



# City of San Antonio

## Agenda Memorandum

**File Number:**16-5023

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**Agenda Item Number:** 3.

**Agenda Date:** 10/12/2016

**In Control:** Transportation, Technology and Utilities Committee

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**SUBJECT:**

A Briefing on the High Water Detection System (HWDS) collaboration between the City of San Antonio and Bexar County.

**SUMMARY:**

The City of San Antonio and Bexar County have invested in a multi-year High Water Detection System (HWDS) to aid in warning the traveling public of flooded roadways to increase safety and reduce fatalities.

**BACKGROUND INFORMATION:**

San Antonio and the surrounding region of Texas are located in what is called Flash Flood Alley. This is due to the area's steep terrain, soil types, and intense high rainfall rates that can quickly transform into walls of fast-moving water with great destructive potential. Flash flooding is the leading cause of weather related deaths in the Country. Unfortunately, Texas has the most flood-related deaths over the last 36 years and has been ranked number one in deaths in 21 of 36 years. Of the flood related deaths that occur in Texas, 76% are vehicle related, most often the result of attempting to cross a flooded road.

**ISSUE:**

Bexar County currently is underway with the installation of the third phase of their High Water Detection System program and anticipates completion in October 2016. Each site includes flashing lights that are automatically activated as water overtops a roadway deterring motorists from hazardous water crossings. As part of this program, Bexar County will install approximately 50 High Water Detection sites within the city limits of San Antonio. With these additional sites, San Antonio will have approximately 100 sites within the city limits. The FY 2016 Budget included funding for additional staff and equipment for the maintenance of the new high water detection systems within San Antonio.

In addition to the installation of the high water detection systems, development of a public website showing real-time flood information and emergency road closures is near completion. This website collects and displays real-time flood sensor data so the public can see where the low water crossings are and which roads are closed. Users also can subscribe to their locations of interest and receive text and/or emails when sensors become flooded. The website also offers an additional feature to display each agency's tweets with a #Bexarflood handle, allowing agency partners to re-tweet the public's tagged photos of flooded areas. This website will provide more tools to the public to avoid dangerous areas by making flood information easily available and

reaching people through alerts and social media.

**ALTERNATIVES:**

This is a briefing for informational purposes only.

**FISCAL IMPACT:**

This is a briefing for informational purposes only.

**RECOMMENDATION:**

This is a briefing for informational purposes only.