



Madison Flood Warning System Pilot

BPW

May 11, 2022

Introduction

- ▶ EMS has requested a system like this for numerous years
- ▶ City Engineer relayed information re: technology being used in other locations (May 2021)
- ▶ USGS approached Engineering about piloting the technology (May/June 2021)
- ▶ Concept:
 - ▶ Sensors monitor stormwater elevations in the stormwater pipes and on the street at select locations
 - ▶ When stormwater reaches a certain level, alerts are sent
- ▶ Alerts can be used to:
 - ▶ Notify EMS which streets are impassable
 - ▶ Notify Operations on which streets need to be closed
 - ▶ Other as Requested

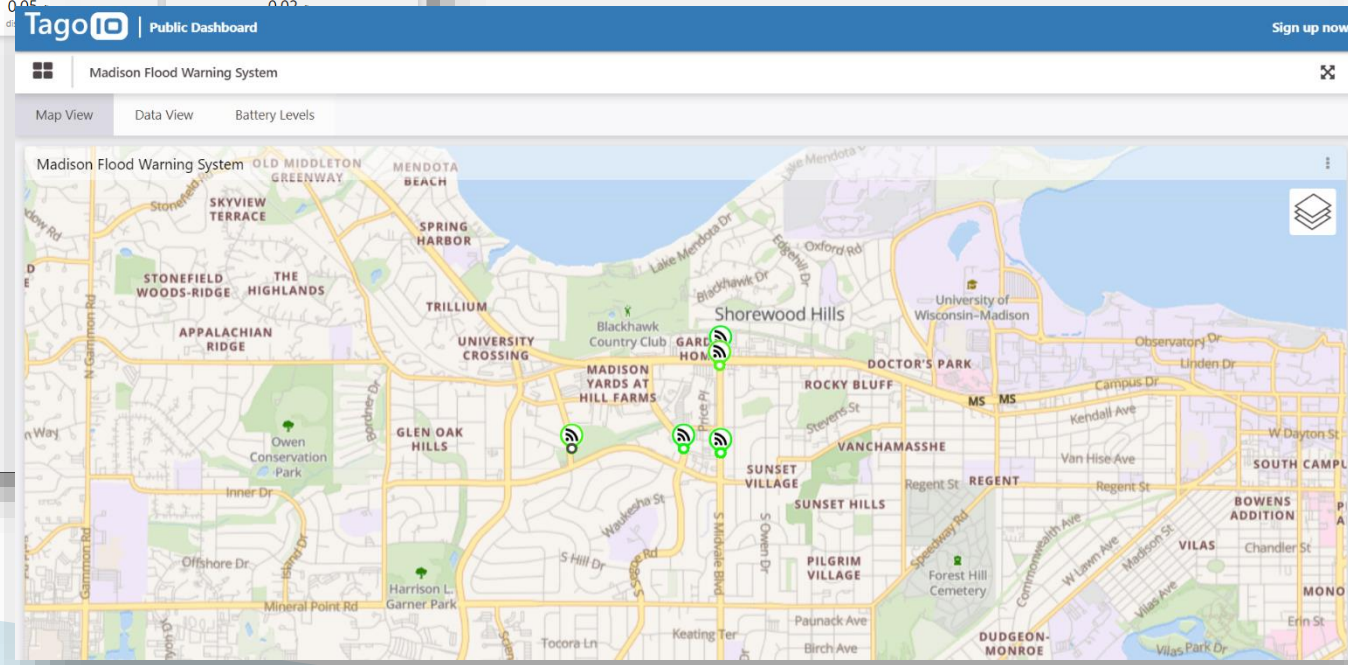
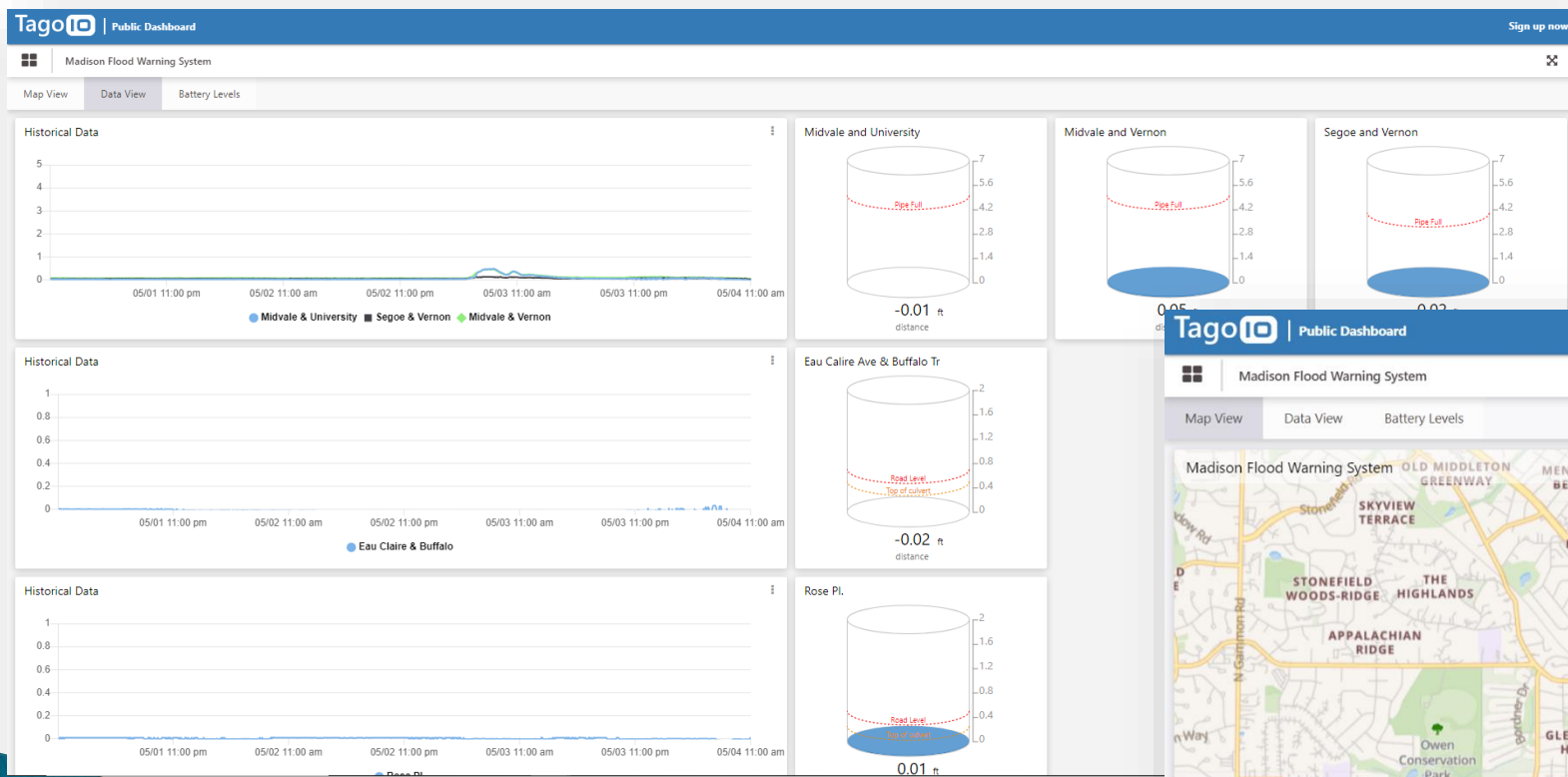
Pilot Study Location

- ▶ Currently have one five sensors installed
- ▶ Estimating approximately 30 total



Dashboard and Alerts

- Initial Dashboard Created
- Initial Alerts set up



Logistics

- Initial discussion (spring/summer 2021) just with USGS
- USGS secured a Grant/Partnership (fall 2021) with Intel Corp to expand Pilot Locations to approximately total of 30 sensors
- All funding, equipment, resources are provided by outside sources, except:
 - Physical locations
 - Power for 5 gateways (need to be hardwired)
- Current grant is for 1-year, expiring December 2022
- Following grant expiration, City to decide if they want to continue with the system

Next Steps

- Continue meetings with partners and other agencies including: EMS, Operations, IT, Legal, Risk, etc
- Continue installing sensors
- Eventually
 - Determine longevity of system
 - Determine funding, staffing, and O&M if City going to continue system
 - Actively looking for grants
 - Explore ability to incorporate use of real-time controls for flood mitigation