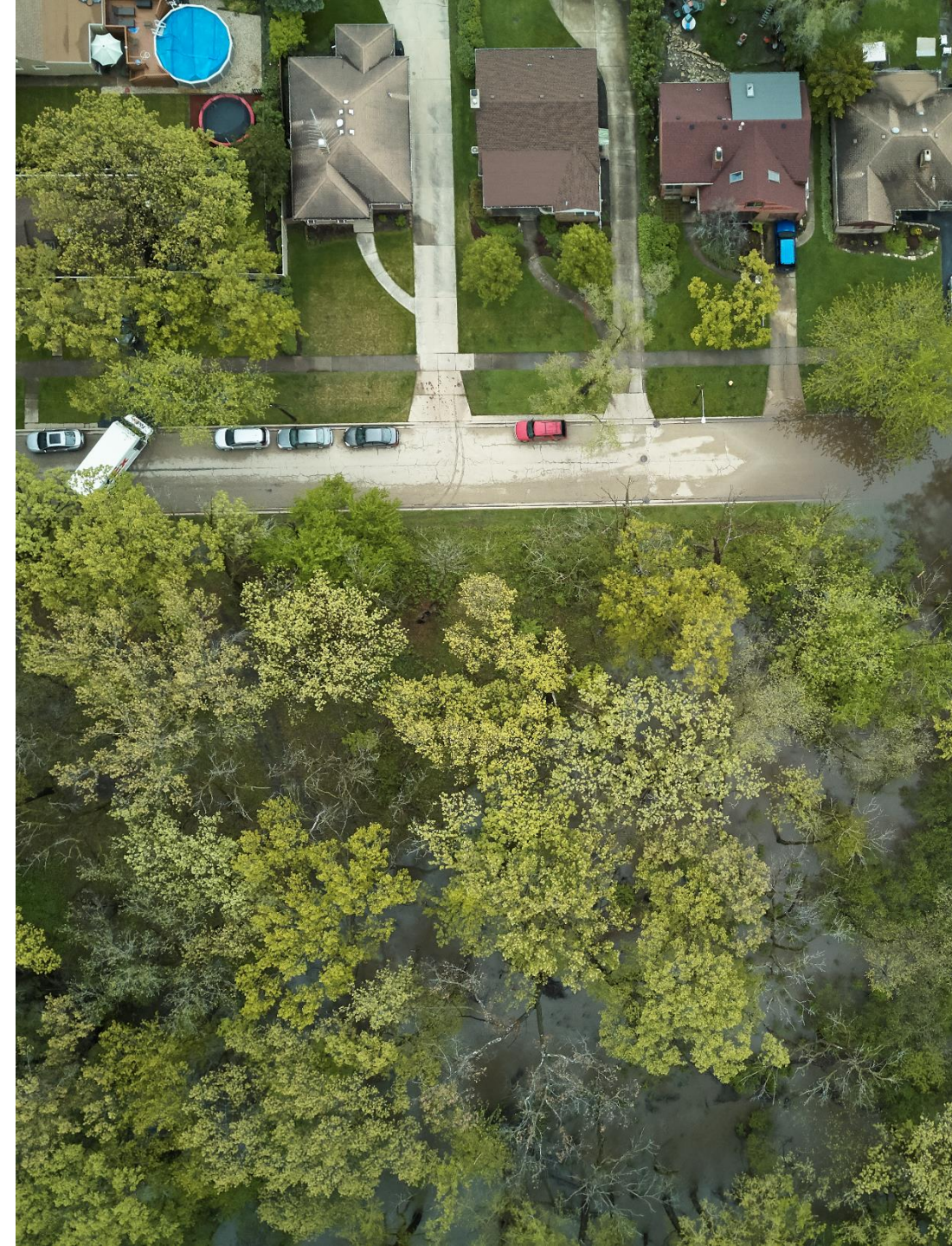


Central Council of Mayors Transportation Resilience Plan

IAFSM 2022 Conference
March 8, 2022

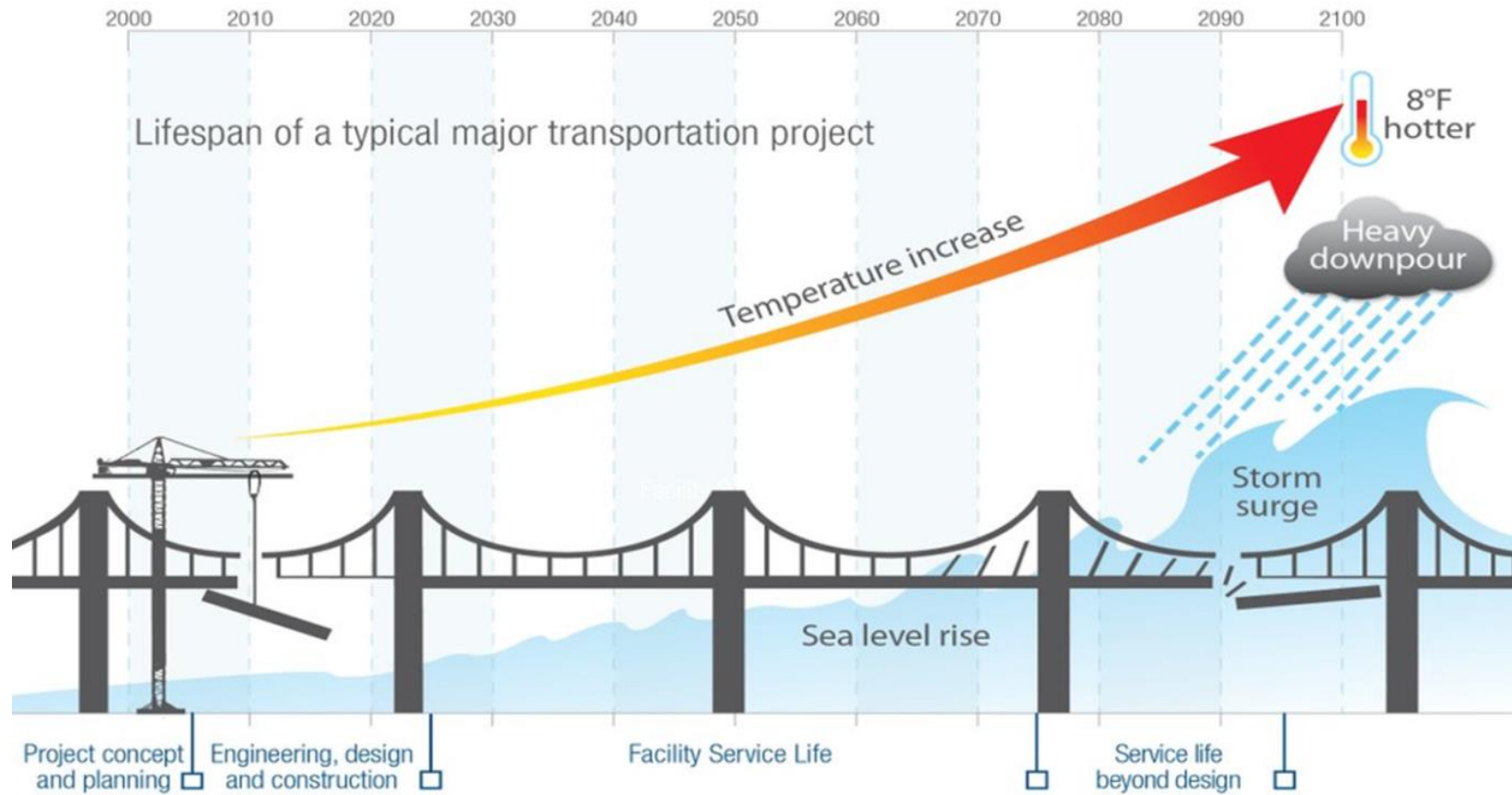


Transportation resilience

Resilience: the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.¹

¹Federal Highway Administration, Vulnerability Assessment and Adaptation Framework

