



CITY OF HOUSTON REPETITIVE LOSS AREA ANALYSIS (RLAA)

**CHOYCE MORROW, P.E., CFM
MANAGING ENGINEER**

***FLOODPLAIN MANAGEMENT OFFICE, HOUSTON
PERMITTING CENTER***

OCTOBER 5TH, 2023

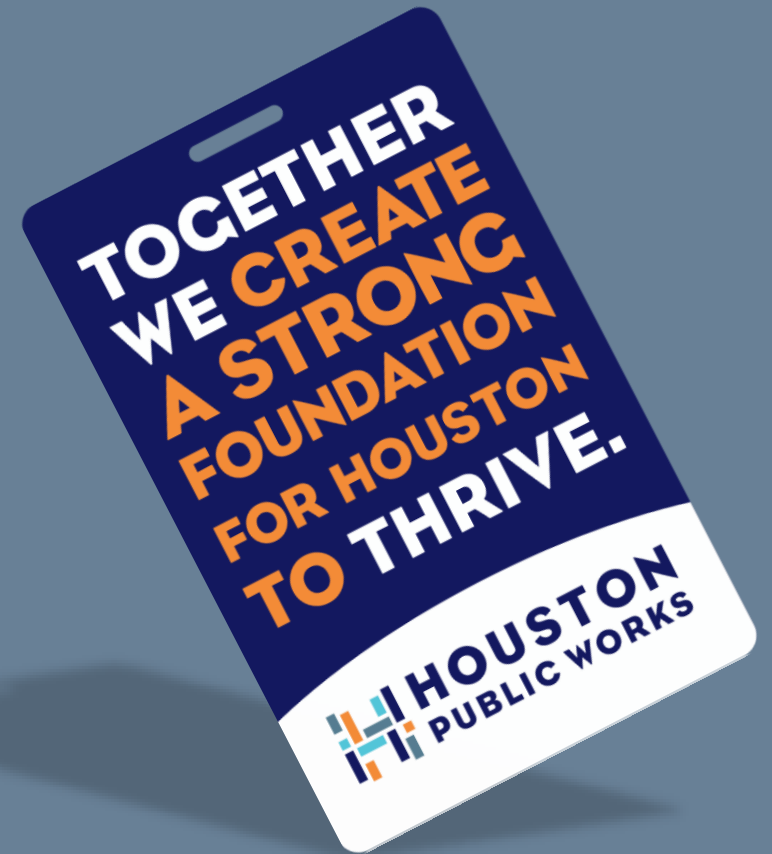


PURPOSE

together we create a strong foundation
for Houston to thrive

5 TO THRIVE VALUES

respect | ownership | communication | integrity | teamwork



CITY OF HOUSTON REPETITIVE LOSS AREA ANALYSIS (RLAA)

- **A MITIGATION PLAN FOR AREAS THAT HAVE OR ARE EXPECTED TO EXPERIENCE REPEATED LOSSES FROM FLOODING**
- **MITIGATION SOLUTIONS ARE GENERATED FOR INDIVIDUAL BUILDINGS OR AREAS**
- **SUCCESSFUL RLAA IMPLEMENTATION COULD INCREASE CITY'S CRS RATING**
- **CRS RATING = INSURANCE PREMIUM DISCOUNTS**
- **AVAILABLE DUE TO CITY'S PARTICIPATION IN NATIONAL FLOOD INSURANCE PROGRAM (NFIP)**

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

- City of Houston (COH) enrolled in 1979
- Current Effective FEMA Floodplain Maps:
 - **Oct. 18, 2007; Oct. 16, 2013; Oct. 9, 2014;
Jan. 6, 2017; May 2, 2019 and Nov. 15, 2019**
- Chapter 19 Code of Ordinances (Floodplain Ordinance)
Amended effective date Sept. 1, 2018
 - **Fulfills FEMA enrollment requirements**
 - **Sets local standards for construction and floods**
 - **Includes protections above FEMA minimum requirements**
 - **Factor in the CRS rating for COH**

