li>□ Homeowners Associations</li> <li>□ Meetings regarding flood preparedness</li> <li>□ News outlets or other multimedia platforms</li> <li>□ Personal experience</li> <li>□ Schools or other academia</li> <li>□ None</li> <li>□ Other (please specify)</li> </ul>

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Gauge availability and access to information about flood risks and hazards.	24. Information about the risks associated with flood hazards is readily available and easy to locate.	Select one	<ul> <li>□ Strongly Disagree</li> <li>□ Somewhat Disagree</li> <li>□ Neither Agree nor Disagree</li> <li>□ Somewhat Agree</li> <li>□ Strongly Agree</li> </ul>
				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Determine awareness of current FMP's programs and policies.	25. Are you aware of the current Floodplain Management Plan's programs and policies to reduce flooding hazards? (For example, the National Flood Insurance Program, Flood Alerts and Warnings, Disaster Assistance and Grant programs)	Select one	□ Yes □ No

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Understand respondents' preferences for receiving information.	26. Choose up to five (5) of the following methods you think are most effective for providing flood hazard and disaster information:	Check all that apply <li>limit to 5 responses&gt;</li>	<ul> <li>□ Books</li> <li>□ Chamber of Commerce</li> <li>□ Community Emergency Response Training (CERT) Classes</li> <li>□ Community Events</li> <li>□ Faith-based Institutions</li> <li>□ Fire Department/Rescue</li> <li>□ Informational Brochures</li> <li>□ Internet</li> <li>□ Law Enforcement</li> <li>□ Local Government Newsletters</li> <li>□ Newspaper</li> <li>□ Outdoor Advertisements</li> <li>□ Public Awareness Campaign (e.g., Flood Awareness Week, Winter Storm Preparedness Month)</li> <li>□ Public Library</li> <li>□ Public Meetings</li> <li>□ Radio Ads</li> <li>□ Radio News</li> <li>□ Red Cross Information</li> <li>□ Schools/Academic Institutions</li> <li>□ Social Media (Twitter/X, Facebook, Nextdoor, etc.)</li> <li>□ Telephone Book</li> <li>□ TV Ads</li> <li>□ TV News</li> <li>□ Word of Mouth</li> <li>□ Workshops</li> <li>□ Other (please specify)</li> </ul>

Topic	Purpose/ Research	Questions	Questions	Response options
	Question/Information Needed		Format	
	Inform on best methods for urgent	27. Which methods are	Check all	□ Cell phone
	communications.	best for you and	that apply	□ Email
		your residence or		□ Land-line telephone
		business to receive		□ Radio
		urgent information		□ Social network (Twitter/X,
		or instructions for		Facebook, etc.)
		action?		☐ Text message
				□ TV
	Identify need for specialized	28. Do you have any	Select one	□ Yes
	response	access or functional		□ No
		needs within your		
		residence or place		
		of business that		
		would require early		
		warning or		
		response during disasters?		
	Gauge willingness to be	29. Would you like	Select one	□ Yes
	contacted by personnel for the	personnel from the	Ocicot one	□ No
	County's Office of Emergency	Los Angeles		□ N/A
	Management regarding access	County Office of		
	and functional needs.	Emergency		
		Management to		
	Note: on LA City Survey, not LA	contact you		
	County Survey	regarding your		
		access and		
		functional needs?		

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options		
	Gather email for respondents who wish to be contacted by personnel from the County's Office of Emergency Management regarding their access and functional needs.	30. Provide your email below	Write-in  Logic: If answered "Would you like personnel from the" with Yes	Text box		
Additional C Los Angeles	<proposed introductory="" section="" text=""> Additional Comments Los Angeles County would like to hear your thoughts related to the Floodplain Management Plan update. Please share any additional thoughts or comments you may have related to this effort.</proposed>					
	Gather any additional feedback or thoughts respondents may have related to the Plan update.	31. Do you have any additional comments?	Write-in	Text box		
About You	ection introductory text> g questions are optional. Providing a		nderstand who	m we have reached.		
	Understand where respondents live.	32. Please provide your zip code, nearest cross streets, or neighborhood.	Write-in	Text box		

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Understand which age range respondents fall under.	33. Please indicate your age range:	Drop down: Select one	<ul> <li>□ Under 18</li> <li>□ 18 to 30</li> <li>□ 31 to 40</li> <li>□ 41 to 50</li> <li>□ 51 to 60</li> <li>□ 61 or older</li> <li>□ Prefer not to answer</li> </ul>
	Understand the gender of respondents.	34. Please indicate your gender:	Drop down: Select one	<ul> <li>□ Male</li> <li>□ Female</li> <li>□ Transgender Female</li> <li>□ Transgender Male</li> <li>□ Gender Variant/Non-conforming</li> <li>□ Not listed</li> <li>□ Prefer not to answer</li> </ul>
	Understand the highest level of education attained by respondents.	35. Please indicate your highest level of education.	Drop down: Select one	<ul> <li>□ Grade school/no school</li> <li>□ Some high school</li> <li>□ High school graduate/GED</li> <li>□ Some college/Trade school</li> <li>□ College degree</li> <li>□ Graduate degree</li> <li>□ Other (please specify)</li> <li>□ Prefer not to answer</li> </ul>
	Understand the gross household income of respondents.	36. How much is your gross household income?	Drop down: Select one	<ul> <li>□ \$20,000 or less</li> <li>□ \$20,001 to \$49,999</li> <li>□ \$50,000 to \$74,999</li> <li>□ \$75,000 to \$99,999</li> <li>□ \$100,000 to \$249,999</li> <li>□ \$250,000 or more</li> <li>□ Prefer not to answer</li> </ul>