Changing weather conditions



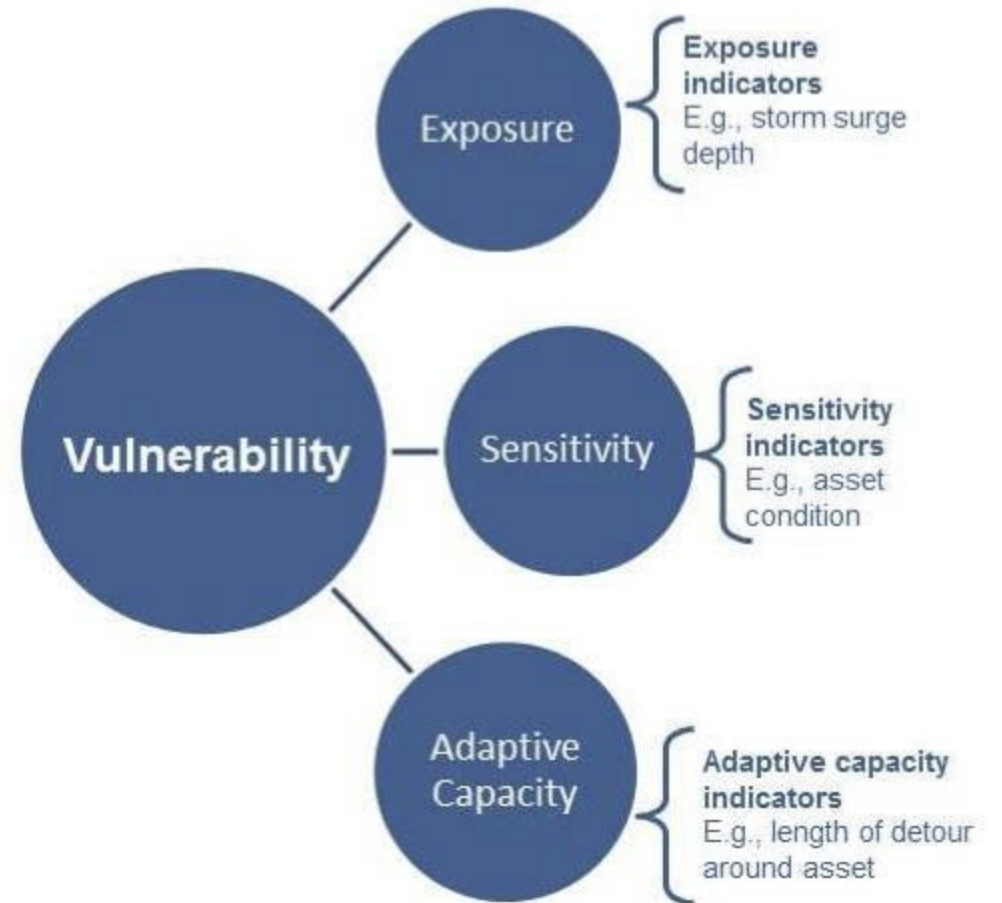
Source: Federal Highway Administration

Vulnerability

Exposure to extreme weather and climate effects

Sensitivity to climate effects

Adaptive capacity

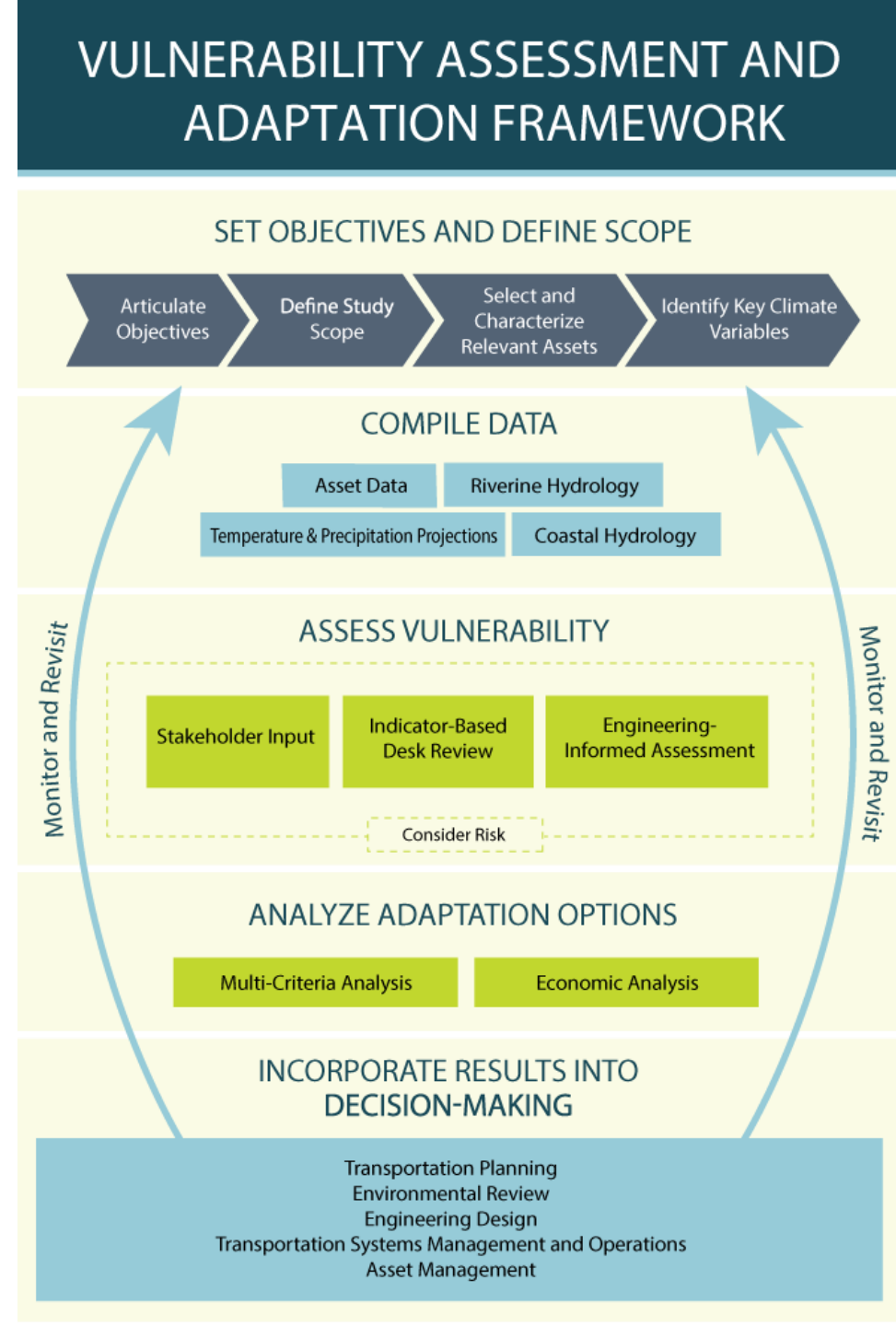


Vulnerability assessment

Where are your highest risk locations?

How might future changes in climate impact your transportation system?

Source: Federal Highway Administration



Federal Infrastructure Bill

PROTECT Program for resilience improvements – \$250 million in formula funding over 5 years to IL + \$1.4B for competitive grants

National Highway Performance Program (NHPP) – up to 15% funding for resilience projects

Bridge Investment Program – approximately \$1.4 billion in formula funding over 5 years to IL + \$12.5B for competitive grants

Culvert removal, replacement, restoration – \$1B in competitive grants

Healthy Streets Program for stormwater, heat, and air quality projects – \$500M in competitive grants

Central Council of Mayors

Developed transportation plan to identify STP Shared Fund and local projects for funding

STP Shared Fund – regional projects that meet the goals of ON TO 2050

Includes incentive for green infrastructure

Central Council of Mayors
STP Shared Fund and Transportation Plan
Draft December 2019



Project goal

Develop a plan to reduce the flood risk of the transportation system in the Central Council of Mayors region.

Project objectives

- Assess the vulnerability of the transportation system to flooding.
- Identify where flooding issues coincide with transportation priorities.
- Engage communities and partners to validate the assessment and avoid duplicating efforts.
- Outline projects, policies, and areas requiring further study.
- Help inform stormwater and transportation investment decisions.

