



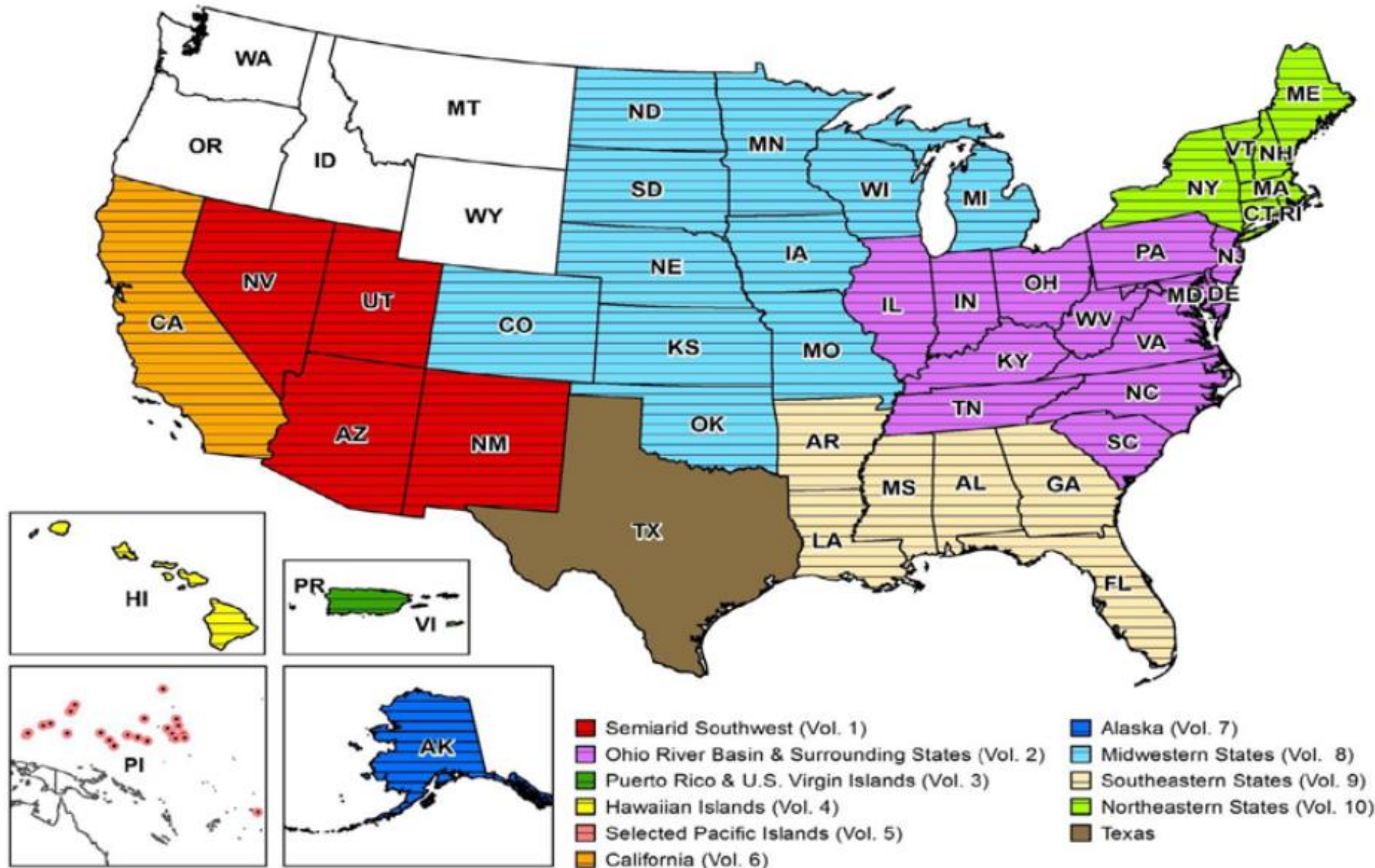
ATLAS 14: AUSTIN'S NEW UNDERSTANDING OF FLOOD RISK