COMMUNITY RATING SYSTEM (CRS) PROGRAM

- **Voluntary incentive program**
- **Recognizes and encourages local standards above FEMA minimum requirements**
- **3 goals of the Community Rating System program:**
 - Reduce flood losses
 - Facilitate accurate insurance rating; and
 - Promote the awareness of flood insurance
- **Insurance premium rates discounted to reflect the enhanced COH standards**

COMMUNITY RATING SYSTEM (CRS) HISTORY

- 1979
 - COH enters the Regular NFIP Program
- 2001
 - COH enters the CRS program at Class 8 Rating
(Class 1 is best, Class 10 is base level)
- 2009
 - COH improves its rating to Class 5
 - Houston is the largest City in the US with Class 5 rating
 - Houston is the largest City in the US participating in CRS
- 2023
 - COH begins initiative to increase CRS Rating
 - Houston currently receives the largest CRS discount in Texas, however additional savings are possible

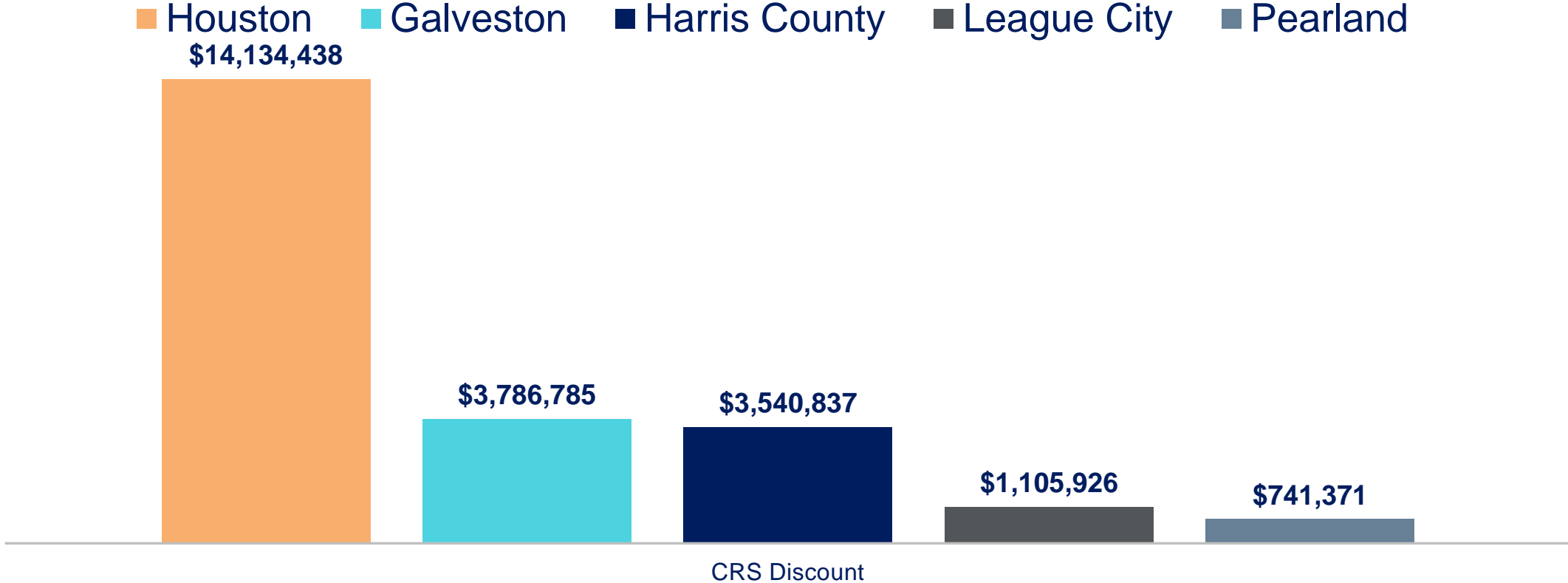
BENEFITS OF PARTICIPATING IN CRS

CRS Credit Points	CRS Class	CRS Discount (Premium Reduction)
4,500+	1	45%
4,000 – 4,499	2	40%
3,500 – 3,999	3	35%
3,000 – 3,499	4	30%
2,500 – 2,999	5	25%
2,000 – 2,499	6	20%
1,500 – 1,999	7	15%
1,000 – 1,499	8	10%
500 – 999	9	5%
0 – 499	10	0

Along with reducing flood risks through Community Rating System activities, COH National Flood Insurance Program policy holders receive 25% flood insurance premium savings.

