

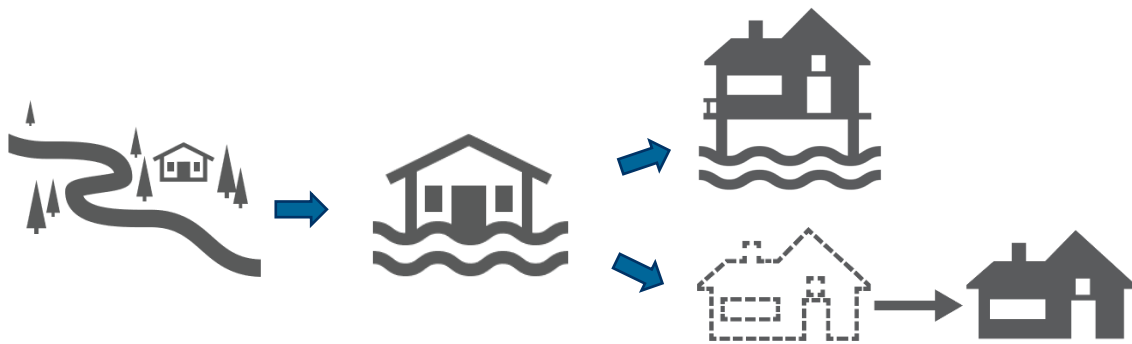
SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD)

FACILITATOR'S GUIDE

WHAT ARE WE TALKING ABOUT?

When buildings undergo repair or improvement, it is an opportunity for local floodplain management programs to reduce flood damage to existing structures. More than 21,000 communities participate in the National Flood Insurance Program (NFIP), which is managed by the Federal Emergency Management Agency (FEMA). To participate in the NFIP, communities must adopt and enforce regulations and codes that apply to new development in Special Flood Hazard Areas (SFHAs). Local floodplain management regulations and codes contain minimum NFIP requirements that apply not only to new structures, but also to existing structures which are “substantially improved (SI)” or “substantially damaged (SD).”

Enforcing the SI/SD requirements is a very important part of a community's floodplain management responsibilities. There are many factors that local officials will need to consider and several scenarios they may encounter while implementing the SI/SD requirements.



For communities with SFHAs where structures were built before the National Flood Insurance Act of 1968, there are a limited number of tools available to encourage structure owners to reduce their risk. The SI/SD process is one (required) tool available. In the example above, there is a home in the floodplain that has just flooded, causing more than 50 percent damage. The community and homeowner must work together to identify a path for the homeowner to comply with NFIP requirements (found in the community's local floodplain ordinance). Two options that are often discussed are to elevate the home or return the property to permeable surface (by relocating or demolishing the home).