Flood vulnerability assessment and mapping

Flood Vulnerability Assessment and Mapping

Overview

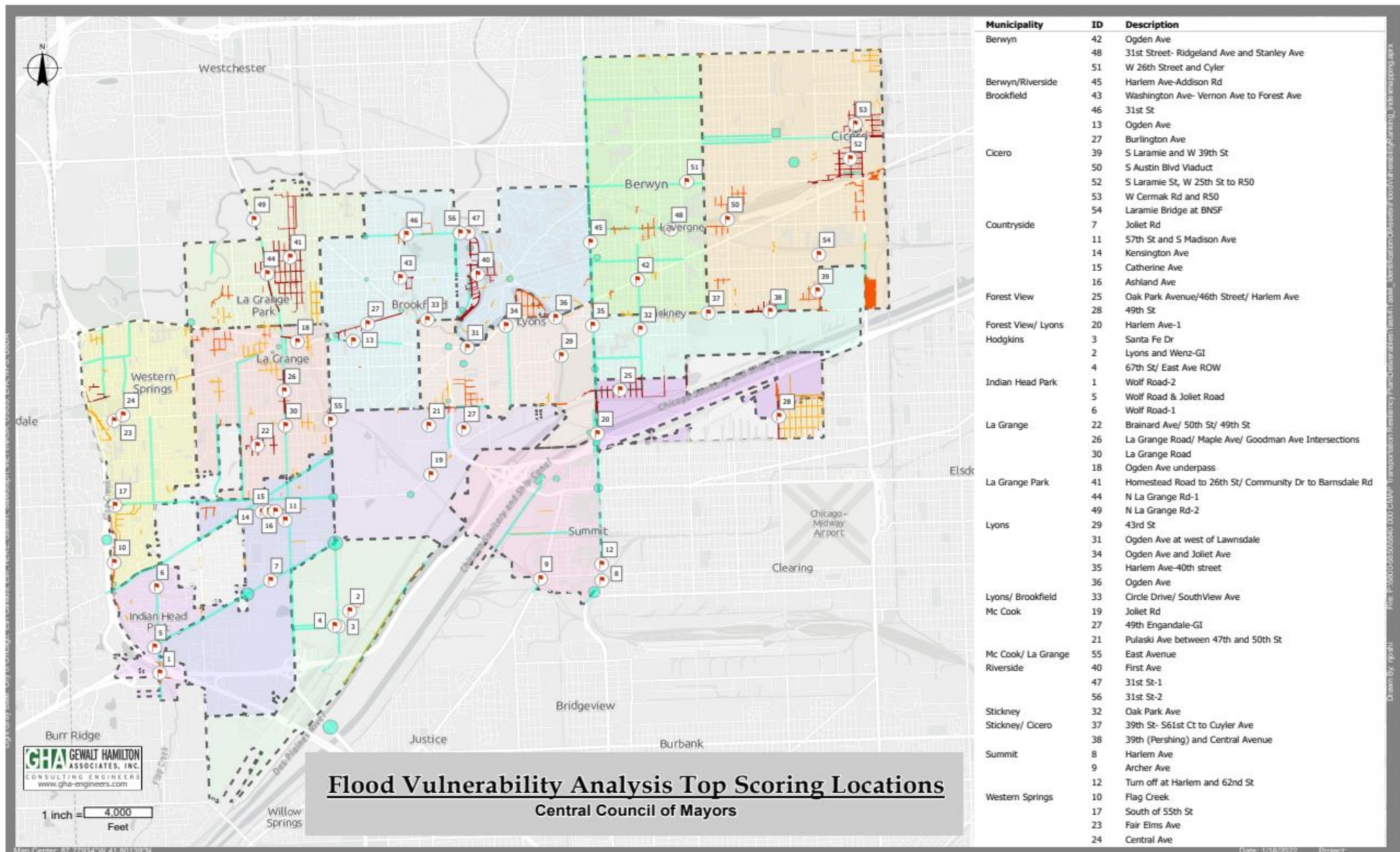


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graph TD; A[Overview] --> B[Process]; B --> C[Scoring and maps];
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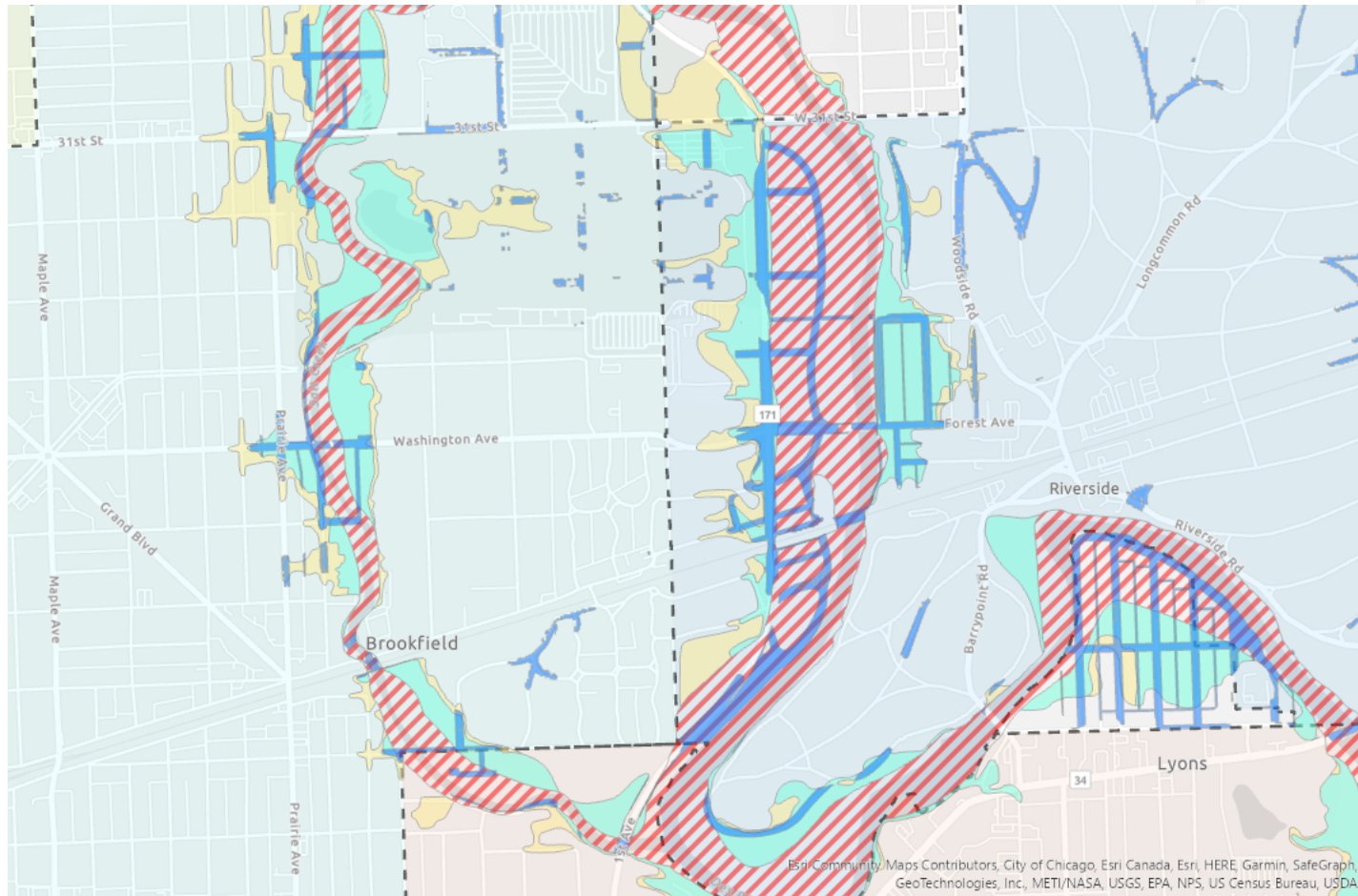
Process