BENEFITS OF PARTICIPATING IN CRS (CONTINUED)

Top 5 Largest CRS Discounts in Texas (2023)



Austin – \$598,168 * Dallas – \$519,897 * San Antonio - \$390,648

COH policy holders save more than a total of \$14M/year on flood insurance premiums. Increasing Community Rating System class ranking can yield greater savings.

BACKGROUND



Repetitive Loss (RL) Property: An NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978.



Severe Repetitive Loss (SRL) Property: An NFIP-insured structure that has had at least four paid flood losses of more than \$5,000 each, or at least two claims that cumulatively exceed the building's value.



Repetitive Loss Area: A portion (or portions) of a community that includes buildings on FEMA's list of repetitive losses and also any nearby properties that are subject to the same or similar flooding conditions.



Historically, repetitive loss properties represent 1.3% of all NFIP properties but 15%-20% of all NFIP claims.

REPETITIVE LOSS AREA ANALYSIS BENEFITS



- Ensures that a comprehensive review of all possible activities and mitigation measures is conducted so that the most appropriate solutions will be implemented.



- Ensures that criteria used in land-use and developmental programs account for the hazards faced by existing and new development.



- Educates residents and property owners about the hazards, loss reduction measures, and the natural and beneficial functions of floodplains.



- Builds support for activities and projects that prevent new problems, reduce losses, and protect the natural and beneficial functions of floodplains.

CRS RLAA: FIVE STEP PROCESS



STEP 1: COMMUNITY INPUT

Advise all properties in the RL areas that an analysis will be conducted and request their input on the hazard and recommended actions.



August 2023

Dear Neighbor,

You are receiving this letter because you own a property in a Federal Emergency Management Agency (FEMA) repetitive loss area, a delineated 100-year floodplain, or an area that is subject to repetitive flood loss outside of the Special Flood Hazard Area.

The 100-year floodplain means there is a 1% chance of a flood event occurring in any given year. The 500-year floodplain means there is a 0.2% chance of a flood event occurring in any given year. Approximately 25% of the city lies within the 100-year floodplain. Neighbors in flood-prone areas must be aware of the hazards that may occur during severe storms, hurricanes, or tropical storms.

The City of Houston actively participates in the National Flood Insurance Program (NFIP). Flood insurance is available to you through most major insurance carriers, even if your home has been flooded in the past. Don't delay, buy flood insurance today as there is a 30-day waiting period before policies are effective. City of Houston homeowners receive a 25% discount on their flood insurance premiums because the city holds a class 5 ranking under FEMA's Community Rating System.

Houston Public Works is conducting a Repetitive Loss Area Analysis to identify potential solutions to flooding hazards within each individual repetitive loss area. This analysis is ongoing, and most of the data collected is being done remotely; however, we may be visiting some areas to collect additional data in the coming months. Our teams will not enter your private property to collect this data. The analysis results will be provided to city leaders for future flood mitigation efforts. Your personal information will not be disclosed.

The City appreciates the help of those living in repetitive loss areas by providing any information regarding the flooding conditions of your property and we encourage your input. Visit HoustonPublicWorks.org to take the survey and provide flooding-related information regarding your property or area. Once completed, copies of the final report will be made available at HoustonPublicWorks.org and will include a review of alternative approaches for property protection or drainage improvements where feasible.

Prepare for flooding by elevating your HVAC, and by storing insurance paperwork, valuables, and medicine, in a water-protected container. Consider some flood protection measures such as checking your building for water entry points. These can be protected with low walls or temporary shields. Some property protection measures may require a permit. Contact the Floodplain Management Office to find out if a permit is required.