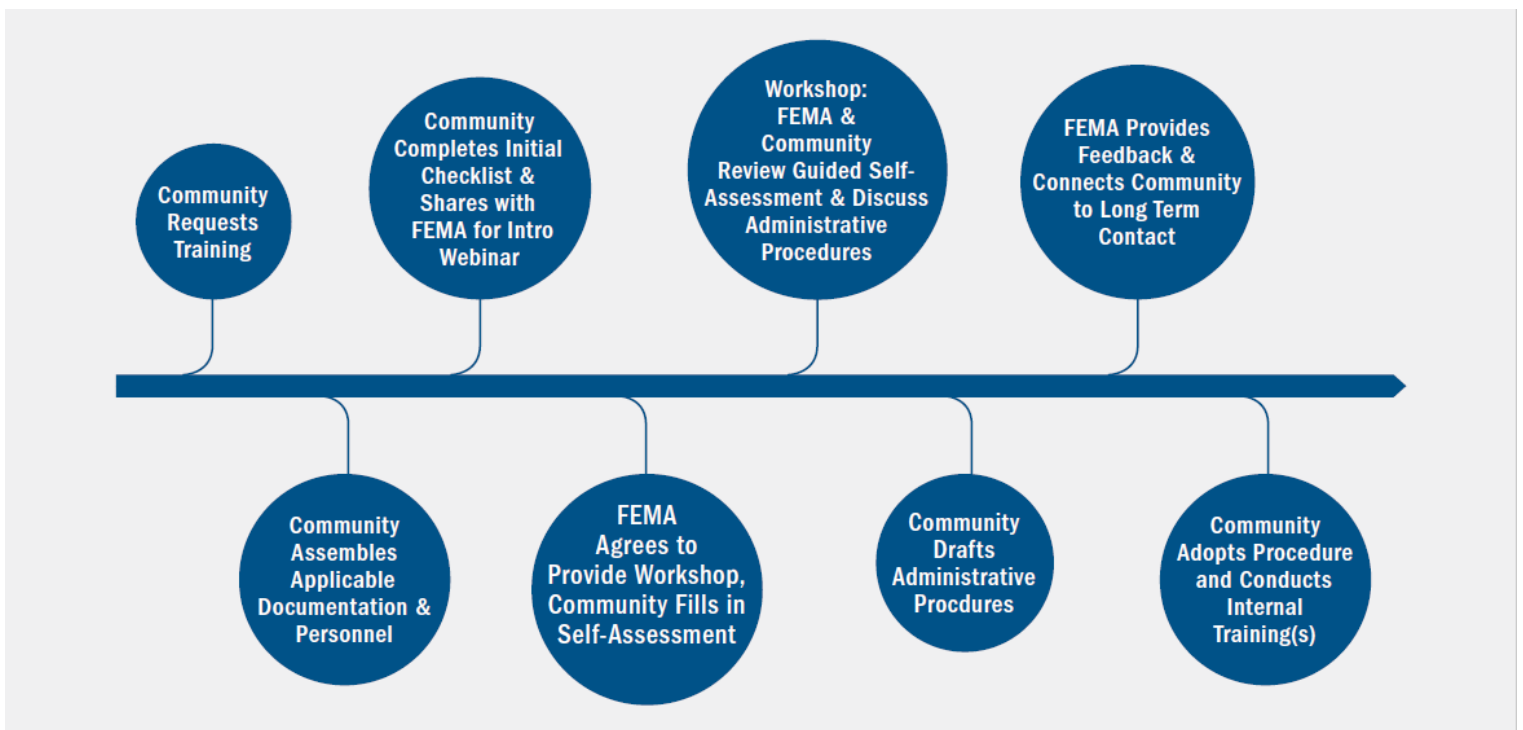
WHAT IS IN IT FOR ME?

As a State or County official, you have the opportunity to guide communities toward NFIP compliance and reduce their future risk through developing and adopting an SI/SD administrative procedure.

WHAT DO I HAVE TO DO?

FEMA has developed a suite of materials designed to help you guide Floodplain Administrators and other community officials. FEMA recommends that you:

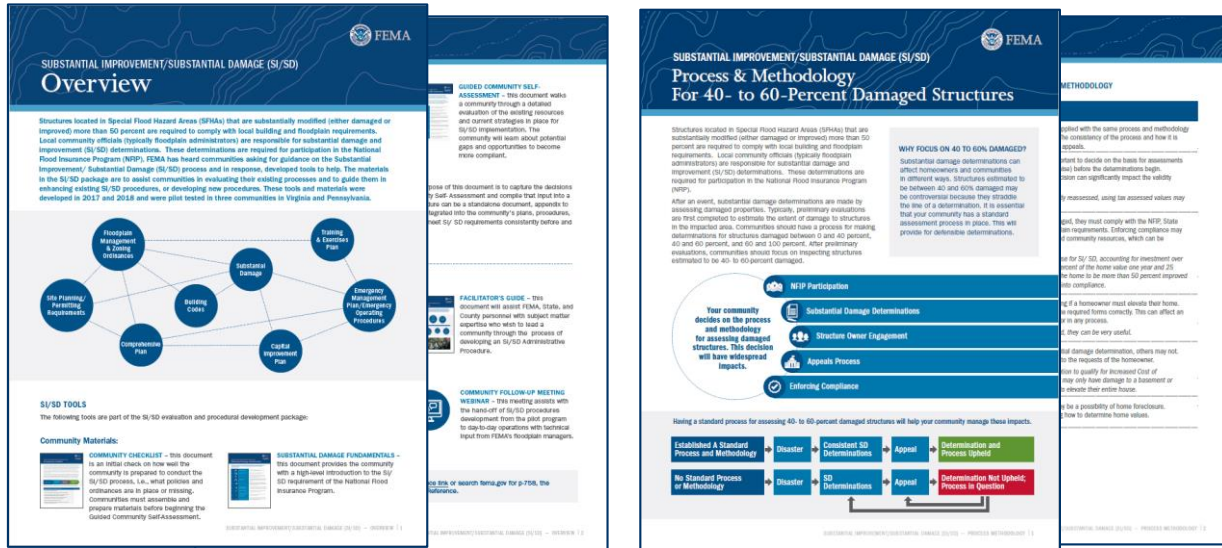
- Identify your intended audience (one community, multiple communities)
- Work with the audience to gauge interest. If there is interest, send some additional materials.
- If the communities have capacity, set up a webinar, then an in- depth half- day workshop, and six months to one year later, a follow up webinar.



SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD) FACILITATOR'S GUIDE

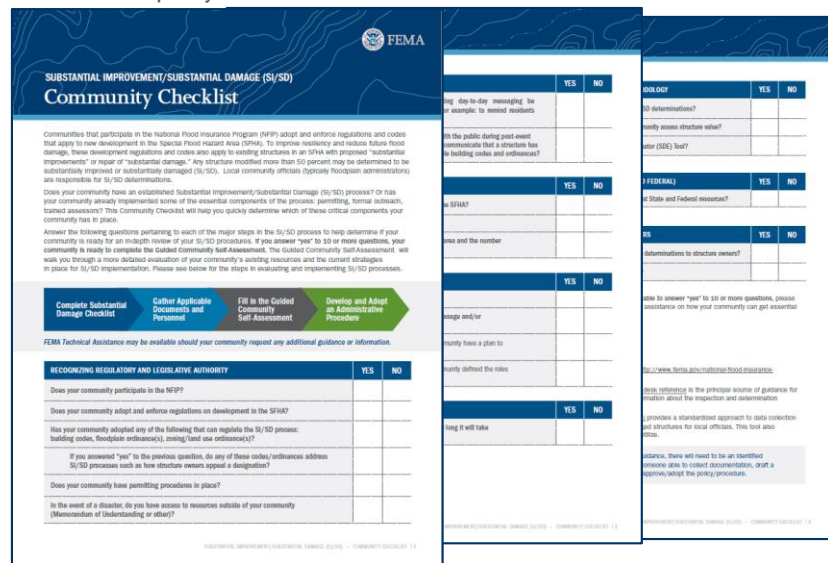
STEP ONE: BUILDING AWARENESS AND INTEREST

Get the word out and build interest in the SI/SD process. FEMA recommends sharing the SI/SD Overview handout and the 40-60 percent flyer.



STEP TWO: INITIAL ASSESSMENT OF COMMUNITY CAPACITY AND RESOURCES

Once you have one or more communities interested, FEMA recommends sending a pre-checklist to gauge community interest and capacity.



If the community's answers are primarily negative, they may benefit from technical assistance, completing the L273 class, and working with the State NFIP Coordinator to arrive at more positive answers. Without the necessary foundation blocks, the process of developing an administrative procedure may be too advanced for the community. If the community's answers are mostly affirmative, proceed to the next step.

STEP THREE: SHARE SI/ SD GUIDANCE MATERIALS

If the community answers to the checklist were mostly positive, FEMA recommends confirming their availability and capacity to complete the SI/ SD administrative procedure process. Communities that dedicate an individual approximately 100-150 hours are more likely to succeed. This is also a good time to send the SD Fundamentals and Guided Community Self-Assessment.

**SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD)
Substantial Damage Fundamentals**

For communities participating in the National Flood Insurance Program (NFIP), structures located in the Special Flood Hazard Area (SFHA) that are substantially modified (either damaged or improved) more than 50 percent are required to comply with local building and floodplain requirements. Local community officials (typically floodplain administrators) are responsible for substantial damage and improvement (SI/SD) determinations. These determinations are required to be in compliance for participation in the NFIP.

This document is meant to serve as a quick resource for Substantial Improvement/Substantial Damage (SI/SD) requirements and opportunities. There is also a Guided Community Self-Assessment and Administrative Procedure Template that accompany this document.

1		RECOGNIZING REGULATORY & LEGISLATIVE AUTHORITY	This section is for identifying what regulatory authority your community has and may need to complete the SI/SD process.
2		COMMUNITY ENGAGEMENT & THE CURRENT STRUCTURE	You may already have structures in place for permitting and outreach; this section is to review what you have.
3		DETERMINING IMPACT AREA	The purpose of this step is to think about what you will use as a base (maps, list of addresses in the floodplain, or otherwise) to figure out the extent of the impact.
4		IDENTIFYING AVAILABLE PERSONNEL	This is a critical step to think through for any size disaster: who can manage the teams, complete the assessments, input the data, and analyze for consistency. Do they have the training and contracts in place to do so?
5		DETERMINING TIMEFRAMES	Based on the people, training, and extent of damage, this section includes guidance about how to estimate how long the process will take and what thresholds you will use to maximize efficiency and get your residents information quickly.
6		ESTABLISHING SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE DETERMINATION PROCESS AND METHODOLOGY	Whether you use FEMA's Substantial Damage Estimator (SDE) Tool or some other process, this section is to look at how you can consistently set up and implement an SI/SD determination process in your community.
7		COMMUNICATING DAMAGE TO PARTNERS (LOCAL, STATE, FEDERAL)	This section includes guidance on when and how your community will coordinate with Federal, State, and other local partners.
8		COMMUNICATING SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE INFORMATION TO PROPERTY OWNERS	It is important to identify how your community will communicate SI/SD information to property owners.
9		MONITORING & REINTEGRATION	This is the last part of the "emergency permitting and development" process and includes guidance on how your community can return to the day-to-day after disaster support operations.

SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD) – SUBSTANTIAL DAMAGE FUNDAMENTALS | 1

**SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD)
Guided Community Self-Assessment**

Does your community have a Substantial Improvement/Substantial Damage (SI/SD) process in place? What about some of the components: permitting, formal outreach, trained assessors? Completing this SI/SD guided self-assessment can help your community determine if its current strategies comply with regulations, as well as consideration for additional strategies to get residents the information they need to get back in their homes as quickly as possible.

The guided self-assessment includes questions pertaining to each of the major steps in the SI/SD determination process. If you have everything in place, this can be a good double-check. If your communities do not have this information, it is still worth continuing the assessment. Start with where you are and this will help you determine what you may want to address moving forward. To help with navigation, the steps have an icon for quick reference.

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SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD) – GUIDED COMMUNITY SELF-ASSESSMENT | 1

STEP FOUR: WEBINAR

Set up a webinar. The webinar is an opportunity for you to provide an overview of the process, reiterate the level of effort and timeline, talk through the Guided Community Self-Assessment components, and discuss common hiccups. Based on the community's level of interest, capacity, and ability to bring applicable players to the table, you may recommend that the community lead submit a completed self-assessment to you, or that you discuss it in person with a workshop. The workshop should focus on applying the self-assessment results to the administrative procedure and identifying the next steps for implementation. The next section will provide guidance on the workshop.



STEP FIVE: COMMUNITY WORKSHOP

One Month to One Week before the Workshop

Before the training begins, think about who is at the table. Are the right stakeholders invited and available to attend? Generally, it will be useful to invite:

- Community Officials, Politicians, and Decision Makers
- Police, Fire, and Emergency Management Representatives
- Permitting and Building Code Enforcement Personnel
- Zoning Officers
- Housing and Community Development
- Business and Economic Development/Small Business Administration
- Board of Appeals
- Planning Commission
- Floodplain Administrator(s)
- County Planners
- State Partners such as the State Hazard Mitigation Officer (SHMO) and NFIP Coordinator
- Neighboring Community Officials and Personnel
- Notetaker/Individual to document decisions and process



Do the participants understand the expectations of them (time and deliverables) and are they able to meet those expectations? While FEMA is providing support, this is a heavy lift for community members to complete the process within 6 months.