Scoring and maps

Overview



Process

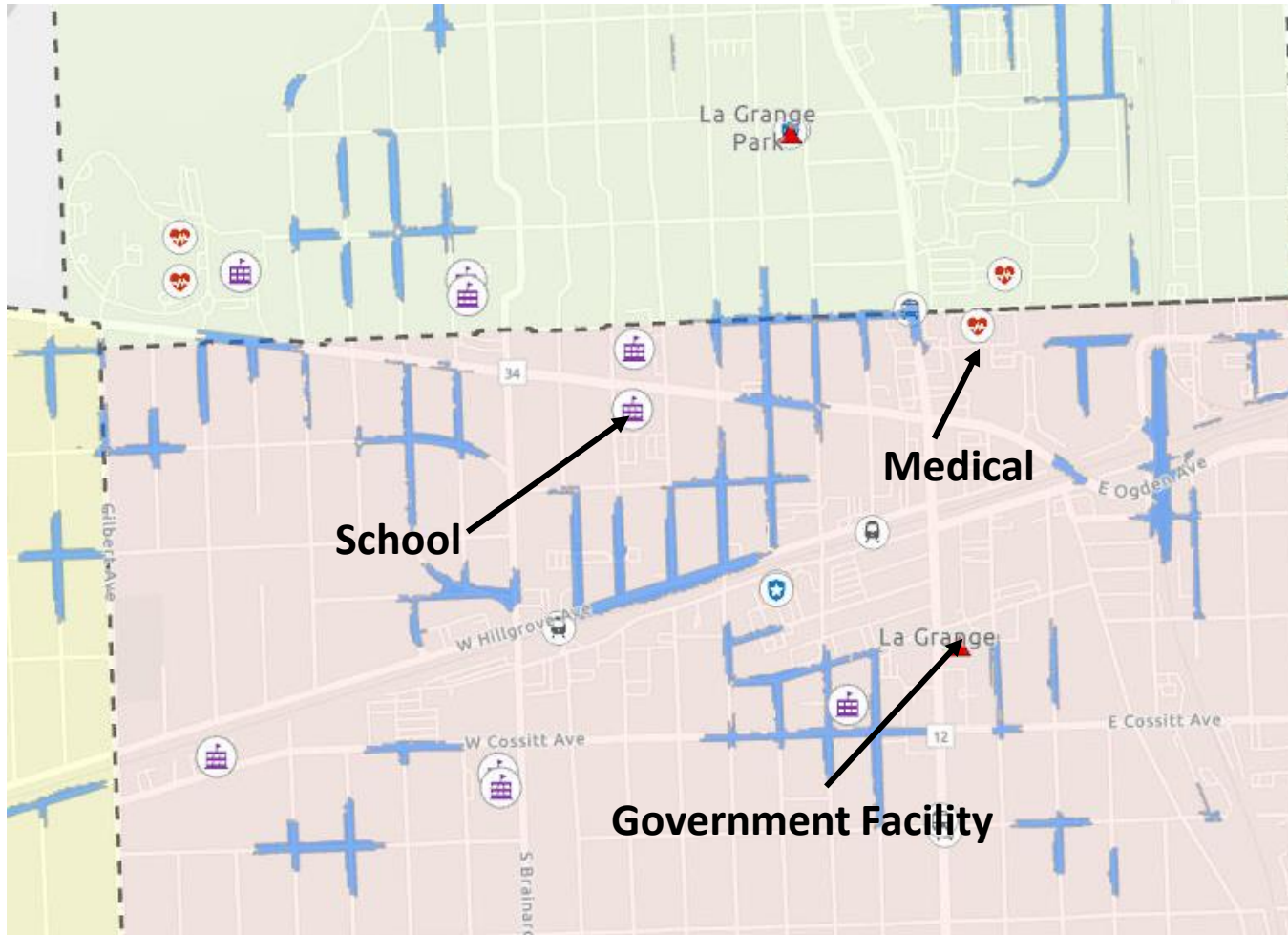


Flood Risk

- ☑ FEMA Flood Zones
- 100 year Flood
- 500 year Flood
- Regulatory Floodway

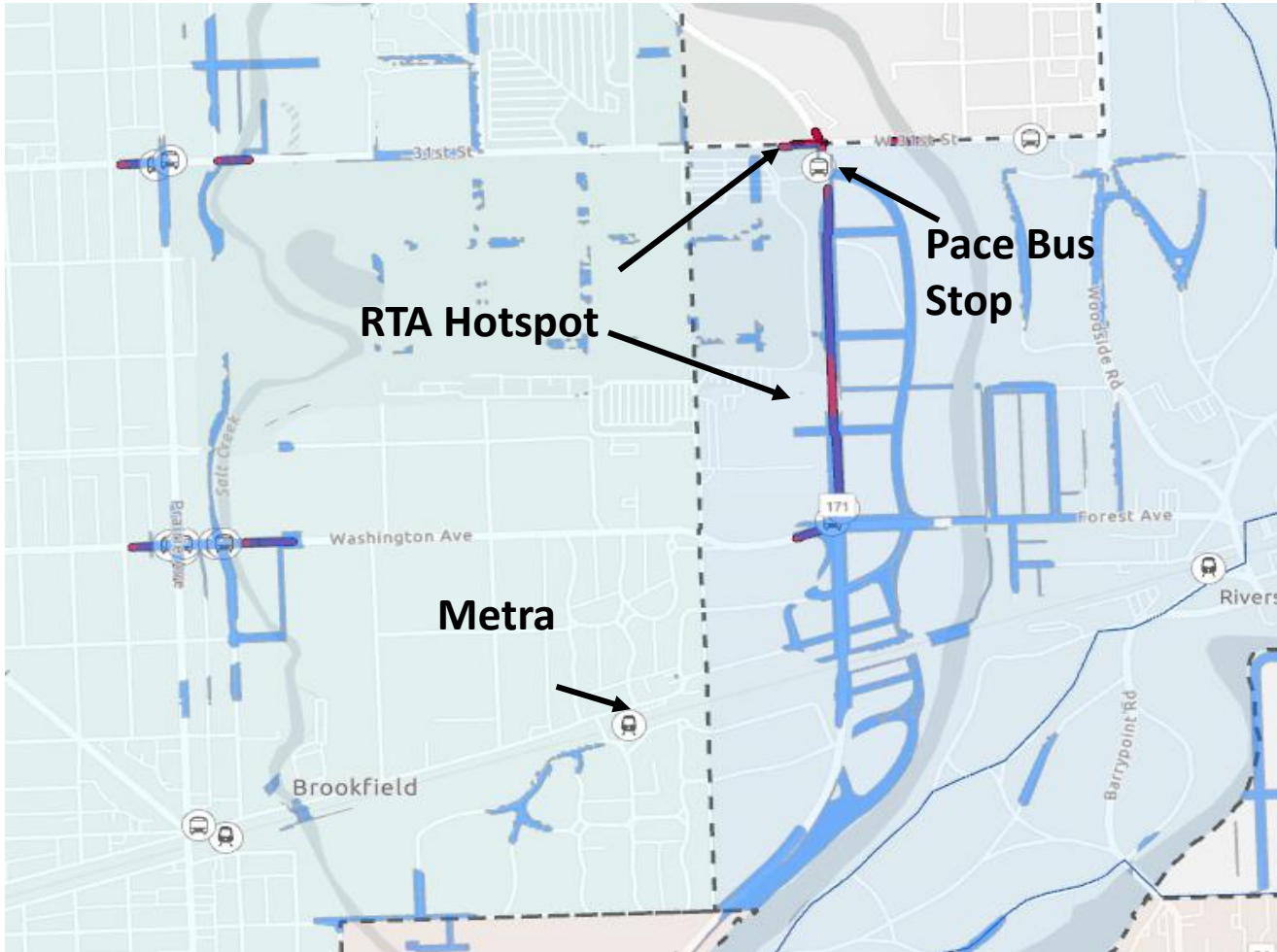
Depressions (in blue) clipped to the ROW (gray outline)