Contact the Houston Public Works grant team at 832.395.3111 for possible grant opportunities that may cover some or all the costs of elevating your house above historic flood levels. Go to [Flood Risk Reduction Grants - HoustonRecovers.org](https://HoustonRecovers.org) for information on financial assistance.

Visit FEMA's website at www.fema.gov to learn more about the NFIP, availability of flood insurance and property protection measures. Visit FEMA's Map Service Center at msc.fema.gov for copies of Flood Insurance Rate Maps for your property or call toll-free at 877.336.2627. If you do not have internet access, visit the Floodplain Management Office at 1002 Washington Avenue, or call 832.394.8854.

Sincerely,

A handwritten signature in cursive that reads "Choyce Morrow".

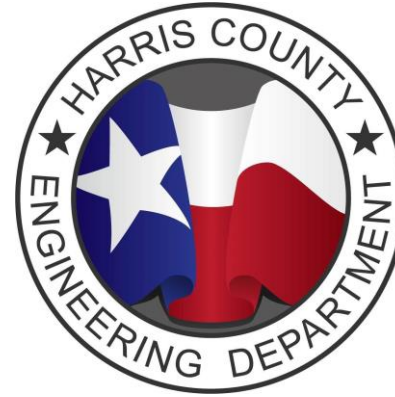
Choyce Morrow, P.E., CFM
Manager, Floodplain Management Office

P.O. Box 1562 | Houston, Texas 77251-1562 | HoustonPublicWorks.org

Capital Projects | Customer Account Services | Houston Permitting Center | Houston Water | Transportation & Drainage Operations

STEP 2: ORGANIZATION COORDINATION

Contact agencies or organizations that may have plans or studies that could affect the cause or impacts of the flooding.



**US Army Corps
of Engineers®**



**HOUSTON
PUBLIC WORKS**

STEP 3: DATA COLLECTION

- Collect data on each building in the rep loss area to per a preliminary determination of the cause of flooding and of appropriate mitigation measures.
- The date for each building's insurance claim may help to identify the cause of flooding (rainfall, overbank flooding, etc.) and the amount of the claim may help determine the extent of the damage.
- Sources for data collection includes:
 - Harris County Flood Control District - Geographic Information Systems (GIS)
 - Harris County Appraisal District
 - Houston Public Works Open Data
 - Google Earth