Make sure participants collect, review, and bring all applicable documents such as:

- Building codes
- Floodplain ordinances
- Emergency Operation Plans
- Public Assistance documents and Preliminary Damage Assessment forms
- Existing SI/SD procedures

It is also helpful to think about where and what time of day the workshop will take place.

- Is it accessible to everyone?
- How many participants do you anticipate attending?
- Did the Outlook invitation/email go out with enough time for individuals to plan for it?

The Day of the Workshop

Print copies of the Community Checklist, Guided Community Self-Assessment, Administrative Procedures Template, and Substantial Damage (SD) Fundamentals for reference.



It is a best practice to have a workshop sign-in sheet and agenda. Depending on the community, it may be helpful to share a link to the SD Desk Reference, preload the Substantial Damage Determination (SDE) Tool onto a computer, and to talk through the program's capabilities.

ROLES AND RESPONSIBILITIES

Facilitator

The facilitator highlights key points in the SI/ SD process and works to ensure that the community understands the short- and long-term impacts of each decision. The facilitator should also be familiar with the community's chosen SI/SD tool.

Community

The community is expected to recognize the importance of SI/SD and develop a process for SI/SD determinations, including: assembling applicable documents and personnel relevant to the SI/SD process, drafting new administrative policy/procedures, working with FEMA to ensure necessary considerations are addressed, and approving and adopting the policy/procedures. Typically, this works best if there is one primary point of contact, or champion, for the project with other community personnel as support and/or advisors.

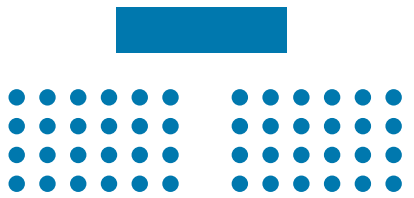
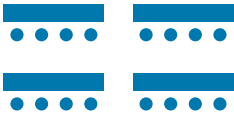
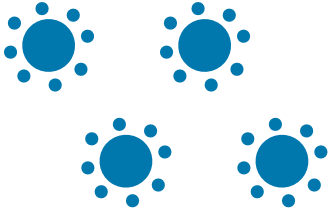

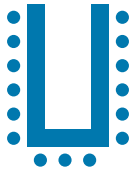



ASSESS THE ROOM

Setup

It is important to think about room setup as a way to facilitate conversation. For instance, when the chairs all face the same direction (similar to an auditorium or classroom) the expectation is that there will be a presentation and discussion is discouraged. Alternatively, while banquet seating encourages small group discussion, participants may not be able to easily see a presentation.

For this workshop, we encourage a U-shape or chevron table setup so that individuals can see the initial presentation and then be prepared for a discussion in a comfortable manner thereafter.

<p>AUDITORIUM</p>	<p>CLASSROOM</p>	<p>“PRESENTATION MODE”</p>
		<p>Good for informing an audience, not for interaction.</p>
<p>BANQUET</p>	<p>BANQUET LONG TABLE</p>	<p>“SMALL DISCUSSION”</p>
		<p>Circular tables are good for small group discussion, often difficult for whole group discussions as attendees may have their back to the speaker(s). Banquet long table set-up may be helpful for “turn and talk to a partner” activities.</p>
<p>U-SHAPE</p>	<p>CHEVRON</p>	<p>“LARGE DISCUSSION”</p>
		<p>When possible, tables are preferred over simple rows of chairs so that participants may take notes and interact comfortably.</p>

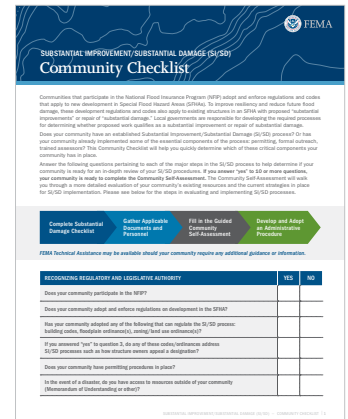
CONNECT THE DOTS

COMMUNITY CHECKLIST

During the workshop, it is helpful to talk through the materials provided to the community so far; for instance, reviewing the community's answers to the Community Checklist.