Process



Critical Facilities

Process

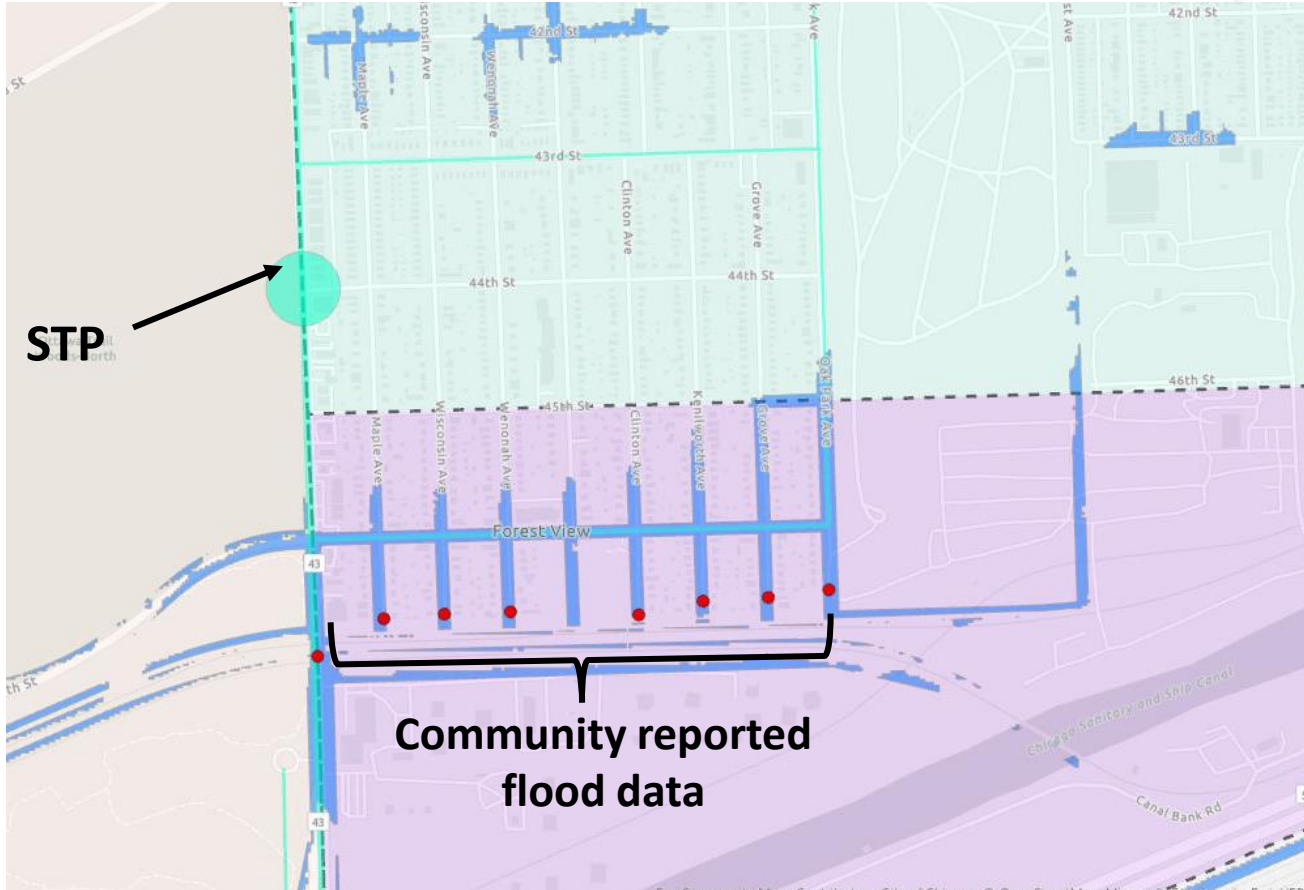


RTA hotspots, bus stops, and Metra stations

Transit facilities



Process

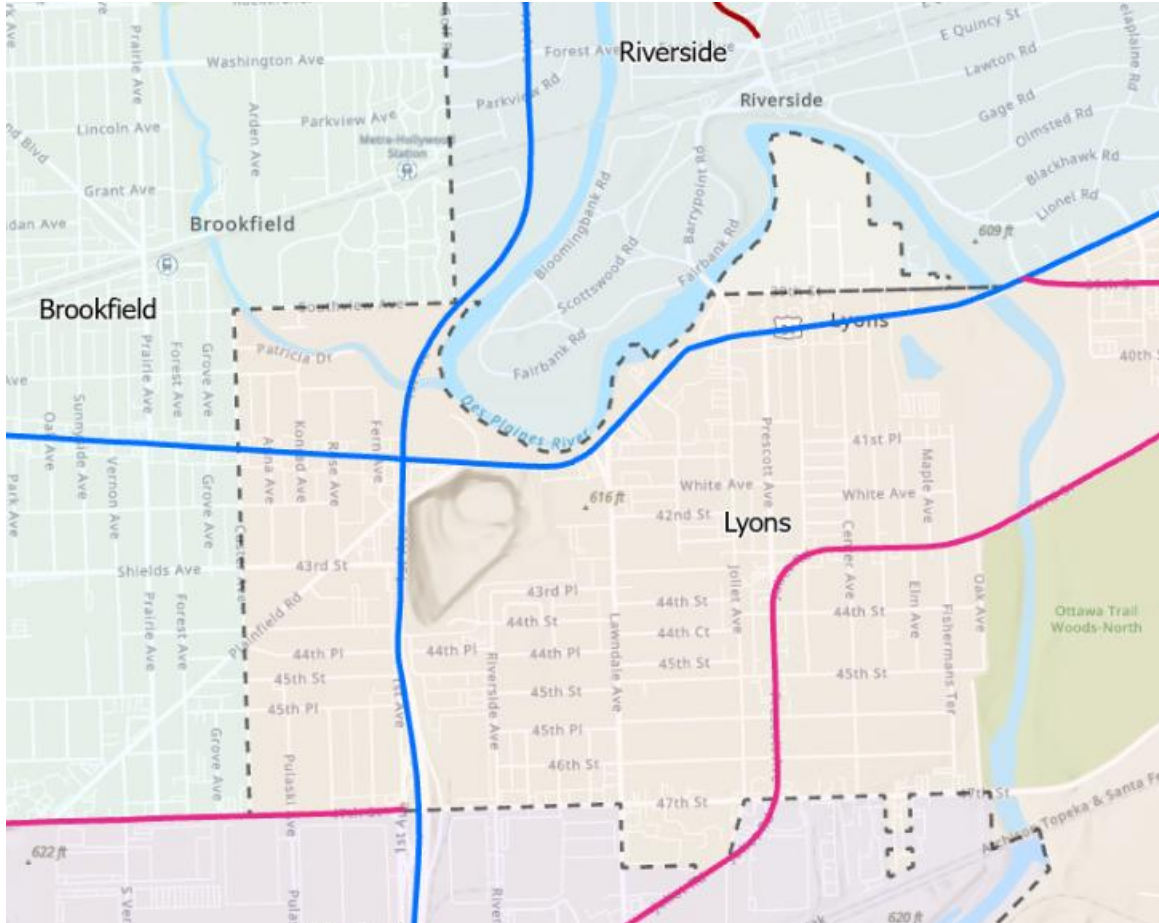


STP Shared Fund projects (turquoise) and community-reported flood data (red)

