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
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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
ATLAS 14: AUSTIN’S NEW UNDERSTANDING OF FLOOD RISK