If you previously held a webinar or conference call to talk through the Checklist and the community's answers, you may not need to spend much time here. Otherwise, FEMA recommends discussing any questions the community answered with "no" and reviewing possible technical assistance opportunities. If you/your department/your agency cannot provide the technical assistance to the community, please reach out to FEMA to discuss possible training and technical assistance opportunities.

For communities that have determined the answers are mostly "yes" to the questions in the Community Checklist, it will be good to understand why they answered yes and what materials and personnel they have available.



GUIDED COMMUNITY SELF-ASSESSMENT

The Guided Community Self-Assessment consists of nine steps to help community leaders assemble their regulatory requirements and navigate decisions that must be in place post-disaster.

Please feel free to follow the PowerPoint presentation to walk the community through each step of the Guided Community Self-Assessment.

REGULATORY AND LEGISLATIVE AUTHORITY

Many communities develop their building code requirements independently from their floodplain ordinance. To match all permitting, building, and demolition requirements, it is good to review applicable documents and find alignment where possible. For communities that outsource code enforcement and/or permitting to contractors, this is a good chance to hear the contractor's feedback on discrepancies in regulatory authority. Many States also have developed model floodplain ordinances, which can be referenced and/or applied at the community level.



It is also important to find out more about what tools and resources the community has in place to "ramp up" operations, e.g., a Memoranda of Understanding (MOU), and what must happen for the community to enable those agreements, contractor requirements, employee procedures, etc. For instance, is the MOU dependent on a gubernatorial disaster declaration request? Where are other weak points? Are neighboring communities depending on the same contractor for emergency support?

COMMUNITY ENGAGEMENT AND THE CURRENT STRUCTURE

When identifying a community's communication capabilities post-disaster, it is important to look at what resources are available and regularly used pre-disaster, as well as what modifications may be required to implement those resources post-disaster. For instance, if the community regularly communicates by email and there is an extended power outage, email may not be a reliable means of communication until power is restored.



As mentioned in Substantial Damage (SD) Fundamentals, the SI/SD Manager should set guidelines for interactions with residents and structure occupants. In this section, it will be helpful to provide examples of guidelines developed by other communities.



DETERMINING THE IMPACT AREA

The first questions a community will get post-disaster are about the area affected, how many structures were affected, and the extent of damage. Many communities have a system in place to conduct preliminary damage assessments (PDAs), which determine potential State and Federal assistance eligibility. With the SI/SD process, it is important to distinguish between homes in the Special Flood Hazard Area (SFHA), which would be eligible for NFIP assistance, and those outside the SFHA. In this section, it will be helpful for the community to figure out how they will collect the data quickly and accurately.



IDENTIFYING AVAILABLE PERSONNEL

Often, the personnel conducting SI/SD assessments are also responsible for emergency response, permitting, and/or are themselves impacted by the disaster. In this section, it is important to keep in mind who would ideally be on the SI/SD team as well as who might provide backup support. In the event of a large-scale disaster, these individuals may become the task leads with additional personnel coming from other communities or the State and Federal levels (depending on MOUs and other agreements in place).

When considering who will be completing these assessments, it is good to consider who has the technical knowledge and also who has public information-sharing experience. There may be some pieces of information the community does not want shared – it is good to ask the workshop attendees how they will coordinate this information flow and brainstorm possible talking points and items to avoid.