**Shared Fund
Projects
and
Community-
reported flood
data**

Process

Functional Class



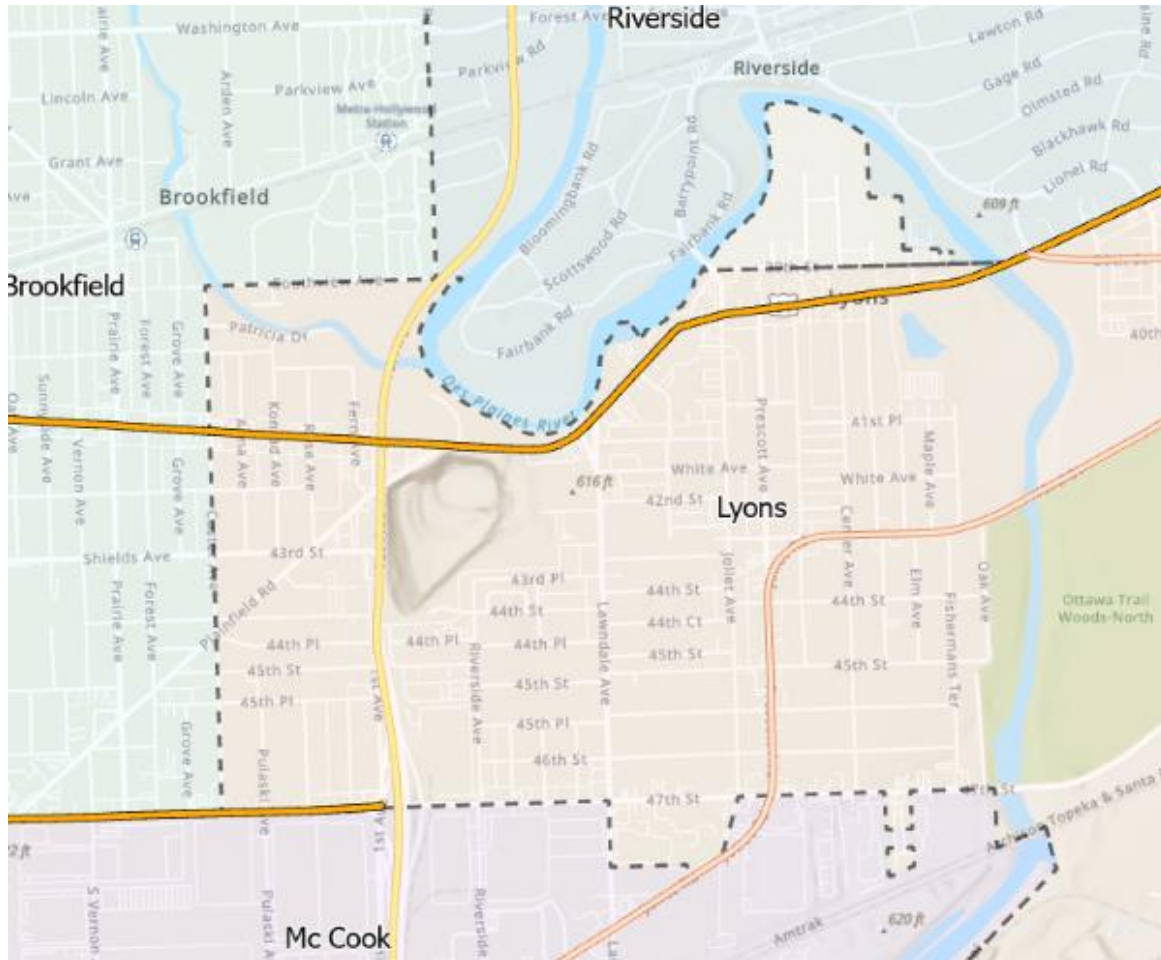
Functional Class

FCNAME

- Interstate
- Local Road or Street
- Major Collector
- Minor Arterial
- Other Principal Arterial

Process

Annual Average Daily Traffic



ADTccom

AADT

10000

10000 - 15000

15000 - 25000

25000 - 50000

> 50000

Scoring

Flood Vulnerability Scoring Criteria

Serial No.	Criteria	Class	Score
1	Depression Depth	Depth < 1.5ft	0
		Depth ≥ 1.5ft	2
		Depth ≥ 12 ft	3
	Flood Zones	Floodplain (FEMA and MWRD)	4
		Floodway	5
2	Critical Facilities	<i>All facilities were given the same score</i>	5
3	Pace bus stop	<i>Based on access to bus stops</i>	
		1. Alternate access available	1
		2. No alternate access with long detour	2
4	Metra station	<i>Based on access to commuter parking lots</i>	
		1. Alternate access available	1
		2. No alternate Access	2
5	Cicero CTA Station	<i>Based on access to commuter parking lot</i>	
		1. Alternate access available	1
		2. No alternate access	2
6	Cicero Intermodal Facility	<i>Based on access to intermodal facility</i>	
		1. Alternate access available	1
		2.No alternate access	2