Atlas 14 Background

- Nationwide study of rainfall intensities

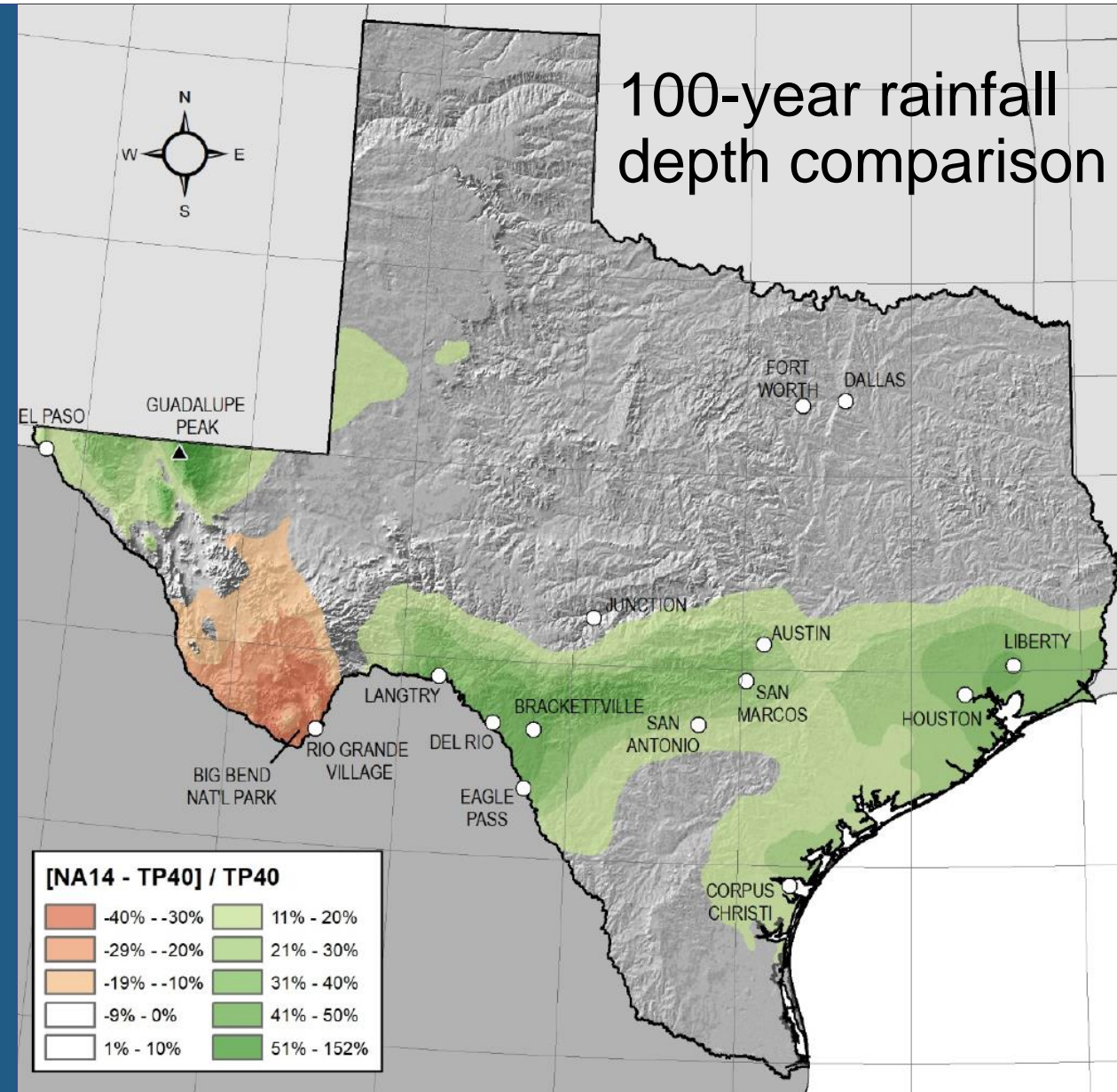
Partners

- Federal** NOAA, National Weather Service, U.S. Army Corps of Engineers, Federal Highway Administration
- State/Local** TxDOT, Harris County Flood Control District, City of Austin, et al.