DETERMINING TIMEFRAMES

This is a tricky section for communities to navigate. It takes time to request and mobilize additional personnel to complete SI/SD determinations. The permitting and inspection processes also require time and personnel. However, homeowners are often anxious to return and rebuild. The industry norm assumption is that people will look to start repairs within 1 week of water receding if the disaster was a flood event. It is imperative that each community work as quickly and efficiently as possible, while also providing outreach and updates to affected owners. In this section, it may be useful to ask attendees, based on the personnel involved, to estimate how long it would take to assess 1 percent of the SFHA, and then with the same people, 50 percent of the SFHA. Are their estimates realistic? If someone says it would take more than 2-3 weeks, you may want to encourage them to review their personnel and methodology.



ESTABLISHING A SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE DETERMINATION PROCESS AND METHODOLOGY

When deciding on a methodology and how to implement it consistently, it may be helpful to consider what tools are already available. For instance, FEMA provides a Substantial Damage Estimation tool and training. Some States also have software available that may interface with other programs such as WebEOC and Knowledge Center. A community- or county-level PDA tool may also be adaptable to include SI/SD information.



COMMUNICATING DAMAGE TO PARTNERS (LOCAL/STATE/FEDERAL)

If a community and/or its third-party contractors cannot conduct all the assessments in the intended timeframes, it is important to communicate the need for additional resources to the county, State, and (when applicable) Federal levels. Some communities may be able to make requests through response and recovery software. FEMA is currently working to provide personnel classifications at the Federal level so that communities can request a specific skillset related to SI/SD, such as building inspection, permitting, or data collection and processing. When asking attendees to discuss their communication techniques, it is important to listen for who would likely make those requests so that a follow-up could be initiated, and the community would know what to do if that individual were unavailable.

COMMUNICATING SUBSTANTIAL IMPROVEMENT/ SUBSTANTIAL DAMAGE INFORMATION TO PROPERTY OWNERS



Communities may have day-to-day communications with property owners about the permitting process, flooding, or other topics but will have separate lines of communication during and immediately after a disaster. This is a great section to ask attendees to share their approaches and identify possible best practices for post-disaster SI/SD communication. For instance, some communities provide SD packets to homeowners during PDA windshield surveys. Others email ahead of time or set up tents with information next to the impacted area. It is important to recognize what information to share with property owners and who may be able to help spread the message. For instance, communities can work with hardware stores to post signs reminding customers to get permits or send reminder emails to contractors about the permitting process and enforcement.

It is also important to remind attendees that residents may have different interpretations of the regulations and the rules should be applied consistently. For instance, you could ask about the cost of completing the work and how their jurisdiction will assess this. If someone has a friend completing the work, and the labor is undervalued, the Floodplain Manager can require additional estimates.

REINTEGRATION AND MONITORING



Every disaster starts and ends at the local level. It is important for attendees to think about how they will ramp up their processes to include additional people when needed and how they will demobilize and return to day-to-day operations. This section is an opportunity to connect the dots with the other sections. If external support assisted with or conducted the SI/SD determination, the community will need to make sure the determination was done in accordance with their process, consistently across personnel, and that the data is available in a navigable format afterwards. For homes in the SFHA that were declared substantially damaged, the community will need to follow up with homeowners until all open concerns are resolved.

ADMINISTRATIVE PROCEDURE TEMPLATE

After talking through the Guided Community Self-Assessment with the community, the next step is to formally document those decisions and procedures. Some communities amend the floodplain ordinance with the Administrative Procedures, others add it to their Emergency Operating Procedures. The community can choose where they think the document will be most effectively referenced and implemented.

The image shows a form titled "SUBSTANTIAL IMPROVEMENT/SUBSTANTIAL DAMAGE (SI/SD) Administrative Procedures" with the FEMA logo in the top right corner. The form is divided into several sections for completion:

- 1. RECOGNIZING REGULATORY AND LEGISLATIVE AUTHORITY**
 - Substantial Improvement/Substantial Damage (SI/SD) procedures in (Name of Community) are established and signed as per (Name of Community).
 - Other applicable authority is established through _____
 - Additionally, SI/SD procedures and other information pertaining to the SI/SD can be found in (Name of Community)'s _____
- 2. COMMUNITY ENGAGEMENT AND THE CURRENT STRUCTURE**
 - The following communication methods are employed pre- and/or post-event to communicate SI/SD information to the public:
 - _____
 - _____
 - _____
 - _____
 - SI/SD information provided in pre-event communication include: _____
 - SI/SD information provided in post-event communication include: _____