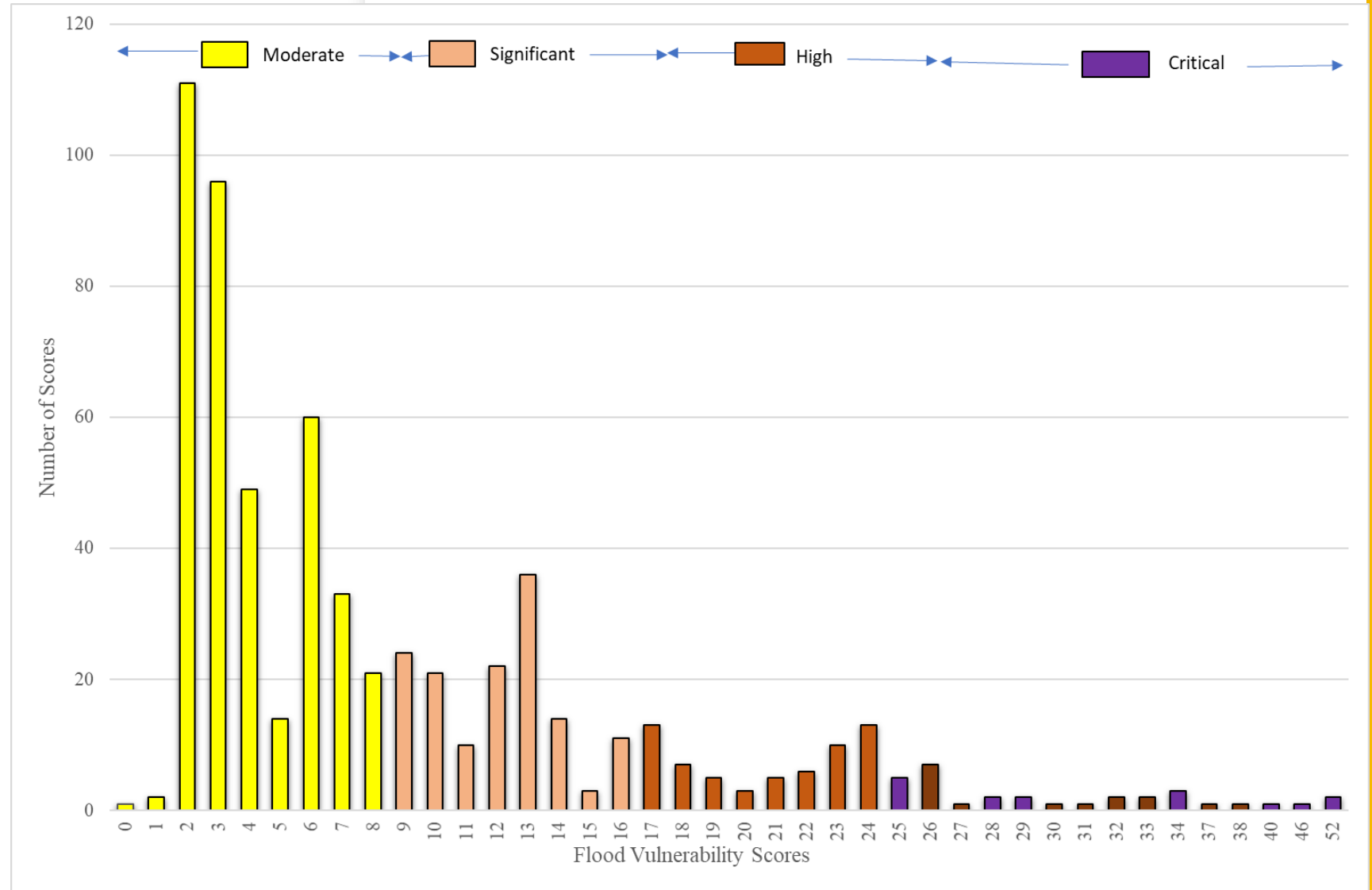
Scoring

Flood Vulnerability Scoring Criteria

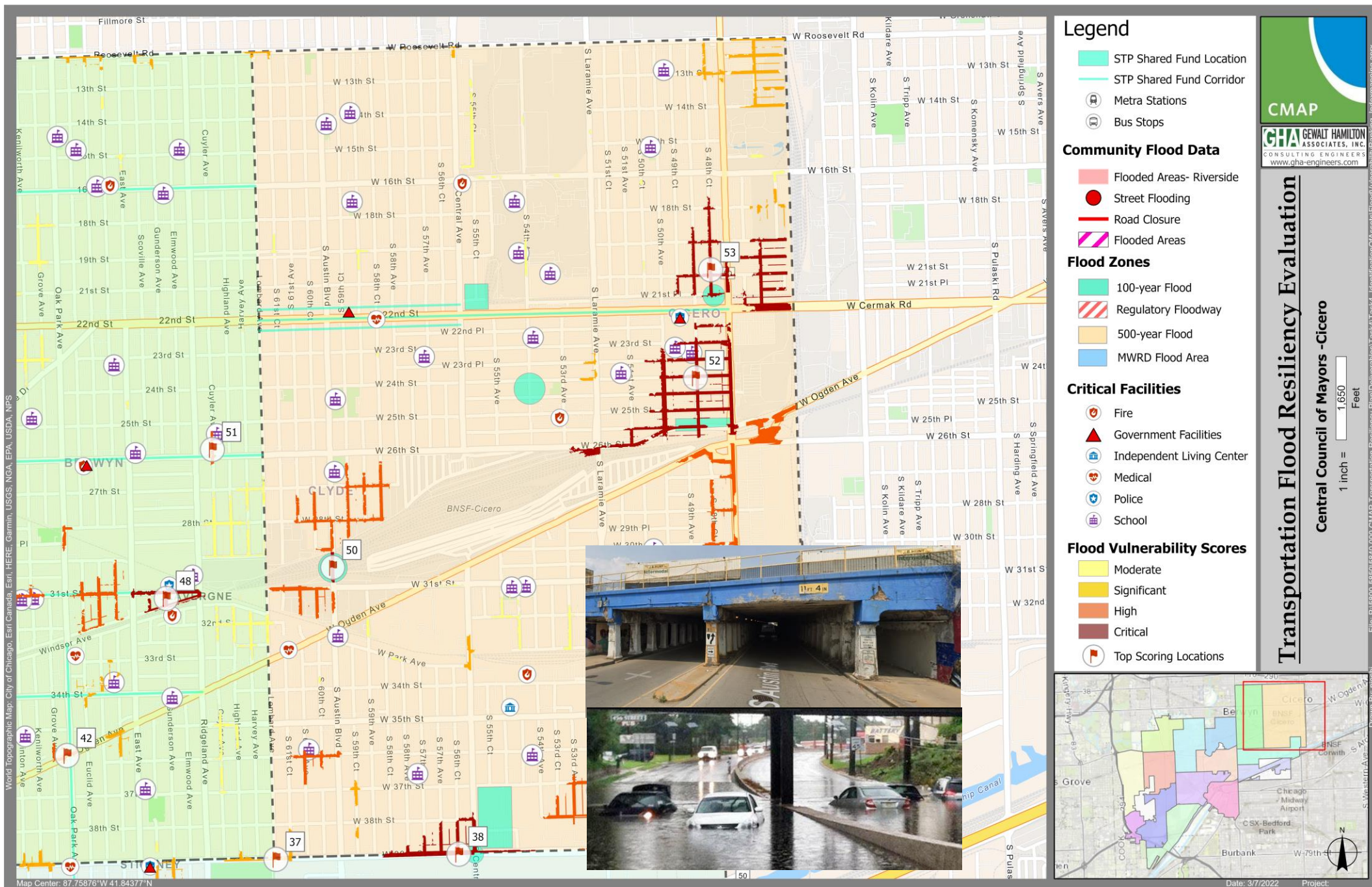
7	RTA Hotspots	<i>All were given same score</i>	5
8	STP Shared Fund Projects	1. Reconstruction and rehabilitation projects	10
		2. Bike trails, pedestrian, and safety improvement projects	5
9	Community Flood Data	<i>All locations were given same score</i>	10
10	Average Daily Traffic (ADT)	<i>ADT Count Class</i>	
		1. $ADT \leq 10,000$	1
		2. $10,000 < ADT \leq 15,000$	2
		3. $15,000 < ADT \leq 25,000$	3
		4. $25,000 < ADT \leq 50,000$	4
		5. $ADT > 50,000$	5
11	Functional Class (FC)	<i>FC Types</i>	
		1. Interstate	0
		2. Other Principal Arterial	8
		3. Minor Arterial	4
		4. Major Collector	2
		5. Local	1

Scoring

Distribution of Flood Vulnerability Scores



Austin Viaduct Flooding Cicero



Next steps



Finalized
FVA



Begin
Project Identification Phase



Schedule
Public Engagement - Steering Committee and
Stakeholders



Prepare
Transportation Resiliency Plan Document

Thank you! Questions?

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Chicago Metropolitan
Agency for Planning



GEWALT HAMILTON
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