Topic	Purpose/ Research Question/Information Needed	Questions	Questions Format	Response options
	Understand the primary language	37. Please indicate	Drop down:	□ Armenian
	spoken at home by respondents.	the primary	Select one	□ Chinese
		language spoken		□ English
		in your household.		□ Korean
				□ Spanish
				□ Filipino (Tagalog)
				□ Vietnamese
				☐ Other (please specify)
				□ Prefer not to answer



# LA County Floodplain Management Plan Update Flood Preparedness Questionnaire Approach

### Introduction

The Los Angeles County Department of Public Works is updating its Floodplain Management Plan (FMP). An FMP provides analysis about communities at risk of flood hazards, and includes the projects, programs and actions the County uses to inform residents about their flood risks and to reduce future flooding to properties in unincorporated communities.

### Position Statement and Research Question (What we are trying to solve)

The County is required to update its management plan every five years, in part to ensure that communities experiencing flooding or that are at risk of flood hazards have access to the tools and information they need to deal with and reduce the risks of flooding on their properties and in their communities. It is important that FMP policies, guidelines, and recommendations reflect the diversity of needs of unincorporated communities considered at risk for flood hazards.

The project team is looking to re-use and revise the survey used during the last plan update in 2020, and ensure that the following goals are met:

- Assess people's knowledge and understanding of flood hazards and related risks.
- · Gauge community readiness for flood hazard events.
- Explore perceptions and expectations related to the need and responsibility for flood risk abatement.
- Determine the community's need for, and for what kinds of, resources and tools to learn about flood risks, flood hazard abatement, and how to receive urgent information during potential flood hazard emergencies.

### Methodology

**Population** – Target population that we want to find out about

Residents and Business owners in Los Angeles County Unincorporated communities

### Perspectives to explore:

- Property Owners/Renters
- Recent/Long-time residents
- Lower income/higher income (responses on last survey were largely from higher income individuals)
- RLAs/other unincorporated areas

**Sample** – The survey in this project will include a self-selected sample of respondents, meaning that participants volunteer to participate, and determine on their own whether the survey and questions relate to their experience. Responding to survey questions will be optional. This kind of non-randomized sample will not achieve a statistical representation of the population and

results will not be generalized to the entire population. Demographic questions will help us understand the makeup of the response, compare it to County unincorporated community demographics, and breakdown results to compare perspectives within the pool of respondents.

### *Type* – Questionnaire

The questionnaire(s) will be open access and readily available both digitally and on paper to maximize the response. A larger response will increase accuracy (closer to the population as a whole) and may surface more useful ideas.

- Creates access and resulting in a larger response
- Can view gaps in participation among certain groups, and the team can do targeted outreach to address gaps
- The team can create an introductory question to ask online respondents whether they live or work in unincorporated communities to make sure participants live or work in the areas where we are looking for information.

### **Question Design**

- Types of questions We propose to follow the range of question types from the previous survey, including multiple choice and rating questions, and a few long form questions based upon the types of responses we are looking for. The MIG team has also included several follow-up questions to yes/no questions in the survey.
  - Closed ended questions More quantitative, numerical data can be analyzed to identify patterns and trends.
    - Binary
    - Scale / slider
    - Single option lists
    - Multiple option lists with or without response limits
  - Open ended open ended questions will be used sparingly, only where the added effort in interpreting results will be beneficial to the goals mentioned in the position statement above.
  - Logic questions follow yes/no questions to gather more information from respondents such as the reason for their previous answer.
- Phrasing The phrasing on the survey framework draft largely reflects that of the
  previous survey. The MIG team suggested including explanations for terms and phrases
  such as "flood hazard," "vulnerable property," "capital projects," "mitigation" and
  "retrofit infrastructure" that the average community member might not understand.
  Definitions and suggested edits to wording provided by Los Angeles County Public Works
  were added to the survey questionnaire document.
- Ordering and layout the MIG team rearranged the order of the previous LA County FMP survey to group questions by theme:
  - Introduction and Background: responses to these questions may provide information about respondents including whether a resident or business owner and whether they have flood insurance

- Awareness and Priorities: responses to these questions may identify what respondents know about flood hazards and gather priorities related to risks and hazards
- Preparedness, Action and Responsibility: responses to these questions may identify what actions respondents may have taken related to flood hazards, determine who they see as responsible for mitigation and gauge their willingness to act to against floods and associated risks.
- Communication: responses to these questions will provide information about the best methods for providing information and for reaching community members during an urgent event.
- Additional comments: the project team proposes providing a space for respondents to provide any additional information they don't feel is captured by questions in the survey.
- Demographic information ("About you"): these responses will help the project team analyze responses for key demographics we are hoping to reach or to determine if there are particular tools and resources needed by segments of the community.
  - Note: several of these questions include answer choice groupings that are not standardized to U.S. Census data categories (see the Age and Gender questions). The project team suggests changing these categories to match Census data groupings unless there is a desire to match these responses to other analyses with these original groupings.

**Content** – Text is focused with enough context so respondents can answer accurately. Each section will have a brief and concise explanation of the next set of questions. Response options attempt to be exhaustive as possible, without creating too long of a list.

**Accessibility** – We reviewed text to ensure the information is accessible and included suggestions above related to terminology in the survey questions. Below are our guidelines as we review surveys:

- Clear and plain language to make the information easy to understand
- Plain language will also translate more clearly into other languages
- That they work in digital form and print