Atlas 14 Rainfall Changes – Statewide

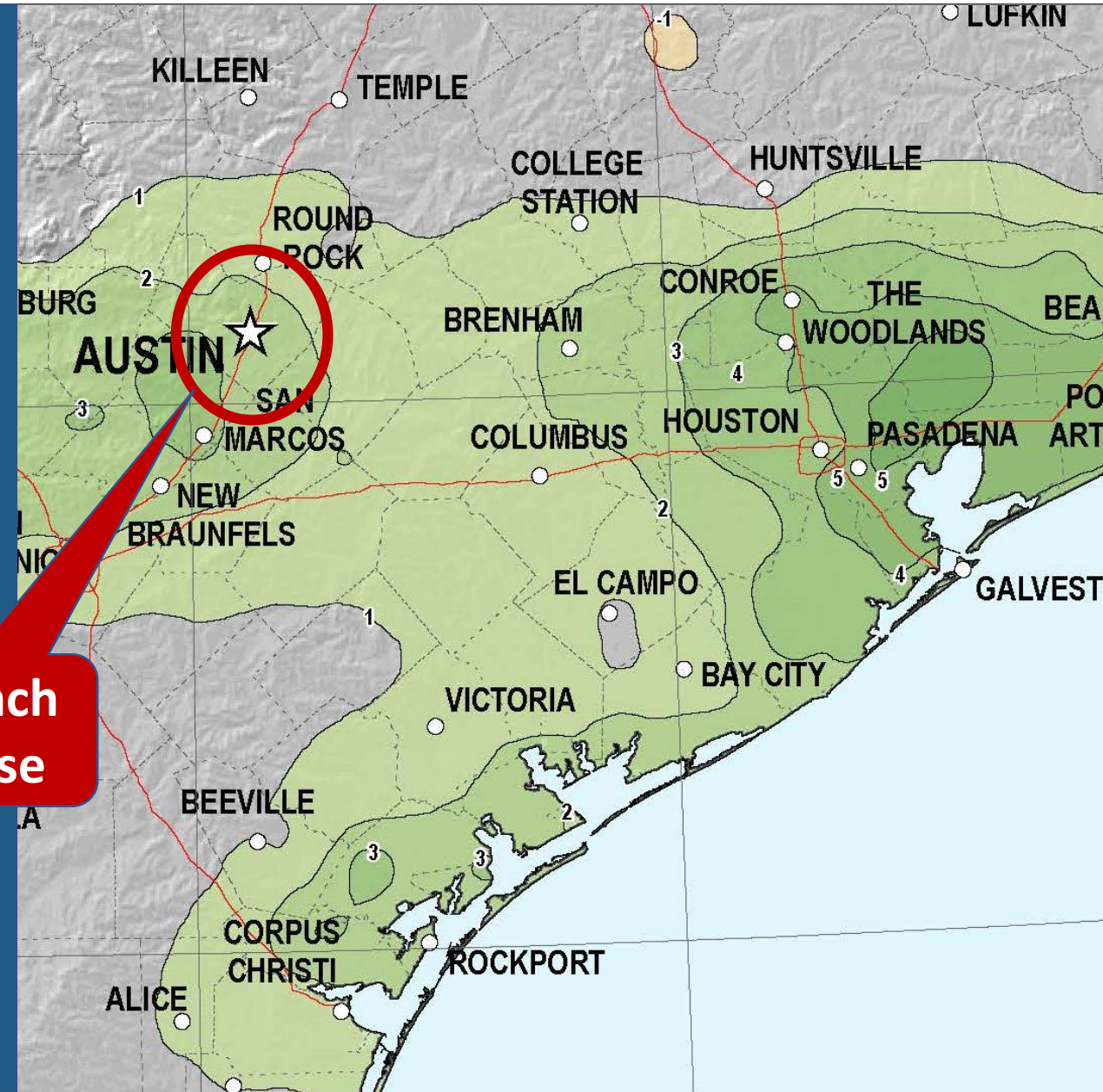
- Nationwide examination of historic rainfall data
- Adds data from 1961 – 2017



Atlas 14 Rainfall Changes – Austin

- Nationwide examination of historic rainfall data
- Adds data from 1961 – 2017

**2 – 3 inch
increase**



What does the new understanding of

Flood Risk Mean?

- More buildings in the 100-year floodplain.
- Depth of flooding increases.
- More low water crossings at risk of flooding.
- Depth and velocity of flooding over roadways increase.