STEP 3: DATA COLLECTION EXAMPLE

Houston Permitting Center - Google Street View



Houston Permitting Center - HCAD Property Information

Tax Year: 2023

HARRIS CENTRAL APPRAISAL DISTRICT
REAL PROPERTY ACCOUNT INFORMATION
1321140010001

Owner and Property Information												
Owner Name & Mailing Address: CITY OF HOUSTON PO BOX 1562 HOUSTON TX 77251-1562			Legal Description: RES A BLK 1 CITY OF HOUSTON CENTRAL PERMITTING									
			Property Address: 1002 WASHINGTON AVE HOUSTON TX 77002									
Historical Designation												
This property is located in a City of Houston Historic District or is a designated Historic Landmark. Please email historicpreservation@houstontx.gov or click this link for more information.												
State Class Code	Land Use Code	Building Class	Total Units	Land Area	Building Area	Net Rentable Area	Neighborhood	Market Area	Map Facet	Key Map [®]		
XV -- Other Exempt (Government)	8001 -- Land Neighborhood Section 1	E	0	106,809 SF	147,376	0	5924.18	4001 -- Central Business District	5457A	493L		
Value Status Information												
Value Status			Notice Date				Shared CAD					
Noticed			06/23/2023				No					
Exemptions and Jurisdictions												
Exemption Type	Districts	Jurisdictions	Exemption Value	ARB Status	2022 Rate	2023 Rate						
Total	001	HOUSTON ISD	25,735,165	Certified: 08/18/2023	1.037200							
	040	HARRIS COUNTY	25,735,165	Certified: 08/18/2023	0.343730							
	041	HARRIS CO FLOOD CNTRL	25,735,165	Certified: 08/18/2023	0.030550							
	042	PORT OF HOUSTON AUTHY	25,735,165	Certified: 08/18/2023	0.007990							
	043	HARRIS CO HOSP DIST	25,735,165	Certified: 08/18/2023	0.148310							
	044	HARRIS CO EDUC DEPT	25,735,165	Certified: 08/18/2023	0.004900							
	048	HOU COMMUNITY COLLEGE	25,735,165	Certified: 08/18/2023	0.095569							
	061	CITY OF HOUSTON	25,735,165	Certified: 08/18/2023	0.533640							
	924	MARKET SQ AREA EXPNSN TIRZ (061)	25,735,165	Certified: 08/18/2023								
Texas law prohibits us from displaying residential photographs, sketches, floor plans, or information indicating the age of a property owner on our website. You can inspect this information or get a copy at HCAD's information center at 13013 NW Freeway.												
Valuations												
Value as of January 1, 2022					Value as of January 1, 2023							
		Market	Appraised			Market	Appraised					
Land		0		Land		0						
Improvement		0		Improvement		0						
Total		0		Total		0				0		
Land												
Market Value Land												
Line	Description	Site Code	Unit Type	Units	Site Factor	Site Factor	Appr O/R Factor	Appr O/R Reason	Total Adj	Unit Price	Adj Unit Price	Value
1	8001 -- Land Neighborhood Section 1	4353	SF	106,809	1.00	1.00	1.00	--	1.00	0	0	0

***Note: Flood insurance data about private property, including repetitive loss properties, are protected under the Privacy Act of 1974. The Houston Permitting Center is used here only as an example to show how data for repetitive loss properties was collected.**

STEP 4: ALTERNATIVES ANALYSIS

Review alternative approaches to determine whether any property protection measures or drainage improvements are feasible.

This includes reviewing categories of floodplain management activities:

- 1) Preventive
- 2) Property Protection
- 3) Natural Resource Protection
- 4) Emergency Services
- 5) Structural Projects
- 6) Public Information

STEP 5: DOCUMENT FINDINGS

A report for each repetitive loss area detailing:

- Problem statement with a map of the area affected
- List or table with basic info for each building, such as address, foundation type, condition and appropriate mitigation measures.
- Alternative approaches that were reviewed
- Action items for the area including
 - Implementation of mitigation activities
 - Responsible agencies
 - Scheduling/funding



PRIVACY ACT OF 1974

- Personally identifiable Information such as the names or addresses of specific properties, whether they are covered by flood insurance or not, whether they have received flood insurance claims, or the amounts of such claims may not be released outside of local government agencies or to the public or used for solicitation or other purposes.
- Such information should be marked “For internal use only. Protected by the Privacy Act of 1974.”
- General or aggregated information, such as total claims paid for a community, or an area or data not connected to a particular property may be made public.

HOUSTON'S REPETITIVE LOSS AREAS

- Total of **804** Repetitive Loss Areas identified in Houston.
- Total of **173,434** properties in Repetitive Loss Areas were identified.
- Houston has **7,700** Repetitive Loss properties:
 - Total of **\$1,096,807,000** in paid claims
 - Average of **\$60,000** in paid claims
- Houston has **2,665** Severe Repetitive Loss properties:
 - Total of **\$905,782,000** in paid claims
 - Average of **\$73,000** in paid claims

(The SRL properties are not included in the RL totals.)

HOUSTON RL AREAS BY COUNCIL DISTRICT

COUNCIL DISTRICT	NUMBER OF REPETITIVE LOSS AREAS	NUMBER OF PROPERTIES IN RL AREAS
District A	64	34,132
District B	126	10,280
District C	95	36,354
District D	94	10,233
District E	100	10,698
District F	51	10,210
District G	79	25,117
District H	82	16,101
District I	80	10,693
District J	40	2,331
District K	60	7,285

**Note: Some repetitive loss areas are within the boundaries of more than one council district.*

Thank you!



houstonpublicworks.org

  @houpublicworks

QUESTIONS?