On the right side of the form, there are four callout boxes with icons:

- HELPFUL TIPS AND CONSIDERATIONS FOR UTILIZERS:**
- Having entities identified by the SI/SD process, including public and non-public management entities, during flood risk reduction (SI/SD) training, such as the _____ of the local Emergency Self-Assessment.**
- These agreements can include an MHA, Substantial Improvement Assessment, Compliance, etc. _____ of the local Emergency Self-Assessment.**
- List the communication methods your community identified in the Guided Community Self-Assessment. _____**
- List where communication materials are disseminated (e.g., the Emergency Operations Plan, and county and federal emergency response materials).**

At this point in the training, the focus is on implementation, recognizing and resolving any roadblocks to implementation, and determining realistic next steps. Some communities may agree to meet regularly until they can resolve open questions, others may request information on training opportunities. As facilitator, your goal is to help communities to see their gaps and commit to concrete actions to close those gaps.

? COMMON QUESTIONS AND POSSIBLE ANSWERS

1. **What's the difference between using Market-Based Assessment data and Tax-Based Assessment data?** Market-Based Assessment data may be difficult to get retroactively, and post-disaster values may vary from the structure's pre-disaster value. If a homeowner is trying to stay below the 40-percent threshold, the Market-Based data may be preferable. The norm is to use Tax-Based Assessment data as it allows for consistent implementation and does not vary by source. However, communities with outdated tax assessments may be inclined to consider alternatives as well.

2. **Can't we just waive the permitting process?**
While communities have a great deal of autonomy in how they conduct their floodplain ordinance and permitting process, to stay in good standing within the NFIP, the permitting process setup pre-disaster must continue to be followed post-disaster. Communities can ease homeowner burden, such as by waiving permitting fees; however, the permitting process itself cannot be waived.

3. **Why won't PDA data work for the SI/SD determination?**
Emergency responders often collect PDA data to get a sense of the level of impact and number of impacted structures. When applying for FEMA Public and Individual Assistance grants, the community must meet a threshold of damage. This data is often collected through "windshield surveys" looking at the street-facing exterior of a home and categorizing the damage as none, minor, major, or complete. Within the SI/SD determination process, the structure may require a more detailed assessment. For instance, if a homeowner stored all major appliances and utilities in the basement and the basement flooded, that is significantly more monetary damage than would be visible from the exterior. Some communities will use PDA data to inform which structures receive a secondary SI/SD assessment. Structures with major damage can be targeted for outreach materials as they are more likely to fall in the 40 to 60 percent gray area.

BREAK-OUT SESSION TO APPLY AND IMPLEMENT

In this section the community starts to draft administrative procedures and the facilitator provides guidance. The community agrees to a timeline for completing the draft and begins to determine an implementation plan. Considerations during the development of the procedures include how frequently internal training will occur (e.g., an initial training and then annual refreshers), how to build political buy-in, and any other gaps the community may identify.

STEP SIX: POST- WORKSHOP FOLLOW UP AND CLOSE OUT

It is important to keep the momentum going. When possible, it is helpful to send meeting notes and materials to participants. It may also be helpful to list out the questions and answers discussed and consider updating the presentation for future workshops. Based on the deadline the community agreed upon, the facilitator should follow up and provide comments on the revised procedures. Once complete, it is important to hand-off the procedures to the community's long-term point of contact (as questions may come up in the future).

Depending on the community, capacity, and follow up needed from the Workshop, some facilitators may request a follow up webinar to review the Administrative Procedure draft(s) and any final steps to implement. FEMA recommends providing each community participating with points of contact for any questions that may come up later on. Please work with your State NFIP Coordinator to determine recommended contacts; your regional FEMA Mitigation staff may be available as well.