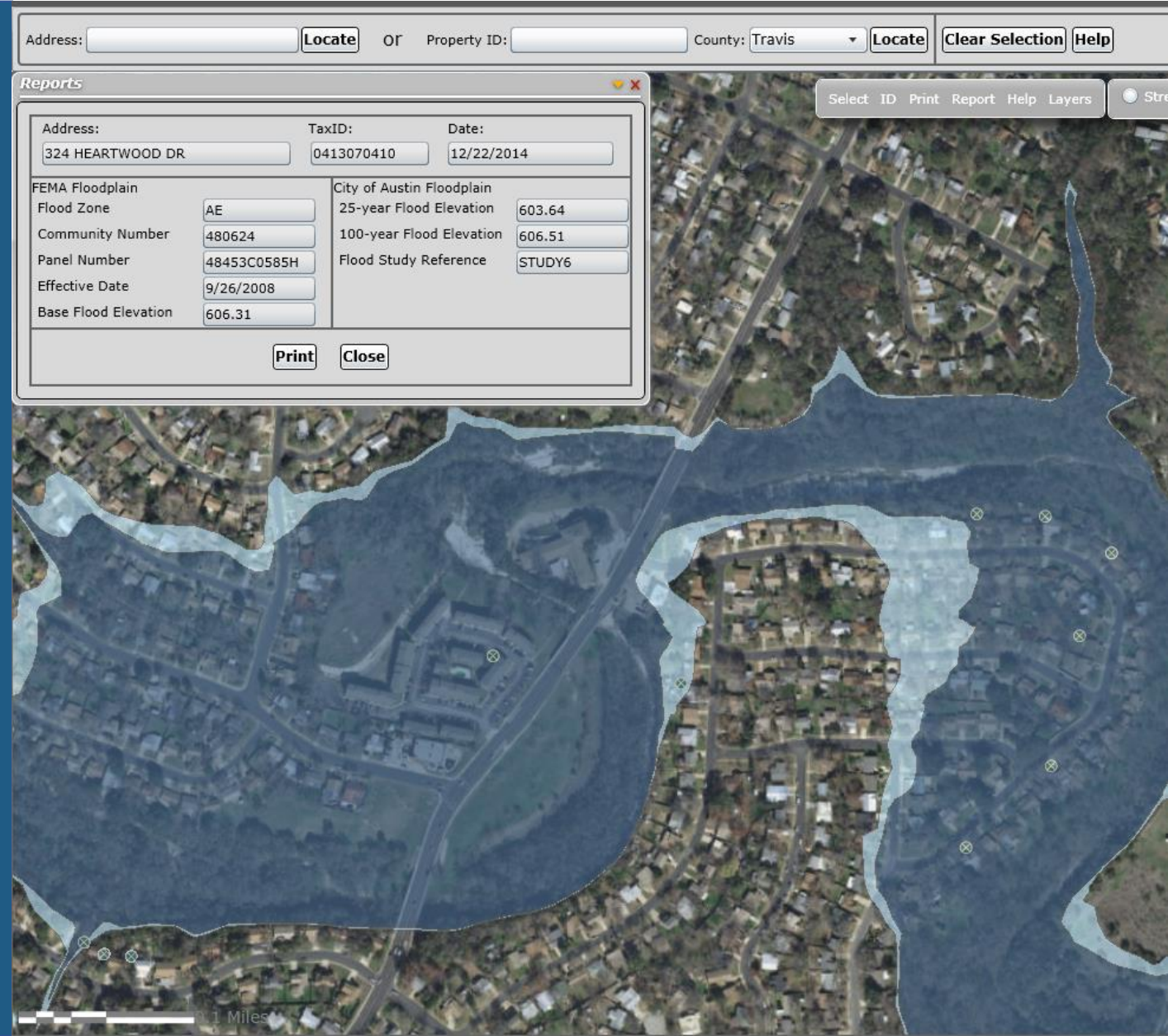


Overview of

Flood Prevention Strategies

How do we ensure that *new* development minimizes its flood risk and the risk to others?

- Floodplain regulations
- Drainage criteria



Recommended Response

Step 1

Land Development Code
amendments

Step 2

Drainage Criteria Manual
revisions

Step 3

Flood Risk Evaluation





Step 1

Land Development Code amendments

- Revise floodplain definitions
- Create a redevelopment exception
- Expand the Colorado River exception
- Increase the freeboard requirement

Step 2 Drainage Criteria Manual revisions

- Atlas 14 updates rainfall rates that are used to determine:
 - Floodplain location
 - Size of storm drain pipes, inlets, and ditches
 - Detention pond size
- Rules making process
 - Draft DCM released in August
 - Stakeholder input





Step 3 Flood Risk Evaluation

Update floodplain studies citywide

- Process to take 2 - 3 years
- Once complete, will provide data to FEMA to update flood insurance maps

Evaluate impacts to existing infrastructure

- Floodwalls
- Channels

Timeline

Step 1 – LDC

Public Hearings

September 2019 – Boards and Commissions (EC, ZAP, PC, and BFCBA)

October 2019 – proposed City Council meeting

Step 2 – DCM

August 2019 – Released draft rules

October 2019 thru January 2020 – Rules change process that includes stakeholder input

Step 3 – Evaluation

2019 to 2021 – Re-mapping of Austin floodplains and infrastructure evaluation

2022 – FEMA map updates



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